



City of Ormond Beach

City Commission Meeting

City Hall Commission Chambers

22 South Beach St., Ormond Beach FL 32174

November 4, 2025, 7:00 PM

*Jason Leslie, Mayor
Lori Tolland, Zone 1
Travis Sargent, Zone 2
Kristin Deaton, Zone 3
Harold Briley, Zone 4*

Agenda

1. CALL TO ORDER

2. INVOCATION

3. PLEDGE OF ALLEGIANCE

4. PRESENTATIONS AND PROCLAMATIONS

- A. Ormond Beach Police Foundation
- B. Kevin Gray
- C. FDOT Nova Road Update

5. AUDIENCE REMARKS - REGARDING ITEMS NOT ON THE AGENDA & ON THE CONSENT AGENDA

6. APPROVAL OF MINUTES

- A. Minutes from City Commission meeting - October 21, 2025

7. CONSENT AGENDA

The action proposed is stated for each item on the Consent Agenda. Unless a City Commissioner removes an item from the Consent Agenda, no discussion on individual items will occur and a single motion will approve all items.

- A. National Association of Government Employees Collective Bargaining Agreement

RESOLUTION NO. 2025-158: A RESOLUTION AUTHORIZING THE EXECUTION OF A COLLECTIVE BARGAINING AGREEMENT BETWEEN THE CITY OF ORMOND BEACH AND THE NATIONAL ASSOCIATION OF GOVERNMENT EMPLOYEES; AND SETTING FORTH AN EFFECTIVE DATE.

- B. Nova Community Center Gym Ceiling Repairs

RESOLUTION NO. 2025-162: A RESOLUTION ACCEPTING A PROPOSAL FROM A.M. WEIGEL CONSTRUCTION, INC. FOR CONSTRUCTION MANAGEMENT SERVICES REGARDING CEILING REPAIRS IN THE GYM AT THE NOVA COMMUNITY CENTER; AUTHORIZING THE EXECUTION OF A WORK AUTHORIZATION AND PAYMENT THEREFOR; AND SETTING FORTH AN EFFECTIVE DATE.

C. RFP - Motor and Pump Repair

RESOLUTION NO. 2025-167: A RESOLUTION ACCEPTING PROPOSALS AND AUTHORIZING THE EXECUTION OF CONTRACTS WITH TWO PROFESSIONAL FIRMS FOR UTILITIES MOTOR AND PUMP REPAIR SERVICES ON AN AS-NEEDED BASIS, UNDER RFP 2025-40; AND SETTING FORTH AN EFFECTIVE DATE.

D. Work Authorization - Northbrook Lane Stormwater Repair

RESOLUTION NO. 2025-168: A RESOLUTION ACCEPTING A PROPOSAL FROM HAZEN CONSTRUCTION, LLC FOR CONSTRUCTION MANAGEMENT AT RISK FOR UNDERGROUND UTILITY SERVICES REGARDING THE NORTHBROOK LANE STORMWATER PIPE REPAIR PROJECT; AUTHORIZING THE EXECUTION OF A WORK AUTHORIZATION AND PAYMENT THEREFOR; AND SETTING FORTH AN EFFECTIVE DATE.

E. Interlocal Agreement - Volusia Co., Fire Apparatus Fleet Services and Contingency Fueling

RESOLUTION NO. 2025-169: A RESOLUTION AUTHORIZING THE EXECUTION OF AN INTERLOCAL AGREEMENT WITH THE COUNTY OF VOLUSIA FOR THE PROVISION OF MUNICIPAL FLEET MAINTENANCE SERVICES ON AN AS-NEEDED BASIS; SETTING FORTH AN EFFECTIVE DATE.

F. Category 8 FBO Certification - R & B Executive Aviation Services, LLC.

RESOLUTION NO. 2025-170: A RESOLUTION APPROVING THE APPLICATION OF R&B EXECUTIVE AVIATION SERVICES, LLC TO PROVIDE SERVICES AS A CATEGORY EIGHT FIXED BASE OPERATOR AT THE ORMOND BEACH MUNICIPAL AIRPORT; ESTABLISHING CONDITIONS OF APPROVAL; AND SETTING FORTH AN EFFECTIVE DATE.

G. 2026 Florida Healthcare Plans Employee Health Insurance Coverage

RESOLUTION NO. 2025-171: A RESOLUTION ACCEPTING A PROPOSAL FROM FLORIDA HEALTH CARE PLANS, INC. FOR THE PROVISION OF EMPLOYEE HEALTH/MEDICAL BENEFIT SERVICES; AUTHORIZING THE EXECUTION OF A CONTRACT AND PAYMENT THEREFOR; AND SETTING FORTH AN EFFECTIVE DATE.

H. 2026 Health Savings Account Funding

RESOLUTION NO. 2025-172: A RESOLUTION AUTHORIZING FUNDING OF EMPLOYEE HEALTH SAVINGS ACCOUNTS FOR THE 2026 PLAN YEAR; AND SETTING FORTH AN EFFECTIVE DATE.

I. 2026 Mutual of Omaha Employee Dental Insurance Coverage

RESOLUTION NO. 2025-173: A RESOLUTION ACCEPTING A PROPOSAL FROM MUTUAL OF OMAHA FOR THE PROVISION OF EMPLOYEE DENTAL INSURANCE BENEFITS SERVICES; AUTHORIZING THE EXECUTION OF A CONTRACT AND PAYMENT THEREFOR; REJECTING ALL OTHER PROPOSALS; AND SETTING FORTH AN EFFECTIVE DATE.

J. 2026 Mutual of Omaha Vision Insurance Coverage

RESOLUTION NO. 2025-174: A RESOLUTION ACCEPTING A PROPOSAL FROM MUTUAL OF OMAHA FOR THE PROVISION OF EMPLOYEE VISION INSURANCE BENEFITS; AUTHORIZING THE EXECUTION OF A CONTRACT AND PAYMENT THEREFOR; REJECTING ALL OTHER PROPOSALS; AND SETTING FORTH AN EFFECTIVE DATE.

K. 2026 Mutual of Omaha Employee Life Insurance Coverage

RESOLUTION NO. 2025-175: A RESOLUTION ACCEPTING A PROPOSAL FROM MUTUAL OF OMAHA FOR THE PROVISION OF EMPLOYEE LIFE INSURANCE BENEFITS SERVICES; AUTHORIZING THE EXECUTION OF A CONTRACT AND PAYMENT THEREFOR; REJECTING ALL OTHER PROPOSALS; AND SETTING FORTH AN EFFECTIVE DATE.

L. 2026 Mutual of Omaha Long Term Disability Insurance Coverage

RESOLUTION NO. 2025-176: A RESOLUTION ACCEPTING A PROPOSAL FROM MUTUAL OF OMAHA FOR THE PROVISION OF EMPLOYEE LONG TERM DISABILITY INSURANCE BENEFITS SERVICES; AUTHORIZING THE EXECUTION OF A CONTRACT AND PAYMENT THEREFOR; REJECTING ALL OTHER PROPOSALS; AND SETTING FORTH AN EFFECTIVE DATE.

M. 2026 Mutual of Omaha Voluntary Life Insurance Coverage

RESOLUTION NO. 2025-177: A RESOLUTION ACCEPTING A PROPOSAL FROM MUTUAL OF OMAHA FOR THE PROVISION OF EMPLOYEE VOLUNTARY LIFE INSURANCE BENEFITS SERVICES; AUTHORIZING THE EXECUTION OF A CONTRACT AND PAYMENT THEREFOR; REJECTING ALL OTHER PROPOSALS; AND SETTING FORTH AN EFFECTIVE DATE.

N. 2026 Mutual of Omaha Voluntary Short Term Disability Insurance Coverage

RESOLUTION NO. 2025-178: A RESOLUTION ACCEPTING A PROPOSAL FROM MUTUAL OF OMAHA FOR THE PROVISION OF EMPLOYEE VOLUNTARY SHORT-TERM DISABILITY INSURANCE BENEFITS; AUTHORIZING THE EXECUTION OF A CONTRACT AND PAYMENT THEREFOR; REJECTING ALL OTHER PROPOSALS; AND SETTING FORTH AN EFFECTIVE DATE.

- O. Real Property Conveyance from VCS, Seminole Avenue Lift Station

RESOLUTION NO. 2025-179: A RESOLUTION AUTHORIZING THE ACCEPTANCE OF A QUIT CLAIM DEED FROM THE SCHOOL BOARD OF VOLUSIA COUNTY, FOR PROPERTY LOCATED AT 205 SEMINOLE AVENUE; AND SETTING FORTH AN EFFECTIVE DATE.

- P. **Disposition Item:** Intent To Bid - Lift Station 4P Rehabilitation

- Q. **Disposition Item:** Orchard Lane Drainage Improvements

- R. **Disposition Item:** 2026 City Of Ormond Beach Legislative Action Agenda

8. **FIRST READING OF ORDINANCES**

- A. Fiscal Year 2024-2025 Budget Amendments

ORDINANCE NO. 2025-33: AN ORDINANCE AMENDING THE ANNUAL BUDGET FOR FISCAL YEAR 2024-2025 BY AMENDING THE GENERAL FUND (001); DOWNTOWN REDEVELOPMENT TRUST FUND (104); STORMWATER UTILITY FUND (107); AIRPORT FUND (108); ECONOMIC DEVELOPMENT FUND (110); PENSION CONTRIBUTION PASS THROUGH FUND (113); FINANCING DEBT SERVICE FUND (205); BEACHFRONT PARK BOND FUND (220); CAPITAL IMPROVEMENTS FUND (301); EQUIPMENT RENEWAL & REPLACEMENT FUND (302); PUBLIC SAFETY VEHICLE & EQUIPMENT FUND (305); TRANSPORTATION IMPROVEMENTS FUND (308); FACILITIES RENEWAL & REPLACEMENT FUND (317); WATER AND WASTEWATER FUND (401); VEHICLE REPLACEMENT FUND (408); RENEWAL & REPLACEMENT FUND (409); WATER SYSTEM IMPACT FEE FUND (434); WASTEWATER SYSTEM IMPACT FEE FUND (435); 2024 WATER & WASTEWATER BOND FUND (446); SOLID WASTE FUND (460) AND THE GENERAL LIABILITY FUND (504); AND SETTING FORTH AN EFFECTIVE DATE.

- B. General Employees' Pension Ordinance Amendment

ORDINANCE NO. 2025-34: AN ORDINANCE OF THE CITY OF ORMOND BEACH, FLORIDA, FURTHER AMENDING ARTICLE I, GENERAL EMPLOYEES' PENSION PLAN, OF CHAPTER 16, PENSIONS AND RETIREMENT, OF THE CODE OF ORDINANCES; AMENDING SECTION 16-6, BENEFIT AMOUNTS AND ELIGIBILITY; AMENDING SECTION 16-9, VESTING; PROVIDING FOR A BENEFIT MULTIPLIER FOR CREDITED SERVICE EARNED ON OR AFTER OCTOBER 1, 2025, FOR MEMBERS HIRED ON OR AFTER DECEMBER 19, 2012; PROVIDING FOR SEVERABILITY OF PROVISIONS; REPEALING ALL ORDINANCES IN CONFLICT HERewith AND PROVIDING AN EFFECTIVE DATE.

9. **REPORTS, SUGGESTIONS, REQUESTS**

10. **ADJOURNMENT**

Website Address – www.ormondbeach.org

NOTICE – Pursuant to Section 286.0105 of the Florida Statutes, if any person decides to appeal any decision made by the City Commission with respect to any matter considered at this public meeting, such person will need a record of the proceedings and for such purpose, such person may need to ensure that a verbatim record of the proceedings is made, including the testimony and evidence upon which the appeal is to be based.



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City of Ormond Beach

City Commission Meeting

City Hall Commission Chambers

22 South Beach St., Ormond Beach FL 32174

October 21, 2025, 7:00 PM

*Jason Leslie, Mayor
Lori Tolland, Zone 1
Travis Sargent, Zone 2
Kristin Deaton, Zone 3
Harold Briley, Zone 4*

Minutes

1. **CALL TO ORDER**

Mayor Leslie called the meeting to order at 07:01 PM.

Present: Mayor Jason Leslie, Commissioners Lori Tolland, Travis Sargent, Kristin Deaton, and Harold Briley, City Manager Joyce Shanahan, Deputy City Attorney Ann-Margret Emery, Assistant City Managers Claire Whitley and Shawn Finley, and City Clerk Susan Dauderis.

2. **INVOCATION**

Pastor Aaron Sweigert, Tomoka Christian Church, provided the invocation.

3. **PLEDGE OF ALLEGIANCE**

Mayor Leslie led the Pledge of Allegiance.

4. **PRESENTATIONS AND PROCLAMATIONS**

A. Hispanic Heritage Month

Mayor Leslie presented a proclamation to the Hispanic Chamber of Commerce representative and proclaimed September 15, 2025, through October 15, 2025, as Hispanic Heritage Month and encouraged the recognition and celebration of the culture and contributions of the Hispanic community.

B. Red Ribbon Week - Volusia Young Marines

Mayor Leslie presented a proclamation and a Challenge Coin to the Volusia Young Marines representatives, proclaiming October 23, 2025, through October 31, 2025, as Red Ribbon Week and encouraged the promotion of a drug-free environment.

C. Florida City Week

Mayor Leslie presented a proclamation to Ms. Joyce Shanahan, City Manager, for Florida City Week, thanking her and city staff for all they do for the city and residents.

5. AUDIENCE REMARKS - REGARDING ITEMS NOT ON THE AGENDA & ON THE CONSENT AGENDA

Ms. Jennifer Bright, Post Office Box 62, thanked staff for posting City Commission workshop minutes to the city's website. She voiced concerns regarding transparency of City Commission workshop minutes approval and audio availability.

Mr. Anthony Conforti, 100 East Granada Boulevard, discussed his application of Ordinance 2025-26, and provided suggestions on how to mitigate some Commission concerns. He requested the hearing for his application be reconsidered.

Commissioner Sargent discussed the procedure for reconsidering his application.

Mayor Leslie inquired if there was a motion to reconsider; whereby, Ms. Ann-Margret Emery, Deputy City Attorney, stated if there was a consensus, staff could add the item to the November 4, 2025, City Commission agenda.

Commissioner Tolland and Commissioner Briley expressed appreciation for Mr. Conforti and explained their opposition on the item had not changed.

Mr. Conforti explained the desire for the reconsideration; whereby, Mayor Leslie expressed his appreciation for Mr. Conforti and respect for the Commissioners' stance on the item.

Ms. Amber Bobak, 397 Collins Street, provided an update on her case with the Saint Johns River Water Management District and Circle K. She stated she adopted two parks along Division Avenue through the city's Adopt a Park program, inviting residents to join her family on the first clean-up day.

6. APPROVAL OF MINUTES

A. Minutes from City Commission meeting - October 8, 2025

Mayor Leslie advised the minutes from the October 8, 2025, City Commission meeting were sent to the Commission for review and posted on the city's website for public viewing. He asked if there were any corrections, additions, or omissions.

He stated he would like to correct the minutes to reflect Commissioner Tolland's comments as "... explained it was not the role of government to provide employment and training for individuals with special needs..."

Commissioner Sargent moved, seconded by Commissioner Tolland, for approval of the October 8, 2025, City Commission meeting minutes as amended.

Motion passed by voice vote.

7. CONSENT AGENDA

Mayor Leslie advised the actions proposed for the items on the Consent Agenda were so stated on the agenda. He asked if any member of the Commission had questions or wished to discuss any items separately.

Commissioner Deaton requested Items 7D and 7E be pulled from the Consent Agenda.

Commissioner Sargent moved, seconded by Commissioner Briley, for approval of the Consent Agenda, absent Items 7D and 7E.

Call Vote:	Commissioner Tolland	Yes
	Commissioner Sargent	Yes
	Commissioner Deaton	Yes
	Commissioner Briley	Yes
Carried.	Mayor Leslie	Yes

A. Ormond Beach Housing Authority Appointment

RESOLUTION NO. 2025-160: A RESOLUTION REAPPOINTING HILDEGARDE POSTELL AS A MEMBER TO SERVE AS A COMMISSIONER OF THE ORMOND BEACH HOUSING AUTHORITY; SETTING FORTH TERM AND CONDITIONS OF SERVICE; AND SETTING FORTH AN EFFECTIVE DATE.

B. RFP Award - Water Well Assessment and Rehabilitation Services

RESOLUTION NO. 2025-161: A RESOLUTION ACCEPTING THE PROPOSAL OF THOMPSON WELL & PUMP, INC. FOR WATER WELL ASSESSMENT AND REHABILITATION SERVICES ON AN AS-NEEDED BASIS, UNDER RFP 2025-38; AUTHORIZING THE EXECUTION OF AN AGREEMENT AND PAYMENT THEREFOR; REJECTING ALL OTHER PROPOSALS; AND SETTING FORTH AN EFFECTIVE DATE.

C. PACE Center for Girls, Inc., Lease Agreement

RESOLUTION NO. 2025-163: A RESOLUTION AUTHORIZING THE EXECUTION OF A LEASE AGREEMENT BETWEEN THE CITY AND THE PACE CENTER FOR GIRLS, INC.; SETTING FORTH AN EFFECTIVE DATE.

F. **Disposition Item:** RFP - Tow Related Services

G. **Disposition Item:** RFP - Ormond Beach Facilities Access Control

H. **Disposition Item:** City Manager's Monthly Report, October 2025

City Clerk Susan C. Dauderis read by title only:

D. Yellowstone CPI Rate Adjustment, Athletic Fields

RESOLUTION NO. 2025-164: A RESOLUTION AUTHORIZING A COST OF LIVING INCREASE BASED ON THE CONSUMER PRICE INDEX PURSUANT TO THE AMENDMENT AND RESTATEMENT OF AGREEMENT FOR FIELD MAINTENANCE SERVICES BETWEEN THE CITY OF ORMOND BEACH AND AUSTIN OUTDOOR, LLC D/B/A YELLOWSTONE LANDSCAPE, INC.; AND SETTING FORTH AN EFFECTIVE DATE.

Commissioner Deaton moved, seconded by Commissioner Briley, for approval of Resolution No. 2025-164, as read by title only.

Commissioner Deaton expressed concerns of the Consumer Price Index (CPI) increase for items 7D and 7E.

Commissioner Tolland stated the request was lower than the average CPI increase for the 12-month time frame. She stated in future contracts it would be beneficial to have the CPI adjustment factored into the contract amendments.

Commissioner Deaton explained the CPI adjustment was approved every year.

Commissioner Sargent voiced concerns regarding the increase, service level provided, and contract amendments. He noted he would prefer to see the contract bid out next year.

Commissioner Briley expressed support of Item 7D.

Commissioner Deaton stated she could support 7D, noting concerns with the annual CPI adjustment. She requested Mr. Robert Carolin, Parks and Recreation Director, speak on the items.

Mr. Carolin explained the purpose of the CPI adjustment, the clause in the contract, and concerns of putting the contract out to bid. He explained the CPI adjustment was to keep the contract fair and just, not leverage to save the city money.

Commissioner Tolland inquired if her idea of incorporating the CPI into the next contract was not possible as it would be harder to bid out in the future; whereby, Mr. Carolin stated it was correct and discussed the increased prices for items such as petroleum.

Mayor Leslie inquired if a vote was needed or if it could be tabled; whereby, Mr. Carolin stated the contract renewal was previously approved and the CPI adjustment would be applied to October 1, 2025, and encouraged a vote to take place.

Commissioner Tolland stated the item was not based on the level of service but on how much it cost for Yellowstone Landscape, Inc. (Yellowstone) to do the required job. She stated the Commission could always approve a lower CPI rate.

Commissioner Sargent inquired if there was a lower percentage the Commission would be comfortable with.

Commissioner Deaton stated she would support the item but would need 7E to be lower before she would support.

Call Vote:	Commissioner Sargent	No
	Commissioner Deaton	Yes
	Commissioner Briley	Yes
	Commissioner Tolland	Yes
Carried.	Mayor Leslie	Yes

City Clerk Susan C. Dauderis read by title only:

E. Yellowstone CPI Rate Adjustment, Grounds Maintenance

RESOLUTION NO. 2025-165: A RESOLUTION AUTHORIZING A COST OF LIVING INCREASE BASED ON THE CONSUMER PRICE INDEX PURSUANT TO THE GROUNDS MAINTENANCE SERVICES AGREEMENT BETWEEN THE CITY OF ORMOND BEACH AND AUSTIN OUTDOOR, LLC D/B/A YELLOWSTONE LANDSCAPE, INC.; AND SETTING FORTH AN EFFECTIVE DATE.

Commissioner Tolland moved, seconded by Commissioner Briley, for approval of Resolution No. 2025-165, as read by title only.

Commissioner Deaton stated she was not comfortable with the increase.

Commissioner Tolland inquired if there was a compromise Commissioner Deaton would support.

Commissioner Briley suggested lowering by half a percent.

Commissioner Deaton stated she would support a two percent CPI increase; whereby, Commissioner Tolland and Mayor Leslie agreed. Commissioner Deaton explained she was comfortable looking at other options moving forward as she voiced her lack of satisfaction on the level of work provided by Yellowstone within the corridors of the community.

Commissioner Sargent voiced opposition, noting there was no improvement since the start of his tenure as a City Commissioner.

Commissioner Tolland inquired if qualifiers could be added to the CPI adjustment; whereby, it was confirmed it was not advised.

Commissioner Deaton stated she would like to know what the dollar amount was if changed to a two percent increase.

Commissioner Tolland moved, seconded by Commissioner Deaton, for approval of Resolution No. 2025-165, as amended to reflect a two percent CPI increase.

Call Vote:	Commissioner Deaton	Yes
	Commissioner Briley	Yes
	Commissioner Tolland	Yes
	Commissioner Sargent	No
Carried.	Mayor Leslie	Yes

There were no further comments on the Consent Agenda.

8. PUBLIC HEARINGS

Mayor Leslie opened the Public Hearings.

City Clerk Susan C. Dauderis read by legal title only:

A. Seward Johnson 2026 Sculpture Tour, Downtown Public Art

RESOLUTION NO. 2025-166: A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF ORMOND BEACH, FLORIDA, PROVIDING CONSENT TO ORMOND BEACH ARTS DISTRICT, INC., FOR THE PUBLIC DISPLAY OF SEWARD JOHNSON SCULPTURES WITHIN THE DOWNTOWN OVERLAY DISTRICT; PROVIDING FOR CONDITIONS; PROVIDING FOR THE EXECUTION OF A HOLD HARMLESS AND INDEMNITY AGREEMENT IN FAVOR OF THE CITY; AND SETTING FORTH AN EFFECTIVE DATE.

Commissioner Sargent moved, seconded by Commissioner Briley, for approval of Resolution No. 2025-166, as read by title only.

Mr. Steven Spraker, Planning Director, reviewed the request for the Public Art, reviewed the sponsorships, history of the item, and explained staff recommended approval.

Ms. Judith Stein, 166 Orchard Lane, provided details and statistics from the prior sculpture tour and the increased private sponsorships. She reviewed the request of the Ormond Beach Arts District Board. She thanked the Commission and city staff for their continued support.

Commissioner Briley congratulated Ms. Stein on an award she received and discussed his support of the item, highlighting eco-tourism and the activity brought to the city's downtown area.

Commissioner Tolland discussed the importance of art and public-private partnerships within the community.

Commissioner Sargent stated his support of the item, noting he would like to see alternative funding sources for the sculpture tour in the future.

Mayor Leslie echoed Commissioner Sargent noting his support of the item, and highlighted the need to look for private funding for the tour.

Commissioner Deaton agreed, noting private donors could supplement the city's funds.

Call Vote:	Commissioner Briley	Yes
	Commissioner Tolland	Yes
	Commissioner Sargent	Yes
	Commissioner Deaton	Yes
Carried.	Mayor Leslie	Yes

Mayor Leslie closed the Public Hearings.

9. REPORTS, SUGGESTIONS, REQUESTS

Events, Updates, and Requests

Ms. Shanahan provided details on upcoming meetings, workshops, events, and updates on city projects.

Commissioner Tolland noted October was National Pedestrian Safety Month providing pedestrian statistics. She provided updates from the Florida League of Cities (FLC)

Policy Committee of Utilities, Natural Resources, and Public Works, events she attended, and city projects. She invited citizens to reach out to Mr. Doug Thomas if interested in helping with a Founders Day event in 2026.

Commissioner Sargent discussed events he attended and upcoming events. He suggested hosting an event for residents to see the State of the City video. He discussed updates on Senate Bill 180. He requested staff look into Central Bidding to replace DemandStar and provided handouts, noting he would like to discuss at the November 4, 2025, City Commission workshop. He stated he would provide staff with a contact to review a noise abatement procedure for the Ormond Beach Municipal Airport. He provided statistics from the 2025 Biketober Fest event, commending the law enforcement officers. He inquired about an update on Fortunato Park; whereby, Mr. Finley stated he would look into the status. He quoted Robert Williams and urged residents to check in on others.

Commissioner Deaton reviewed events she attended and upcoming events.

Commissioner Briley discussed the importance of the updates provided by Commissioner Tolland and her FLC committee. He discussed upcoming events and stated he spoke with staff regarding deer crossing signs along Division Avenue.

Mayor Leslie discussed events he attended and congratulated the Mayor's ACE Award recipients. He thanked all those involved with the Biketober Fest and Taste of Ormond events. He wished Sargeant John Jeckovich well for his 100th birthday and safety for those celebrating Halloween.

10. ADJOURNMENT

Mayor Leslie adjourned the meeting at 8:11 PM.

APPROVED: November 4, 2025

BY: Jason Leslie, Mayor

ATTEST:

Susan Carroll Dauderis,
City Clerk



City of Ormond Beach
City Commission Agenda
Staff Report

Agenda Date	November 4, 2025	Item No	7.A.
Section	CONSENT AGENDA	Category	Consent - Resolution
Subject	National Association of Government Employees Collective Bargaining Agreement		
Recommended Action	Staff recommends approval of the collective bargaining agreement with NAGE through September 30, 2028.		
Strategic Goal	Governance - Other		
Department Staff Contact	Human Resources Samantha Potts, Human Resources Manager		

Summary

This is a request for City Commission approval of a collective bargaining agreement between the City of Ormond Beach and its unionized general employees represented by the National Association of Government Employees (NAGE). The agreement will become effective on the date it is last executed by the respective parties and will remain in effect until September 30, 2028, or until a new agreement is reached.

After several bargaining sessions, the collective bargaining agreement was presented to employees included in the general employee bargaining unit, who on August 29, 2025, voted in favor of ratifying the proposed contract.

The agreement remains consistent with the provisions of the expiring contract with updates to economic items and minor administrative revisions to improve operational efficiency. Significant changes to the terms and conditions of employment are summarized below:

Article 21: Personal Leave Time & Compensation Time

Section 21.8 amends the use of compensatory time to allow compensatory time scheduled at least 72 hours in advance to be considered "time worked" for the purpose of computing overtime.

Article 28: Wages

Section 28.1 provides the following annual wage increases:

- Year one: 5% increase
- Year two: 4% increase
- Year three: 3% increase

Article 34: Pension

Effective October 1, 2025, employees hired on or after December 19, 2012, will be enrolled in a 2.25% multiplier defined benefit plan, and will contribute 4% of their base wages toward their retirement account. Associated revisions to the City's pension ordinance are included in a separate agenda item for review.

As of October 1, 2025, the City will no longer contribute to the 401(a), defined contribution retirement plan.

Financial Impact

The collective bargaining contract and all benefits are included in the FY 2025-26 budget. Wage increases are estimated at \$300,000 and pension cost increases specific to bargaining unit members is estimated at \$100,000 for the fiscal year.

Citizen Impact

Negotiating fair and competitive terms of employment for represented employees through multi-year collective bargaining agreements supports the continued recruitment and retention of high-quality employees. This ensures consistent delivery of critical services and a safe, enjoyable environment for all residents, visitors, and businesses.

Attachments

1. 25-158 Collective Bargain Agr NAGE Gen Emp (P25-0132G)
2. NAGE Proposed Contract 2025-2028 (no mark-up)
3. NAGE Proposed Contract 2025-2028 (with mark-up)

RESOLUTION NO. 2025-158

A RESOLUTION AUTHORIZING THE EXECUTION OF A COLLECTIVE BARGAINING AGREEMENT BETWEEN THE CITY OF ORMOND BEACH AND THE NATIONAL ASSOCIATION OF GOVERNMENT EMPLOYEES; AND SETTING FORTH AN EFFECTIVE DATE.

BE IT RESOLVED BY THE CITY COMMISSION OF THE CITY OF ORMOND BEACH, FLORIDA, THAT:

SECTION ONE. The Mayor and the City Manager are hereby authorized and directed to execute a Collective Bargaining Agreement between the City and the National Association of Government Employees, a copy of the Agreement being attached hereto and incorporated herein by reference.

SECTION TWO. This Resolution shall take effect immediately upon its adoption.

APPROVED AND AUTHENTICATED, this 4th day of November, 2025.

JASON LESLIE
Mayor

ATTEST:

SUSAN CARROLL DAUDERIS
City Clerk



**CITY OF ORMOND BEACH
GENERAL EMPLOYEES'
COLLECTIVE BARGAINING AGREEMENT**

October 1, 2025 – September 30, 2028*

DRAFT

**subject to effective dates indicated within the contract*

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PREAMBLE

This Agreement is entered into by the CITY OF ORMOND BEACH, FLORIDA, hereinafter referred to as the "City" and the NATIONAL ASSOCIATION OF GOVERNMENT EMPLOYEES, hereinafter referred to as "NAGE" for the purpose of promoting harmonious relations between the City and NAGE, to establish an orderly and peaceful procedure, to settle differences which might arise, and to set forth the basic and full Agreement between the parties concerning rates of pay, hours of work, and other conditions of employment as provided by law.

ARTICLE 1
RECOGNITION

1.1 The City hereby recognizes NAGE as the exclusive bargaining representative for all matters affecting wages, hours, and working conditions as provided for in Chapter 447, Florida Statutes, for those employees in the unit certified by the Public Employees Relations Commission, in its Certification No. 1897.

ARTICLE 2

MANAGEMENT RIGHTS

2.1 NAGE and the bargaining unit employees recognize that the City has the exclusive right to manage and direct the operations of all City Departments. Accordingly, the City specifically, but not by way of limitation, reserves the exclusive right to: hire, promote and lay-off employees; fire, demote and suspend for just cause; transfer employees from location to location or assignment to assignment; rehire employees; determine the starting and quitting times and the number of hours and shifts to be worked, subject to the Hours of Work and Overtime Article; maintain the efficiency of employees by communication through supervisory personnel; merge, consolidate, subcontract, expand or close any department(s) or any part thereof or expand, reduce, alter, combine, assign or cease any positions with adequate notice; control the use of equipment and property of the City; fill any position on a temporary, emergency or interim basis; determine the number, location and operation of each department, substations and other divisions thereof; schedule and assign the work to the employees and determine the size and composition of the work force; formulate and implement City and departmental policy, rules and regulations; and introduce new or improved services, maintenance procedures, materials, facilities and equipment. If the City fails to exercise any one or more of the above functions from time to time, it shall not be deemed a waiver of the City's right to exercise any or all of such functions. Any right or privilege of the City not

specifically relinquished by the City in this Agreement shall remain with the City.

2.2 If, in the discretion of the Mayor and/or the City Manager, it is determined that civil emergency conditions exist, including riots, civil disorders, weather conditions or what is judged to be a public danger or emergency, the provisions of this Agreement may be suspended by the Mayor and/or City Manager during the time of the declared emergency, provided that the wage rates and monetary fringe benefits shall not be suspended.

2.3 NAGE agrees it will not in any manner whatsoever, either directly or indirectly, support or condone, or in any way assist with any movement or effort in the City, which might in any fashion have the effect of changing or altering this Labor Agreement. Such Agreement includes, but is in no way limited to, the supporting, either directly or indirectly, of any local legislation, which would result in the alteration of any of the terms of this Agreement. This language is not intended to limit the speech of employees who wish to express their personal opinions.

2.4 The above rights of the City are not all-inclusive but indicate the type of matters or rights which belong to and are inherent to the City in its capacity of management and direction of the City of Ormond Beach. Any rights, powers and authority the City had prior to entering into this Agreement

are retained by the City except as expressly and specifically abridged, delegated, granted or modified by this Agreement.

ARTICLE 3

EMPLOYEE RIGHTS

3.1 The City and NAGE agree not to interfere with the right of any eligible employee to become a member of NAGE, withdraw from membership from NAGE, or refrain from becoming a member of NAGE.

3.2 There shall be no discrimination against any employee by reason of race, creed, color, age, national origin, sex, handicap or NAGE membership or activity, or lack of NAGE membership or activity. Reference to the use of the word "he" in this Agreement is for brevity only and shall be interpreted to mean "he" or "she". The exclusive remedy for any alleged violations of this section shall be federal and/or state courts and agencies and not Article 17, the Grievance and Arbitration procedure under this Contract.

3.3 Nothing contained in this Agreement shall foreclose any employee covered by this Agreement from pursuing any right or remedy, not including arbitration as defined in Article 17 available under this Agreement, without representation of NAGE. Further, nothing contained in this Agreement shall foreclose any employee from discussing a non-contract problem directly with his immediate supervisor or other Departmental Official without the intervention of NAGE, provided that the immediate supervisor or other Departmental Official agrees to discuss and/or attempt to resolve the matter outside the formal grievance procedure.

3.4 In any matter involving a formal grievance, NAGE shall be given the opportunity to be present at any meeting called for the resolution of such grievance so long as a NAGE representative is available in a timely manner.

ARTICLE 4

STRIKES AND LOCKOUTS

4.1 There will be no strikes, work stoppages, picketing, slowdowns, boycotts, or concerted failure or refusal to perform assigned work by the employees or NAGE and there will be no lockouts by the City for the duration of this Agreement. NAGE supports the City fully in maintaining normal operations.

4.2 Any employee who participates in or promotes a strike, work stoppage, picketing, slowdown, boycott, or concerted failure or refusal to perform assigned work may be disciplined or discharged by the City and only the question of whether he did in fact willingly participate in or promote such action shall be subject to the grievance and arbitration procedure.

4.3 It is recognized by the parties that the City is responsible for and engaged in activities which are the basis of the health and welfare of the citizens. Accordingly, it is understood and agreed that in the event of any violation(s) of this section, the City shall be entitled to seek and obtain immediate injunctive relief.

4.4 "Picketing" as used herein shall mean any action which has the effect of preventing employees from reporting to or continuing work or preventing the public from entering any public facilities.

ARTICLE 5

VACANT

ARTICLE 6

PERSONNEL RECORDS

6.1 Each employee covered by this Agreement shall have the right to inspect his official personnel file; provided, however, that such inspection shall take place off duty, or on duty with the prior permission of the employee's Department Director or his designee. If permission is granted, an appointment to review the file must be made with the Human Resources Department. The file will be reviewed at the location where the official personnel file is kept. The employee shall have the right to obtain duplicate copies, consistent with the City's normal policy and payment for such copies under the Public Records Act.

6.2 Employees shall have the right to file a written response to any letter of reprimand or other document, which is placed in the employee's official personnel file, subsequent to the effective date of this Agreement, as a result of supervisory action or citizen complaint. At the employee's request any such written response shall be included in the employee's official personnel file together with the letter of reprimand or other document against which it is directed.

6.3 A copy of any written disciplinary action placed in an employee's personnel file will be provided to the employee by the supervisor or by the Human Resources Department within seven (7) days of the date the written notice is placed in the personnel file.

6.4 The City will protect each employee's personnel file to the extent permitted by law.

ARTICLE 7
TEMPORARY ASSIGNMENT TO A HIGHER CLASSIFICATION

7.1 In the event a Department Director determines that there is a need to temporarily fill a regularly budgeted position with an employee from a lower classification, he shall immediately notify the Human Resources Director of such intention.

In the event no current eligibility list exists for such budgeted position, the Department Director may select any employee from a lower classification to temporarily fill such budgeted position. If the employee selected for a temporary position is not selected to the regular position, this employee shall be returned to his previous classification and pay rate.

7.2 If an employee is temporarily assigned to a budgeted position of a higher classification for three consecutive days, the employee shall receive at least five (5%) percent higher than the base rate of pay, or the bottom of the pay grade in which the employee is serving, whichever is higher, for the period served in the higher classification regardless of whether the three consecutive days are assigned during the same work week or during different work weeks.

7.3 The Union and the City agree that for some positions, due to the type of work involved, the City may waive the three consecutive day requirement listed above and approve higher pay for individual days the employee performs the job.

ARTICLE 8

PROMOTIONS

8.1 Whenever a budgeted promotional vacancy exists in a classification within the bargaining unit, the City will determine whether or not to fill such vacancy. The City shall interview all eligible internal applicants who meet the minimum qualifications of each open position.

8.2 To be eligible for a promotion to a higher classification, an employee must have been actively engaged in the duties of the position from which the employee seeks promotion and have satisfactorily passed any applicable probationary period.

8.3 An employee who is promoted will serve a ninety (90) day probationary period, which may be extended an additional ninety (90) days as determined appropriate by management. The probationary period may also be extended in the event the employee is unable to work because of illness, injury, or leave of absence. Such extension shall be on a day-for-day basis for any leave usage of more than forty (40) consecutive work hours.

8.4 During promotional probationary status, an employee may be demoted for failure to meet the expectations of the promotional position, which demotion shall not be subject to the grievance procedure in Article 17.

ARTICLE 9
ASSOCIATION REPRESENTATIVE

9.1 NAGE shall be represented by its President or his designee. It shall be the responsibility of NAGE to notify the City Manager in writing of any change in the designation of President or his designee, subsequent to the execution of this Agreement.

9.2 The President and two (2) members of NAGE's negotiating committee (employees of the City) shall be permitted to attend, without loss of pay, the City Commission meeting where final action is scheduled to be taken on the approval (or rejection) of this Collective Bargaining Agreement and its successor.

9.3 An employee representative of NAGE, designated by the President, shall be permitted reasonable access for reasonable periods of time to all departmental work locations to handle specific grievances. The exercise of such access rights by the Employee Representative shall not interfere with their own or the duties of other employees.

9.4 Three (3) employee representatives of NAGE, designated prior to the beginning of negotiations, who are engaged in the reopening of this contract or in the successor contract shall be allowed to attend negotiation sessions that occur within their normal duty hours without loss of pay or benefits, up to a maximum of 20 hours per year per representative.

ARTICLE 10
EMPLOYEE-MANAGEMENT COMMITTEE

10.1 There shall be an Employee-Management Committee consisting of the following NAGE and Management representatives:

- A. Three (3) representatives of NAGE; and
- B. The Human Resources Director, the City Manager, and one (1) department head (or their respective designees).

10.2 The Employee-Management Committee shall, upon request of either party, meet up to a quarterly basis on dates mutually agreed upon by the participants. The function of the Committee shall be to discuss general matters pertaining to employee relations and departmental operations. NAGE representatives attending Committee meetings during their off-duty hours shall not be compensated for the time spent in such meetings. NAGE representatives attending Committee meetings during on-duty hours will be released from duty without loss of pay or benefits.

10.3 The Committee shall not engage in collective bargaining or the resolution of grievances.

ARTICLE 11
SENIORITY

11.1 Except as otherwise specifically provided, seniority shall consist of continuous accumulated paid service (to include periods of authorized leave) with the given Department. Departmental seniority shall be computed from the most recent date of assignment to the Department as recorded in the Human Resources Department. City seniority shall be computed from the most recent date of hire by the City as recorded in the Human Resources Department. Seniority shall also accumulate during absences in which the employee is receiving workers' compensation as a result of an injury sustained during his employment with the City of Ormond Beach benefits and approved FMLA Leave. Except as otherwise provided, classification seniority shall have preference. Classification seniority shall be computed from the most recent date of assignment to a classification as recorded in the Human Resources Department. Seniority shall be utilized for the following purposes:

Requests for the use of personal leave, when made simultaneously, shall be approved on the basis of classification seniority preference within a department; provided, however, that the Department shall retain the right to disregard seniority preference in the event it becomes necessary to do so in order to provide adequate coverage in certain specialized areas during any period of personal leave usage. Nothing contained herein shall be interpreted as restricting the Department's right to

cancel all personal leave during any given period in the event of disaster or emergency.

11.2 In the event of a personnel reduction, employees shall be laid off from a classification as provided in this Section. Layoff shall be based on the Employees' performance, attendance, and disciplinary record; in the event all factors are equal, seniority shall be the deciding factor.

11.3 Employees shall be recalled from lay-off in the inverse order from which they were laid-off. A laid-off employee shall retain recall rights for twelve (12) months from the date of layoff. It is the responsibility of the employee to keep the City advised as to the current location and telephone number where he may be reached for recall. Employees recalled shall respond within ten (10) calendar days of the recall notification and will report to work as directed; provided that absent mutual consent of the City and the employee, the employee will have at least fourteen (14) calendar days from the date of notification to return to work. Employees being recalled will be subject to a drug screen and physical and shall be required to hold all licenses and certifications for the position to which they are being recalled. If the employee being recalled does not respond within ten (10) working days, his name shall be removed from the recall list and no further recall attempts shall be made with that employee.

ARTICLE 12
PROBATIONARY PERSONNEL

12.1 All new hires of the City shall serve a probationary period of six (6) months. During such probationary period employees shall not be entitled to any seniority or tenure rights, but during such period such new hires shall be subject to all other terms and conditions of this Agreement and applicable City regulations. Upon completion of said six (6) months probationary period, employees shall be known as regular employees and seniority rights and tenure shall accrue from commencement of the probationary period and shall be considered a part of such employee's seniority rights. Probationary employees are entitled to grieve but are not entitled to arbitrate under Article 17.

12.2 The probationary period may be extended up to ninety (90) additional days in the event the employee receives a rating lower than "Meets Standards" during such probationary period. The probationary period may also be extended in the event the employee is unable to work because of illness, injury, or leave of absence. Such extension shall be on a day-for-day basis for any leave usage of more than forty (40) consecutive work hours.

12.3 This Article does not apply to probation on a promotion.

ARTICLE 13

INTERNAL INVESTIGATIONS

13.1 At the request of any employee under investigation, he shall have the right to be represented by counsel or any other representative of his choice (at the employee's expense) who shall be present at all times during any interrogation in which the employee is being questioned relative to alleged misconduct that could result in disciplinary action. The person chosen must be available within twenty-four (24) hours or the employee must choose another representative or proceed without a representative.

13.2 The City shall not discharge or discipline any employee without just cause and due process. If, in any case, the City finds there to be just cause for suspension or discharge, the employee and NAGE will be notified in writing that the employee has been suspended and may be subject to discharge, or that the employee has been discharged.

13.3 The City agrees that no adverse action will be taken against any employee for exercising the rights provided for in this Article.

13.4 In the cases in which the City chooses to relieve an employee from duty pending an investigation or other administrative determination, the following conditions will prevail:

I. The employee will be suspended without pay or benefits for a maximum of fifteen (15) working days.

II. At the end of the fifteen (15) day period, the employee shall be reinstated, terminated, or disciplined; or the investigation may continue with the employee placed on paid suspension. If no disciplinary action is taken, the employee shall be reinstated with all pay and benefits restored including the unpaid period under Paragraph I.

III. Should disciplinary action result from the investigation, that period of time during which the employee was relieved from duty without pay will be included in the disciplinary action. In the event that an employee has been paid, the employee's accumulated leave or compensatory time shall be charged as a set-off.

ARTICLE 14
BULLETIN BOARDS

14.1 Where City bulletin boards are available, the City agrees to provide space on such bulletin boards for NAGE use. Where space is not available, NAGE can put up a reasonable size bulletin board.

14.2 Copies of all material, notices or announcements shall be submitted to the appropriate Director prior to posting on the bulletin board.

14.3 No materials, notices or announcements shall be posted which contain anything of a political or controversial nature and which adversely reflects upon the City of Ormond Beach, its independent agencies, its employees or any labor organization among its employees.

ARTICLE 15

VACANT

ARTICLE 16

DISCIPLINARY ACTION

16.1 In the event a non-probationary employee is to be discharged demoted or suspended, the City agrees that he shall be provided with written notification of the reasons (just cause) for the discharge, demotion, or suspension and the employee will be given an opportunity to explain his actions to the Director or his designee prior to the action becoming effective. The employee will be hand delivered the Director's decision prior to its effective date or it will be mailed to the address in the City Human Resources Department records via FedEx, UPS, or USPS mail, with tracking and delivery confirmation. This section does not apply to employees on new hire probationary status or to employees on probationary status due to promotions. An employee on new hire probationary status may be dismissed without complying with this section. An employee who has been promoted may be demoted to his prior position during his probationary status without complying with this Section.

16.2 Upon request, any employee may obtain a copy of any statement which he (personally) has given to the City in connection with any investigation based upon which disciplinary action can or will be taken against the employee. At the time of such request, the employee shall be required to pay all costs relating to the copy of his statement.

16.3 In the event an employee becomes the subject of a formal Departmental or City investigation arising from a citizen complaint or allegation, the Department or the City, whichever is appropriate, shall notify the employee of the disposition of the complaint upon the conclusion of the formal investigation.

16.4 Grievances addressing discipline shall be initiated at Step III. Grievances regarding verbal and written reprimands shall not go beyond Step IV under Article 17 of this agreement. Such grievance shall be presented to the Director in writing within ten (10) days of the date the employee knows or should have known of the cause of action.

ARTICLE 17
GRIEVANCE AND ARBITRATION PROCEDURE

17.1 In a mutual effort to provide a harmonious working relationship between the parties to this Agreement, it is agreed and understood that there shall be a procedure for the resolution of grievances between the parties and that such procedure shall cover grievances involving the application or interpretation of this Agreement.

On any issue that could be heard by the Human Resource Board and is also subject to this Article, the employee will have his choice of which procedure to follow. The selection of the Human Resource Board route will be considered a conclusive waiver of the grievance and arbitration procedure, and vice versa. An "issue" under this Section means an issue arising out of a single occurrence or set of events.

- A. The City shall retain the right to establish and administer a Performance Evaluation system to conduct annual performance evaluations of employees to appraise their productivity, effectiveness and compliance with the rules and regulations. The purpose of evaluations is to generally improve performance, to identify and recognize superior performance, to facilitate communication between supervisors and employees, and to provide timely and accurate information which may be used in making of personnel decisions related to employee performance.

- B. In the event a non-probationary employee wishes to appeal an overall performance evaluation of less than “Meets Standard” (or equivalent), the employee may utilize the grievance procedure up to Step IV, City Manager, but may not arbitrate the grievance. In the alternative, the employee may utilize the Human Resources Board hearing process for the appeal outlined in the Human Resources Policy. Employees with a “Meets Standard” or higher overall performance rating may not utilize the grievance procedures either in this agreement or the Human Resources Policy, but may request a meeting with the Department Director to discuss their concerns.

17.2 Every effort will be made by the parties to settle any grievance as expeditiously as possible. Any grievance not answered by management within the prescribed time limits shall automatically advance to the next higher step, provided that, if the written answer at Step IV is not timely received, NAGE, if it desires to arbitrate under Step V, Arbitration, must request arbitration within fifteen (15) days of the date the City Manager's response was due under Step IV. Should the grieving party fail to observe the time limits as set forth in the steps of this Article, the grievance shall be conclusively deemed as having been abandoned.

17.3 Grievances shall be presented in the following manner:

STEP I. The employee shall first discuss his grievance with his immediate supervisor within ten (10) days of the occurrence of the event(s), which gave rise to the grievance or from the date on which the employee becomes knowledgeable of the cause of action. If the event(s) which gave rise to the grievance occurred at a time when the employee was on personal leave time, or other compensated leave, the ten (10) day period shall commence immediately upon the employee's return from such compensated leave. The first step (between the employee and his immediate supervisor) shall be on an informal and oral basis, and shall not involve NAGE or any other representative of the employee, unless requested by the employee. The immediate supervisor shall render his decision, within five (5) days after presentation of the grievance. Any resolution of an oral grievance under this Step must be approved by the Director before the resolution is binding on the City. If not approved, the grievance may be appealed to Step II within five (5) days of disapproval.

STEP II. Any grievance which cannot be satisfactorily settled with the immediate supervisor shall be reduced to writing by the employee and shall be filed with the Division Manager. Such grievance shall be presented to the Division Manager in writing within five (5) days of the date of completion of Step I. The Division Manager shall, within five (5) days after receipt of the grievance, render his decision on the grievance in writing, unless a longer period of time is mutually agreed upon.

STEP III. Any grievance which cannot be satisfactorily settled with the Division Manager shall next be submitted to the Director, or his designee, either through a representative of NAGE and the employee, or by the employee himself at the employee's option. The grievance, as specified in writing in Step II, shall be discussed by and between the employee and/or the representative of NAGE and the Director, or his designee, within five (5) days after the completion of Step II. Within five (5) days after this discussion (or such longer period of time as is mutually agreed upon), the Director, or his designee, shall render his decision in writing, with a copy to NAGE. Grievances addressing discipline shall be initiated at Step III.

STEP IV. Any grievance not satisfactorily settled at Step III above may be appealed to the City Manager or his designee within five (5) days from the date the Director has rendered his decision. This appeal shall be submitted in writing and a copy of the original written grievance must be attached. The City Manager shall render his decision within five (5) days of receipt of the appeal. A copy of the decision will be sent to NAGE. The time limits specified in this Article may be extended by mutual agreement of the parties. Grievances regarding verbal and written reprimands shall not go beyond Step IV.

STEP V. ARBITRATION. In the event a grievance processed through the grievance procedure has not been resolved in Step IV above, NAGE may request that the grievance be submitted to arbitration within fifteen (15) days after the City Manager renders a written decision on the

grievance. A copy of the request for arbitration must be provided to the other party. The party requesting arbitration shall request the Federal Mediation and Conciliation Services (FMCS) to furnish a panel of seven (7) names from which each party shall have the option within five (5) days of receipt of striking three (3) names in alternating fashion, thus leaving the seventh (7th), which will give a neutral or impartial arbitrator. The party requesting arbitration shall have the first strike. The FMCS will be advised of the arbitrator selected.

17.4 The City and NAGE shall attempt to mutually agree in writing as to the statement of the grievance to be arbitrated prior to the arbitration hearing, and the arbitrator shall thereafter confine his decision to the particular grievance thus specified. In the event the parties fail to agree on the statement of the grievance to be submitted to the arbitrator, the arbitrator will confine his consideration and determination to the written statement of the grievance presented in Step II of the grievance procedure. The arbitrator shall fashion an appropriate remedy for violations of the provisions contained in this Agreement. Provided that the arbitrator's award in any case involving back pay shall not make the employee more than whole (i.e.: total wages lost less interim earnings and unemployment compensation). No interest, damages, or attorney's fees may be awarded.

The arbitrator shall have no authority to change, amend, add to, subtract from, or otherwise alter or supplement this Agreement or any part hereof or amendment hereto. The arbitrator shall have no authority to consider or rule upon any matter which is stated in this Agreement to be

subject to arbitration or which is not a grievance as defined in this Agreement; nor shall this Agreement be construed by the arbitrator to supersede applicable laws in existence at the time of signing of this Agreement, except to the extent herein provided. To the extent such rules are not inconsistent with this Article, the arbitration hearing shall be conducted in accordance with the rules of procedure promulgated by the Federal Mediation and Conciliation Service.

17.5 Each party shall bear the expense of its own witnesses and of its own representatives for the purpose of the arbitration hearing. The impartial arbitrator's fees and related expenses and expenses of obtaining a hearing room, if any, shall be equally divided between the parties. Any party desiring a transcript of the hearing shall bear the cost of such transcript unless both parties or the arbitrator requests or obtains a copy of the transcript.

17.6 Copies of the arbitrator's award shall be furnished to both parties within thirty (30) days after the close of the arbitration hearing or as soon as possible following the hearing. The arbitrator's award shall be final and binding on the parties.

17.7 When a grievance is general in nature in that it applies to a number of employees rather than a single employee, or if the grievance is directly between NAGE and the City, such grievance shall be presented by NAGE's Representative, in writing, directly to the Director, as in Step III, within ten (10) days of the occurrence of the event(s). Where it is applicable

to a number of employees, each such employee for whom relief is sought shall be identified in the grievance, provided that no retribution will be taken against those so identified.

17.8 All references to "days" in this Article refer to working days (i.e.: days when City Hall is open for business).

17.9 Consistent with the provisions of Chapter 447, Florida Statutes, unless amended, it is mutually acknowledged and agreed that this Agreement shall be administered within the amounts agreed to by the City Commission for funding of the Agreement. Accordingly, and not withstanding any other provision of this Agreement to the contrary, the arbitrator shall have no authority, power or jurisdiction to construe any provision of the law, statute, ordinance, resolution, rule or regulation, or provision of this Agreement to result in, obligate, or cause the City to have to bear any expense, debt, cost or liability which would result, directly or indirectly, in the City exceeding the amounts initially agreed to by the City Commission for the funding of this Agreement as agreed upon by the parties. Any award which contravenes or is not in compliance with the provisions of this paragraph shall be null and void.

ARTICLE 18
TRAINING

18.1 The City agrees to make a good faith effort to promote on-the-job training for the purpose of improving the performance of employees, aiding employees to equip them for advancement to higher positions and greater responsibilities, and improving the quality of service rendered to the public.

18.2 Where the City requires an employee to attend training for specialized techniques, the City will make every reasonable effort to facilitate the employee attending such training during his normal working hours. In the event the City is unable to schedule the employee to attend such training during his normal working hours, the employee shall be required to attend such training during his off-duty hours; provided, however, that the time spent by the employee in such training during his off-duty hours shall be compensated in accordance with Article 22 (*Hours of Work and Overtime*).

ARTICLE 19

LEAVE OF ABSENCE

19.1 The department head may grant any employee in his department a leave of absence without pay for a period not to exceed thirty (30) days. Leaves of absence without pay for a period in excess of thirty (30) days but not more than six (6) months may be granted only upon the written approval of the City Manager. Failure of any employee to return to duty upon expiration of his leave of absence shall automatically constitute the resignation of that employee. Holidays, personal leave, and any other benefits based on time spent in the employ of the City shall not accrue (or be credited) during a leave of absence without pay; provided, however, that if permitted by the Retirement Plan, the employee may maintain his retirement credit by paying both his and the City's share of the Retirement Plan premiums and further that the employee may maintain his health insurance coverage by paying the total cost of his group insurance premium except when such leave is covered by the Family Medical Leave Act (FMLA). Any increases for which an employee may become eligible shall not be credited during any leave of absence without pay. An employee shall return from leave of absence to the same placement within the salary grade as at the time of commencement of leave of absence. If a pay increase was provided while the employee was on an unpaid leave of absence (other than approved FMLA leave), the increase will be provided upon the employee's return to work effective on the date of return and subject to Article 28.1(c). If the employee does not return to work following an unpaid leave of absence,

any payouts of leave shall be made based on the employee's hourly rate on the last day of work prior to the unpaid leave of absence.

19.2 Any employee covered hereunder may be given educational leave for the purpose of taking courses or attending conferences and/or seminars directly related to the employee's work as determined by the City Manager. Request for such educational leave must be approved in advance by the City Manager. The City Manager shall not be required to approve either the leave or any compensation therefore, but may do so in his absolute discretion.

An employee granted educational leave with full pay shall be entitled to receive all City benefits in the same manner as if he were on active duty during the period of the leave. The granting of benefits for employees on partially compensated or uncompensated educational leave shall be determined by the City Manager. If uncompensated, the employee will be treated in the same manner as if he was on a leave of absence without pay for the purposes of providing pay increases.

19.3 An employee who is a member of the National Guard or an organized military reserve unit of the United States will be allowed paid leave consistent with Florida Statute 115.07 and City policy. Prior to returning to duty (paid status) the City reserves the right to require the employee to take and pass the physical examination and drug screen that is then being required by the City for new hires in the same classification. It is the responsibility of the employee to notify the City immediately upon return to

duty of any injury sustained while participating as a member of the National Guard or an organized military reserve unit of the United States.

19.4 In the event an employee is granted a leave of absence, whether paid or unpaid, the employee shall return to work upon termination of the leave. Absent extenuating circumstances beyond the control of the employee, when neither the employee nor someone acting on his behalf is able to contact the City, failure to return to work shall automatically be construed as resignation by the employee.

19.5 Employees qualifying for leave under the Family and Medical Leave Act (FMLA) will be entitled to such leave pursuant to the Family and Medical Leave Act and City policy.

ARTICLE 20
HOLIDAYS

20.1 The City will recognize the following holidays for employees:

New Year's Day

Martin Luther King Jr. Day

Good Friday

Memorial Day

Independence Day

Labor Day

Veterans Day

Thanksgiving Day

Christmas Day

Two (2) floating holidays, as designated by the City

20.2 If an employee's off-duty day falls on a holiday, he shall receive holiday pay at his regular rate of pay.

20.3 If an employee is required to work on one of the recognized holidays, he shall receive payment at his regular rate of pay for all hours worked in addition to holiday pay equal to the number of hours the employee was scheduled to work. If not required to work, the employee will be paid eight (8) hours pay at the regular straight time rate as holiday pay. Under no circumstances will holiday pay for an employee who is scheduled to work on a holiday exceed the regular rate of pay for all hours worked plus holiday pay

equal to the number of hours the employee was scheduled to work. (For example, if a ten (10) hour shift person works the full ten (10) hours on a holiday, that employee would receive ten (10) hours of regular pay plus ten (10) hours of holiday pay).

20.4 If a holiday falls on a Saturday or Sunday, the City will designate another day as the holiday.

ARTICLE 21

PERSONAL LEAVE TIME & COMPENSATION TIME

21.1 Employees shall start to earn Personal Leave Time allowances as of their date of appointment. Every employee shall be eligible to use paid Personal Leave Time after completing his/her probationary period.

21.2 Personal Leave Time cannot be used before it is earned. Personal Leave Time shall accrue at the following rates for each full calendar month of service:

1st year of employment thru 4th year of employment	Twelve (12) hours per month
5th year thru 9th year of employment	Fourteen (14) hours per month
10th year thru 14th year of employment	Sixteen (16) hours per month
15th year thru 19th year of employment	Eighteen (18) hours per month
20th year and thereafter of employment	Twenty (20) hours per month

21.3 Personal Leave must be requested and approved using the City's leave request form at least 72 hours in advanced of scheduled use.

Such scheduled Personal Leave Time will be considered as “time worked” for the purposes of computing overtime under Article 22.

21.4 In the event of an emergency, such as personal or family illness or other unforeseen emergency, no advance approval for the use of Personal Leave Time will be required. In order to maintain service, all bargaining unit members agree that unscheduled Personal Leave Time will only be used when it is impossible to give the advance notice normally required for the use of scheduled Personal Leave Time. Employees shall notify management of an absence under this section as soon as possible, but not later than one (1) hour prior to the start of the work period. Extenuating circumstances will be considered. No doctor's certificate or any other proof of illness will be required under this section; provided, however, that if the City believes that the use of unscheduled Personal Leave Time is being abused, the City will so advise NAGE and the employee of the perceived abuse. If the abuse continues, the City reserves the right to refuse to permit the abusing employee to charge subsequent unscheduled leave to Personal Leave Time and any subsequent unscheduled leave will be taken without pay. Unscheduled Personal Leave Time is leave that is not approved in advance in accordance with Section 21.3. Unscheduled Personal Leave Time will not be considered as "time worked" for the purposes of computing overtime under Article 22. Requests for unscheduled Personal Leave which is not related to an illness or other emergency may be denied by the employee's Supervisor.

21.5 Personal Leave banks cannot exceed 520 hours as of an employee's anniversary date of service. Hours in excess of 520 at an employee's anniversary date, and every anniversary date thereafter, will be automatically forfeited. Exceptions to this automatic forfeiture include unique circumstances approved in advance by the employee's department director and the Human Resources Director.

21.6 Bargaining unit members may elect to be paid up to forty (40) hours of accrued Personal Leave on an annual basis. In order to be eligible for such payment, employees must have a minimum of 240 hours in their Personal Leave bank and request to receive such payment at least two (2) weeks in advance of their anniversary date. Every attempt will be made to process such payment with the payroll immediately preceding the employee's anniversary date. All hours paid under this section will be deducted from the employee's banks as of the date payment is made.

21.7 Upon separating from the City, any bargaining unit employee with time remaining in their Personal Leave Bank will receive full payment for the hours then remaining at termination up to 760 hours. In the event of a death, the employee's estate or the employee's designated beneficiary shall be entitled to a lump-sum payment of all accrued Personal Leave.

21.8 Bargaining Unit employees who are approved to work overtime, may elect to receive compensatory time off in exchange for overtime compensation during any work week in which the hours worked would

otherwise require overtime compensation under the provisions of the federal Fair Labor Standards Act – without regard to whether or not the employee is on probation. No employee may be forced to use accrued compensatory time at particular times. Compensatory time is credited to employees at one-and-one-half (1 ½) hours for each overtime hour worked. No Employee may accrue more than 240 hours of compensatory time. This 240-hour limitation represents no more than 160 hours of actual overtime worked.

A. A Bargaining Unit employee who has accrued compensatory time may request (schedule) the use of such compensatory time under the same terms identified in 21.3 and 21.4.

B. Use of earned Compensatory Time that is scheduled at least 72 hours in advance of use (“scheduled compensatory time”) will be considered as “time worked” for the purposes of computing overtime under Article 22. All other compensatory time (“unscheduled compensatory time”) will not be considered as “time worked” for the purposes of computing overtime .

C. When a Bargaining Unit employee terminates employment with the City for any reason, all unused compensatory time remaining in the Compensatory Leave bank will be paid at the final regular rate of pay received by the employee as an employee of the City.

D. It is intended that the provisions of this Subsection be in compliance with the compensatory time requirements of the federal

Fair Labor Standards Act and the rules and regulations promulgated there under, as the same exist on the date of the adoption of this Agreement.

ARTICLE 22
HOURS OF WORK AND OVERTIME

22.1 The following provisions shall govern hours of work and overtime.

A. Forty (40) hours shall constitute a normal workweek for an employee covered by this Agreement, except as hereinafter provided. Nothing herein shall guarantee an employee payment for a forty (40) hour workweek unless the employee actually works a forty (40) hour workweek. For the purpose of computing hours worked, Scheduled Personal Leave Time under Article 21.5, Scheduled Compensatory Time under Article 21.8, City recognized holidays under Article 20, and regularly scheduled hours not worked because the employee was on Jury Duty will be considered hours worked. Unscheduled Personal Leave Time, and Unscheduled Compensatory Time under Article 21, and all other time not worked, whether paid or unpaid, will not be considered as hours worked. For the purpose of this Agreement, authorized compensated leave shall mean leave compensated under existing City policy.

B. Hours worked in excess of forty (40) hours per week shall be compensated at the rate of time and one-half (1½) of the employee's regular straight time.

C. If an employee covered by this Agreement is "called out" to work at a time outside his normal working hours, he shall receive a minimum

of three (3) hours pay at the rate of time and one-half (1½). If “called out” again during the three-hour period an employee shall not receive any other compensation. “Call-out” time does not extend a regularly scheduled workday; it is an unforeseen circumstance requiring an employee to work beyond their normal schedule where advanced notice of such need to work is not possible to give.

D. Any employee, who in the exercise of his official duties, is ordered or required by the City to appear before any person or agency on his regular day off shall receive a minimum of three (3) hours pay at the rate of time and one-half (1½) of his regular rate. Any fee paid for the appearance shall be paid or turned over to the City by the employee. All hours under this section in excess of the three (3) hour minimum will be considered hours worked and be paid at the regular straight time or overtime rate, if more than 40 hours has been worked during the week.

E. The City will make a good faith effort to provide, wherever possible, forty-eight (48) consecutive hours off.

F. Employees required to respond for “on call” duty assignment by pager and/or cell phone shall be paid \$1 per hour for each hour they are required to be “on call”. “On call” duty will be assigned in accordance with the Overtime Guidelines Policy. In the event an employee does not respond to a call out, the employee will not be entitled to receive call out pay for that day.

ARTICLE 23
UNIFORM, CLEANING, AND EQUIPMENT

23.1 The City will provide uniforms when the wearing of a uniform is required by the City and cleaning will be provided as is currently in effect.

23.2 Any employee who shall receive any breakage, damage, or loss to any personal tool in the line of duty shall have it replaced or repaired at no cost to the employee. The use of such tools must be approved in advance by the Department Director.

23.3 The City agrees to have each City vehicle inspected by a qualified mechanic on a schedule to be determined by the Fleet Operations Section.

23.4 The City will provide a safe working place and issue the proper safety equipment and tools in order to enhance the safety and welfare of all employees. Employees will be required to use such safety equipment as provided.

23.5 Employees that are required to wear protective footwear as determined by specific job duties will receive an annual shoe allowance of \$175.00. Generally, positions requiring protective footwear to be worn are those where a majority of the work is performed outdoors or are of a

hazardous nature. The annual allowance will be dispersed annually in October.

ARTICLE 24
WORKERS' COMPENSATION

24.1 The City will provide benefits in accordance with the provisions of Chapter 440, Florida Statutes, and Chapter 38F, Florida Administrative Code.

ARTICLE 25

AUTHORIZED USE OF PRIVATE AUTOMOBILES

25.1 Any employee authorized to use his/her private automobile in the performance of his/her official City duties will be compensated at the rate established by the Florida Statutes. Such mileage shall be computed by the Finance Department based on the distance between the employee's regular duty station and the place of assignment or the employee's residence and place of assignment, whichever is shorter.

ARTICLE 26
LEGAL BENEFITS

26.1 The City will defend employees against any legal actions taken against them as a result of their actions while acting in the scope of their employment (i.e., in the line of duty), unless such employee acted in bad faith or with malicious purpose or in a manner exhibiting wanton and willful disregard of human rights, safety, or property, and will initiate any proper and appropriate counter-suits.

26.2 The City agrees to indemnify all employees against judgments levied against them as a result of their actions while acting in the scope of their employment provided that the City will not indemnify employees for punitive damages.

ARTICLE 27
INSURANCE

27.1 The City agrees to maintain a health/hospitalization/dental/vision insurance program. Employees will be entitled to the same benefit on the same basis provided to other City employees. NAGE agrees during the duration of this agreement there may be changes to the provided insurance plan, however the City will make a good faith effort to maintain current levels of coverage. The City will also make a good faith effort to maintain low cost dependent coverage.

27.2 Eligibility for hospitalization/dental/vision insurance coverage under the City's plan shall begin on the first day of the month following thirty (30) days of employment.

ARTICLE 28

WAGES

28.1 Upon ratification of this Agreement by both parties, employees shall receive wage adjustments as follows, increases will not be applied retroactively:

A. Employees shall receive a 5% increase for the fiscal year beginning October 1, 2025, and ending September 30, 2026.

B. Employees shall receive a 4% increase for the fiscal year beginning October 1, 2026, and ending September 30, 2027.

C. Employees shall receive a 3% increase for the fiscal year beginning October 1, 2027, and ending September 30, 2028.

D. Each employee with an annual performance evaluation of “Meets Standards” or above will receive wage adjustments as described in Paragraph A, B, and C above. An annual performance rating of lower than “Meets Standards” or equivalent will disqualify an employee from receiving said bonus and increase. However, an employee so rated will be reevaluated at the end of three (3) months and if rated “Meets Standards” (or equivalent) or above at that time, will receive the wage increase effective on the date of the “Meets Standards” (or equivalent) or above performance

rating. A rating of "unsatisfactory" or equivalent at any time may result in discharge.

E. Employees assigned to the afternoon shift (regular shift starts at 12:00 noon or after but prior to 8:00 p.m.) will receive an additional 2.5% shift differential per hour for all hours worked. Employees assigned to the night shift (regular shift starts at 8:00 p.m. or after but prior to 6:00 a.m.) will receive an additional 5% per hour shift differential for all hours worked. Employees assigned to the Day Shift (regular shift starts at 6:00 a.m. or after but prior to 12:00 noon) will not receive any shift differential. Shift differentials are applied to each individual shift, regardless of whether the shifts are worked continuously.

ARTICLE 29
DRUGS AND ALCOHOL

29.1 All members of the bargaining unit shall be subject to the City's Drug Free Work Place Policy, Administrative Policy #59.

ARTICLE 30
SEVERABILITY CLAUSE

30.1 If any provision of this Agreement or any part thereof be rendered or declared invalid by reason of any existing or subsequently enacted legislation, or by any decree of a court of competent jurisdiction, all other provisions and parts of this Agreement shall remain in full force and effect for the duration of the Agreement.

30.2 If any Article is rendered or declared invalid, it shall be re-negotiated within sixty (60) days.

ARTICLE 31

PROHIBITION AGAINST REOPENING NEGOTIATIONS

31.1 This Agreement contains the entire agreement of the parties on all matters relative to wages, hours, working conditions and all other matters which have been, or could have been, negotiated by and between the parties prior to the execution of this Agreement. Neither party shall be permitted to re-open or re-negotiate this Agreement or any part of this Agreement, except as provided herein.

ARTICLE 32

EDUCATION

32.1 All members of the bargaining unit will be entitled to educational benefits according to the City's Education/Training Reimbursement Policy, Administrative Policy #58.

32.2 If the City requires an employee to attend certification or re-certification classes the City will make every reasonable effort to facilitate the employee attending such training during normal working hours and the City will pay for such training. In the event the City is unable to schedule the employee to attend such training during normal working hours the provisions of 18.2 will apply. This section includes training and costs associated with obtaining a commercial driver's license (CDL) if it is a job requirement of the employee's current position. If the employee does not pass the CDL exam, additional costs incurred in obtaining a CDL will not be paid by the City and are the responsibility of the employee. The City will reimburse employees for CDL renewal costs.

ARTICLE 33
BEREAVEMENT LEAVE

33.1 The City agrees that when a death occurs in the immediate family of an employee, the employee shall be granted up to three (3) days off with pay. For a death that requires out of state travel, two (2) additional days will be allowed. These days will not be charged against any other leave time.

33.2 The City agrees that the “immediate family” shall be defined as: father, mother, spouse, child, step-child, legally-placed foster child, brother, sister, father-in-law, mother-in-law, sister-in-law, brother-in-law, step-parents, grandparents and grandchildren. If the employee was raised by someone other than one of the persons listed, he may request the leave as though he had been reared by one of the persons listed.

33.3 For additional bereavement leave, unscheduled Personal Leave Time may be granted.

ARTICLE 34

PENSION

34.1 The City will provide a 2.5% multiplier defined benefit plan to employees hired with the City prior to December 19, 2012. Effective October 1, 2025, The City will provide a 2.25% multiplier defined benefit plan to employees hired on or after December 19, 2012. The 2.25% multiplier defined benefit plan is not retroactive to any wages paid prior to October 1, 2025, however, employees hired prior to October 1, 2025, will receive years of service credit for vesting purposes equal to the number of months of full-time employment the employee had prior to October 1, 2025.

34.2 Bargaining unit members who enter the DROP program will be eligible to enter the program with an interest rate equal to the plan's actual rate of return but not less than zero.

34.3 Employees will contribute four percent (4%) of base wages to the employee's retirement account.

Effective October 1, 2025, the City will no longer make contributions to the City's defined contribution plan. Although the City will not be making contributions, the accounts established on behalf of employees currently enrolled in the defined contribution plan (hired on or after December 19, 2012, and before October 1, 2025) will remain open. If an employee is not vested in the defined contribution plan at the time the plan closes, the employee will continue to accrue vesting rights in accordance with the plan's

eligibility and vesting schedule. Employees that are, or become, vested in the defined contribution plan will retain ownership of all funds contributed into their account by the City.

34.4 The City agrees to allow pension plan members to recommend improvements to the pension plan. It is expressly understood that any costs associated with said improvements will be the permanent obligation of the pension plan members.

ARTICLE 35
JOB CLASSIFICATIONS

35.1 There will be thorough and complete job descriptions for all employee classifications covered by this Agreement.

35.2 Proposed changes in job descriptions will be submitted to the other party for review and comments. However, the City retains the right to modify job descriptions after considering comments, if any, received from the Union.

ARTICLE 36
TERM OF AGREEMENT

36.1 This Agreement will become effective on the date it is last executed by the respective parties and will remain in effect until September 30, 2028. This agreement contains no reopeners.

36.2 This Agreement will remain in full force and effect until its successor is ratified and implemented or until the statutory impasse procedure has been exhausted.

IN WITNESS WHEREOF, the parties hereto have hereunder set their hands and seals on the date shown.

CITY OF ORMOND BEACH

Jason Leslie, Mayor Date

Joyce Shanahan, City Manager Date

NATIONAL ASSOCIATION OF GOVERNMENT EMPLOYEES

Vince Champion, Regional Director Date



**CITY OF ORMOND BEACH
GENERAL EMPLOYEES'
COLLECTIVE BARGAINING AGREEMENT**

October 1, 2025 – September 30, 2028*

DRAFT (STRIKE THROUGH VERSION)

**subject to effective dates indicated within the contract*

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PREAMBLE

This Agreement is entered into by the CITY OF ORMOND BEACH, FLORIDA, hereinafter referred to as the "City" and the NATIONAL ASSOCIATION OF GOVERNMENT EMPLOYEES, hereinafter referred to as "NAGE" for the purpose of promoting harmonious relations between the City and NAGE, to establish an orderly and peaceful procedure, to settle differences which might arise, and to set forth the basic and full Agreement between the parties concerning rates of pay, hours of work, and other conditions of employment as provided by law.

ARTICLE 1
RECOGNITION

1.1 The City hereby recognizes NAGE as the exclusive bargaining representative for all matters affecting wages, hours, and working conditions as provided for in Chapter 447, Florida Statutes, for those employees in the unit certified by the Public Employees Relations Commission, in its Certification No. 1897.

ARTICLE 2

MANAGEMENT RIGHTS

2.1 NAGE and the bargaining unit employees recognize that the City has the exclusive right to manage and direct the operations of all City Departments. Accordingly, the City specifically, but not by way of limitation, reserves the exclusive right to: hire, promote and lay-off employees; fire, demote and suspend for just cause; transfer employees from location to location or assignment to assignment; rehire employees; determine the starting and quitting times and the number of hours and shifts to be worked, subject to the Hours of Work and Overtime Article; maintain the efficiency of employees by communication through supervisory personnel; merge, consolidate, subcontract, expand or close any department(s) or any part thereof or expand, reduce, alter, combine, assign or cease any positions with adequate notice; control the use of equipment and property of the City; fill any position on a temporary, emergency or interim basis; determine the number, location and operation of each department, substations and other divisions thereof; schedule and assign the work to the employees and determine the size and composition of the work force; formulate and implement City and departmental policy, rules and regulations; and introduce new or improved services, maintenance procedures, materials, facilities and equipment. If the City fails to exercise any one or more of the above functions from time to time, it shall not be deemed a waiver of the City's right to exercise any or all of such functions. Any right or privilege of the City not

specifically relinquished by the City in this Agreement shall remain with the City.

2.2 If, in the discretion of the Mayor and/or the City Manager, it is determined that civil emergency conditions exist, including riots, civil disorders, weather conditions or what is judged to be a public danger or emergency, the provisions of this Agreement may be suspended by the Mayor and/or City Manager during the time of the declared emergency, provided that the wage rates and monetary fringe benefits shall not be suspended.

2.3 NAGE agrees it will not in any manner whatsoever, either directly or indirectly, support or condone, or in any way assist with any movement or effort in the City, which might in any fashion have the effect of changing or altering this Labor Agreement. Such Agreement includes, but is in no way limited to, the supporting, either directly or indirectly, of any local legislation, which would result in the alteration of any of the terms of this Agreement. This language is not intended to limit the speech of employees who wish to express their personal opinions.

2.4 The above rights of the City are not all-inclusive but indicate the type of matters or rights which belong to and are inherent to the City in its capacity of management and direction of the City of Ormond Beach. Any rights, powers and authority the City had prior to entering into this Agreement

are retained by the City except as expressly and specifically abridged, delegated, granted or modified by this Agreement.

ARTICLE 3

EMPLOYEE RIGHTS

3.1 The City and NAGE agree not to interfere with the right of any eligible employee to become a member of NAGE, withdraw from membership from NAGE, or refrain from becoming a member of NAGE.

3.2 There shall be no discrimination against any employee by reason of race, creed, color, age, national origin, sex, handicap or NAGE membership or activity, or lack of NAGE membership or activity. Reference to the use of the word "he" in this Agreement is for brevity only and shall be interpreted to mean "he" or "she". The exclusive remedy for any alleged violations of this section shall be federal and/or state courts and agencies and not Article 17, the Grievance and Arbitration procedure under this Contract.

3.3 Nothing contained in this Agreement shall foreclose any employee covered by this Agreement from pursuing any right or remedy, not including arbitration as defined in Article 17 available under this Agreement, without representation of NAGE. Further, nothing contained in this Agreement shall foreclose any employee from discussing a non-contract problem directly with his immediate supervisor or other Departmental Official without the intervention of NAGE, provided that the immediate supervisor or other Departmental Official agrees to discuss and/or attempt to resolve the matter outside the formal grievance procedure.

3.4 In any matter involving a formal grievance, NAGE shall be given the opportunity to be present at any meeting called for the resolution of such grievance so long as a NAGE representative is available in a timely manner.

ARTICLE 4

STRIKES AND LOCKOUTS

4.1 There will be no strikes, work stoppages, picketing, slowdowns, boycotts, or concerted failure or refusal to perform assigned work by the employees or NAGE and there will be no lockouts by the City for the duration of this Agreement. NAGE supports the City fully in maintaining normal operations.

4.2 Any employee who participates in or promotes a strike, work stoppage, picketing, slowdown, boycott, or concerted failure or refusal to perform assigned work may be disciplined or discharged by the City and only the question of whether he did in fact willingly participate in or promote such action shall be subject to the grievance and arbitration procedure.

4.3 It is recognized by the parties that the City is responsible for and engaged in activities which are the basis of the health and welfare of the citizens. Accordingly, it is understood and agreed that in the event of any violation(s) of this section, the City shall be entitled to seek and obtain immediate injunctive relief.

4.4 "Picketing" as used herein shall mean any action which has the effect of preventing employees from reporting to or continuing work or preventing the public from entering any public facilities.

ARTICLE 5

DUES DEDUCTION VACANT

5.1 ~~Upon receipt by the Finance Department of a lawfully executed written authorization form (approved by the City) from an employee, the City agrees to deduct the regular NAGE dues from his first and second bi-weekly pay of each month and remit such deduction to NAGE on a monthly basis. NAGE will notify the City in writing thirty (30) days prior to any change in the regular dues structure.~~

5.2 ~~An employee may, at any time, on a form provided by NAGE (approved by the City) revoke his NAGE dues deduction authorization and submit such revocation form to the City with a copy to NAGE. The City shall discontinue dues deductions only on the first pay day of each calendar month, after thirty (30) days written notice to NAGE.~~

5.3 ~~NAGE agrees to pay the City three cents (\$0.03) per member per pay period for the deduction of dues.~~

ARTICLE 6

PERSONNEL RECORDS

6.1 Each employee covered by this Agreement shall have the right to inspect his official personnel file; provided, however, that such inspection shall take place off duty, or on duty with the prior permission of the employee's Department Director or his designee. If permission is granted, an appointment to review the file must be made with the Human Resources Department. The file will be reviewed at the location where the official personnel file is kept. The employee shall have the right to obtain duplicate copies, consistent with the City's normal policy and payment for such copies under the Public Records Act.

6.2 Employees shall have the right to file a written response to any letter of reprimand or other document, which is placed in the employee's official personnel file, subsequent to the effective date of this Agreement, as a result of supervisory action or citizen complaint. At the employee's request any such written response shall be included in the employee's official personnel file together with the letter of reprimand or other document against which it is directed.

6.3 A copy of any written disciplinary action placed in an employee's personnel file will be provided to the employee by the supervisor or by the Human Resources Department within seven (7) days of the date the written notice is placed in the personnel file.

6.4 The City will protect each employee's personnel file to the extent permitted by law.

ARTICLE 7
TEMPORARY ASSIGNMENT TO A HIGHER CLASSIFICATION

7.1 In the event a Department Director determines that there is a need to temporarily fill a regularly budgeted position with an employee from a lower classification, he shall immediately notify the Human Resources Director of such intention.

In the event no current eligibility list exists for such budgeted position, the Department Director may select any employee from a lower classification to temporarily fill such budgeted position. If the employee selected for a temporary position is not selected to the regular position, this employee shall be returned to his previous classification and pay rate.

7.2 If an employee is temporarily assigned to a budgeted position of a higher classification for three consecutive days, the employee shall receive at least five (5%) percent higher than the base rate of pay, or the bottom of the pay grade in which the employee is serving, whichever is higher, for the period served in the higher classification regardless of whether the three consecutive days are assigned during the same work week or during different work weeks.

7.3 The Union and the City agree that for some positions, due to the type of work involved, the City may waive the three consecutive day requirement listed above and approve higher pay for individual days the employee performs the job.

ARTICLE 8

PROMOTIONS

8.1 Whenever a budgeted promotional vacancy exists in a classification within the bargaining unit, the City will determine whether or not to fill such vacancy. The City shall interview all eligible internal applicants who meet the minimum qualifications of each open position.

8.2 To be eligible for a promotion to a higher classification, an employee must have been actively engaged in the duties of the position from which the employee seeks promotion and have satisfactorily passed any applicable probationary period.

8.3 An employee who is promoted will serve a ninety (90) day probationary period, which may be extended an additional ninety (90) days as determined appropriate by management. The probationary period may also be extended in the event the employee is unable to work because of illness, injury, or leave of absence. Such extension shall be on a day-for-day basis for any leave usage of more than forty (40) consecutive work hours.

8.4 During promotional probationary status, an employee may be demoted for failure to meet the expectations of the promotional position, which demotion shall not be subject to the grievance procedure in Article 17.

ARTICLE 9
ASSOCIATION REPRESENTATIVE

9.1 NAGE shall be represented by its President or his designee. It shall be the responsibility of NAGE to notify the City Manager in writing of any change in the designation of President or his designee, subsequent to the execution of this Agreement.

9.2 The President and two (2) members of NAGE's negotiating committee (employees of the City) shall be permitted to attend, without loss of pay, the City Commission meeting where final action is scheduled to be taken on the approval (or rejection) of this Collective Bargaining Agreement and its successor.

9.3 An employee representative of NAGE, designated by the President, shall be permitted reasonable access for reasonable periods of time to all departmental work locations to handle specific grievances. The exercise of such access rights by the Employee Representative shall not interfere with their own or the duties of other employees.

9.4 Three (3) employee representatives of NAGE, designated prior to the beginning of negotiations, who are engaged in the reopening of this contract or in the successor contract shall be allowed to attend negotiation sessions that occur within their normal duty hours without loss of pay or benefits, up to a maximum of 20 hours per year per representative.

ARTICLE 10
EMPLOYEE-MANAGEMENT COMMITTEE

10.1 There shall be an Employee-Management Committee consisting of the following NAGE and Management representatives:

- A. Three (3) representatives of NAGE; and
- B. The Human Resources Director, the City Manager, and one (1) department head (or their respective designees).

10.2 The Employee-Management Committee shall, upon request of either party, meet up to a quarterly basis on dates mutually agreed upon by the participants. The function of the Committee shall be to discuss general matters pertaining to employee relations and departmental operations. NAGE representatives attending Committee meetings during their off-duty hours shall not be compensated for the time spent in such meetings. NAGE representatives attending Committee meetings during on-duty hours will be released from duty without loss of pay or benefits.

10.3 The Committee shall not engage in collective bargaining or the resolution of grievances.

ARTICLE 11
SENIORITY

11.1 Except as otherwise specifically provided, seniority shall consist of continuous accumulated paid service (to include periods of authorized leave) with the given Department. Departmental seniority shall be computed from the most recent date of assignment to the Department as recorded in the Human Resources Department. City seniority shall be computed from the most recent date of hire by the City as recorded in the Human Resources Department. Seniority shall also accumulate during absences in which the employee is receiving workers' compensation as a result of an injury sustained during his employment with the City of Ormond Beach benefits and approved FMLA Leave. Except as otherwise provided, classification seniority shall have preference. Classification seniority shall be computed from the most recent date of assignment to a classification as recorded in the Human Resources Department. Seniority shall be utilized for the following purposes:

Requests for the use of personal leave, when made simultaneously, shall be approved on the basis of classification seniority preference within a department; provided, however, that the Department shall retain the right to disregard seniority preference in the event it becomes necessary to do so in order to provide adequate coverage in certain specialized areas during any period of personal leave usage. Nothing contained herein shall be interpreted as restricting the Department's right to

cancel all personal leave during any given period in the event of disaster or emergency.

11.2 In the event of a personnel reduction, employees shall be laid off from a classification as provided in this Section. Layoff shall be based on the Employees' performance, attendance, and disciplinary record; in the event all factors are equal, seniority shall be the deciding factor.

11.3 Employees shall be recalled from lay-off in the inverse order from which they were laid-off. A laid-off employee shall retain recall rights for twelve (12) months from the date of layoff. It is the responsibility of the employee to keep the City advised as to the current location and telephone number where he may be reached for recall. Employees recalled shall respond within ten (10) calendar days of the recall notification and will report to work as directed; provided that absent mutual consent of the City and the employee, the employee will have at least fourteen (14) calendar days from the date of notification to return to work. Employees being recalled will be subject to a drug screen and physical and shall be required to hold all licenses and certifications for the position to which they are being recalled. If the employee being recalled does not respond within ten (10) working days, his name shall be removed from the recall list and no further recall attempts shall be made with that employee.

ARTICLE 12

PROBATIONARY PERSONNEL

12.1 All new hires of the City shall serve a probationary period of six (6) months. During such probationary period employees shall not be entitled to any seniority or tenure rights, but during such period such new hires shall be subject to all other terms and conditions of this Agreement and applicable City regulations. Upon completion of said six (6) months probationary period, employees shall be known as regular employees and seniority rights and tenure shall accrue from commencement of the probationary period and shall be considered a part of such employee's seniority rights. Probationary employees are entitled to grieve but are not entitled to arbitrate under Article 17.

12.2 The probationary period may be extended up to ninety (90) additional days in the event the employee receives a rating lower than "Meets Standards" during such probationary period. The probationary period may also be extended in the event the employee is unable to work because of illness, injury, or leave of absence. Such extension shall be on a day-for-day basis for any leave usage of more than forty (40) consecutive work hours.

12.3 This Article does not apply to probation on a promotion.

ARTICLE 13
INTERNAL INVESTIGATIONS

13.1 At the request of any employee under investigation, he shall have the right to be represented by counsel or any other representative of his choice (at the employee's expense) who shall be present at all times during any interrogation in which the employee is being questioned relative to alleged misconduct that could result in disciplinary action. The person chosen must be available within twenty-four (24) hours or the employee must choose another representative or proceed without a representative.

13.2 The City shall not discharge or discipline any employee without just cause and due process. If, in any case, the City finds there to be just cause for suspension or discharge, the employee and NAGE will be notified in writing that the employee has been suspended and may be subject to discharge, or that the employee has been discharged.

13.3 The City agrees that no adverse action will be taken against any employee for exercising the rights provided for in this Article.

13.4 In the cases in which the City chooses to relieve an employee from duty pending an investigation or other administrative determination, the following conditions will prevail:

I. The employee will be suspended without pay or benefits for a maximum of fifteen (15) working days.

II. At the end of the fifteen (15) day period, the employee shall be reinstated, terminated, or disciplined; or the investigation may continue with the employee placed on paid suspension. If no disciplinary action is taken, the employee shall be reinstated with all pay and benefits restored including the unpaid period under Paragraph I.

III. Should disciplinary action result from the investigation, that period of time during which the employee was relieved from duty without pay will be included in the disciplinary action. In the event that an employee has been paid, the employee's accumulated leave or compensatory time shall be charged as a set-off.

ARTICLE 14
BULLETIN BOARDS

14.1 Where City bulletin boards are available, the City agrees to provide space on such bulletin boards for NAGE use. Where space is not available, NAGE can put up a reasonable size bulletin board.

14.2 Copies of all material, notices or announcements shall be submitted to the appropriate Director prior to posting on the bulletin board.

14.3 No materials, notices or announcements shall be posted which contain anything of a political or controversial nature and which adversely reflects upon the City of Ormond Beach, its independent agencies, its employees or any labor organization among its employees.

ARTICLE 15

VACANT

ARTICLE 16

DISCIPLINARY ACTION

16.1 In the event a non-probationary employee is to be discharged demoted or suspended, the City agrees that he shall be provided with written notification of the reasons (just cause) for the discharge, demotion, or suspension and the employee will be given an opportunity to explain his actions to the Director or his designee prior to the action becoming effective. The employee will be hand delivered the Director's decision prior to its effective date or it will be ~~sent by certified~~ mailed ed to the address in the City Human Resources Department records via FedEx, UPS, or USPS mail, with tracking and delivery confirmation. — This section does not apply to employees on new hire probationary status or to employees on probationary status due to promotions. An employee on new hire probationary status may be dismissed without complying with this section. An employee who has been promoted may be demoted to his prior position during his probationary status without complying with this Section.

16.2 Upon request, any employee may obtain a copy of any statement which he (personally) has given to the City in connection with any investigation based upon which disciplinary action can or will be taken against the employee. At the time of such request, the employee shall be required to pay all costs relating to the copy of his statement.

16.3 In the event an employee becomes the subject of a formal Departmental or City investigation arising from a citizen complaint or allegation, the Department or the City, whichever is appropriate, shall notify the employee of the disposition of the complaint upon the conclusion of the formal investigation.

16.4 Grievances addressing discipline shall be initiated at Step III. Grievances regarding verbal and written reprimands shall not go beyond Step IV under Article 17 of this agreement. Such grievance shall be presented to the Director in writing within ten (10) days of the date the employee knows or should have known of the cause of action.

ARTICLE 17
GRIEVANCE AND ARBITRATION PROCEDURE

17.1 In a mutual effort to provide a harmonious working relationship between the parties to this Agreement, it is agreed and understood that there shall be a procedure for the resolution of grievances between the parties and that such procedure shall cover grievances involving the application or interpretation of this Agreement.

On any issue that could be heard by the Human Resource Board and is also subject to this Article, the employee will have his choice of which procedure to follow. The selection of the Human Resource Board route will be considered a conclusive waiver of the grievance and arbitration procedure, and vice versa. An "issue" under this Section means an issue arising out of a single occurrence or set of events.

- A. The City shall retain the right to establish and administer a Performance Evaluation system to conduct annual performance evaluations of employees to appraise their productivity, effectiveness and compliance with the rules and regulations. The purpose of evaluations is to generally improve performance, to identify and recognize superior performance, to facilitate communication between supervisors and employees, and to provide timely and accurate information which may be used in making of personnel decisions related to employee performance.

- B. In the event a non-probationary employee wishes to appeal an overall performance evaluation of less than “Meets Standard” (or equivalent), the employee may utilize the grievance procedure up to Step IV, City Manager, but may not arbitrate the grievance. In the alternative, the employee may utilize the Human Resources Board hearing process for the appeal outlined in the Human Resources Policy. Employees with a “Meets Standard” or higher overall performance rating may not utilize the grievance procedures either in this agreement or the Human Resources Policy, but may request a meeting with the Department Director to discuss their concerns.

17.2 Every effort will be made by the parties to settle any grievance as expeditiously as possible. Any grievance not answered by management within the prescribed time limits shall automatically advance to the next higher step, provided that, if the written answer at Step IV is not timely received, NAGE, if it desires to arbitrate under Step V, Arbitration, must request arbitration within fifteen (15) days of the date the City Manager's response was due under Step IV. Should the grieving party fail to observe the time limits as set forth in the steps of this Article, the grievance shall be conclusively deemed as having been abandoned.

17.3 Grievances shall be presented in the following manner:

STEP I. The employee shall first discuss his grievance with his immediate supervisor within ten (10) days of the occurrence of the event(s), which gave rise to the grievance or from the date on which the employee becomes knowledgeable of the cause of action. If the event(s) which gave rise to the grievance occurred at a time when the employee was on personal leave time, or other compensated leave, the ten (10) day period shall commence immediately upon the employee's return from such compensated leave. The first step (between the employee and his immediate supervisor) shall be on an informal and oral basis, and shall not involve NAGE or any other representative of the employee, unless requested by the employee. The immediate supervisor shall render his decision, within five (5) days after presentation of the grievance. Any resolution of an oral grievance under this Step must be approved by the Director before the resolution is binding on the City. If not approved, the grievance may be appealed to Step II within five (5) days of disapproval.

STEP II. Any grievance which cannot be satisfactorily settled with the immediate supervisor shall be reduced to writing by the employee and shall be filed with the Division Manager. Such grievance shall be presented to the Division Manager in writing within five (5) days of the date of completion of Step I. The Division Manager shall, within five (5) days after receipt of the grievance, render his decision on the grievance in writing, unless a longer period of time is mutually agreed upon.

STEP III. Any grievance which cannot be satisfactorily settled with the Division Manager shall next be submitted to the Director, or his designee, either through a representative of NAGE and the employee, or by the employee himself at the employee's option. The grievance, as specified in writing in Step II, shall be discussed by and between the employee and/or the representative of NAGE and the Director, or his designee, within five (5) days after the completion of Step II. Within five (5) days after this discussion (or such longer period of time as is mutually agreed upon), the Director, or his designee, shall render his decision in writing, with a copy to NAGE. Grievances addressing discipline shall be initiated at Step III.

STEP IV. Any grievance not satisfactorily settled at Step III above may be appealed to the City Manager or his designee within five (5) days from the date the Director has rendered his decision. This appeal shall be submitted in writing and a copy of the original written grievance must be attached. The City Manager shall render his decision within five (5) days of receipt of the appeal. A copy of the decision will be sent to NAGE. The time limits specified in this Article may be extended by mutual agreement of the parties. Grievances regarding verbal and written reprimands shall not go beyond Step IV.

STEP V. ARBITRATION. In the event a grievance processed through the grievance procedure has not been resolved in Step IV above, NAGE may request that the grievance be submitted to arbitration within fifteen (15) days after the City Manager renders a written decision on the

grievance. A copy of the request for arbitration must be provided to the other party. The party requesting arbitration shall request the Federal Mediation and Conciliation Services (FMCS) to furnish a panel of seven (7) names from which each party shall have the option within five (5) days of receipt of striking three (3) names in alternating fashion, thus leaving the seventh (7th), which will give a neutral or impartial arbitrator. The party requesting arbitration shall have the first strike. The FMCS will be advised of the arbitrator selected.

17.4 The City and NAGE shall attempt to mutually agree in writing as to the statement of the grievance to be arbitrated prior to the arbitration hearing, and the arbitrator shall thereafter confine his decision to the particular grievance thus specified. In the event the parties fail to agree on the statement of the grievance to be submitted to the arbitrator, the arbitrator will confine his consideration and determination to the written statement of the grievance presented in Step II of the grievance procedure. The arbitrator shall fashion an appropriate remedy for violations of the provisions contained in this Agreement. Provided that the arbitrator's award in any case involving back pay shall not make the employee more than whole (i.e.: total wages lost less interim earnings and unemployment compensation). No interest, damages, or attorney's fees may be awarded.

The arbitrator shall have no authority to change, amend, add to, subtract from, or otherwise alter or supplement this Agreement or any part hereof or amendment hereto. The arbitrator shall have no authority to consider or rule upon any matter which is stated in this Agreement to be

subject to arbitration or which is not a grievance as defined in this Agreement; nor shall this Agreement be construed by the arbitrator to supersede applicable laws in existence at the time of signing of this Agreement, except to the extent herein provided. To the extent such rules are not inconsistent with this Article, the arbitration hearing shall be conducted in accordance with the rules of procedure promulgated by the Federal Mediation and Conciliation Service.

17.5 Each party shall bear the expense of its own witnesses and of its own representatives for the purpose of the arbitration hearing. The impartial arbitrator's fees and related expenses and expenses of obtaining a hearing room, if any, shall be equally divided between the parties. Any party desiring a transcript of the hearing shall bear the cost of such transcript unless both parties or the arbitrator requests or obtains a copy of the transcript.

17.6 Copies of the arbitrator's award shall be furnished to both parties within thirty (30) days after the close of the arbitration hearing or as soon as possible following the hearing. The arbitrator's award shall be final and binding on the parties.

17.7 When a grievance is general in nature in that it applies to a number of employees rather than a single employee, or if the grievance is directly between NAGE and the City, such grievance shall be presented by NAGE's Representative, in writing, directly to the Director, as in Step III, within ten (10) days of the occurrence of the event(s). Where it is applicable

to a number of employees, each such employee for whom relief is sought shall be identified in the grievance, provided that no retribution will be taken against those so identified.

17.8 All references to "days" in this Article refer to working days (i.e.: days when City Hall is open for business).

17.9 Consistent with the provisions of Chapter 447, Florida Statutes, unless amended, it is mutually acknowledged and agreed that this Agreement shall be administered within the amounts agreed to by the City Commission for funding of the Agreement. Accordingly, and not withstanding any other provision of this Agreement to the contrary, the arbitrator shall have no authority, power or jurisdiction to construe any provision of the law, statute, ordinance, resolution, rule or regulation, or provision of this Agreement to result in, obligate, or cause the City to have to bear any expense, debt, cost or liability which would result, directly or indirectly, in the City exceeding the amounts initially agreed to by the City Commission for the funding of this Agreement as agreed upon by the parties. Any award which contravenes or is not in compliance with the provisions of this paragraph shall be null and void.

ARTICLE 18

TRAINING

18.1 The City agrees to make a good faith effort to promote on-the-job training for the purpose of improving the performance of employees, aiding employees to equip them for advancement to higher positions and greater responsibilities, and improving the quality of service rendered to the public.

18.2 Where the City requires an employee to attend training for specialized techniques, the City will make every reasonable effort to facilitate the employee attending such training during his normal working hours. In the event the City is unable to schedule the employee to attend such training during his normal working hours, the employee shall be required to attend such training during his off-duty hours; provided, however, that the time spent by the employee in such training during his off-duty hours shall be compensated in accordance with Article 22 (*Hours of Work and Overtime*).

ARTICLE 19
LEAVE OF ABSENCE

19.1 The department head may grant any employee in his department a leave of absence without pay for a period not to exceed thirty (30) days. Leaves of absence without pay for a period in excess of thirty (30) days but not more than six (6) months may be granted only upon the written approval of the City Manager. Failure of any employee to return to duty upon expiration of his leave of absence shall automatically constitute the resignation of that employee. Holidays, personal leave, and any other benefits based on time spent in the employ of the City shall not accrue (or be credited) during a leave of absence without pay; provided, however, that if permitted by the Retirement Plan, the employee may maintain his retirement credit by paying both his and the City's share of the Retirement Plan premiums and further that the employee may maintain his health insurance coverage by paying the total cost of his group insurance premium except when such leave is covered by the Family Medical Leave Act (FMLA). Any increases for which an employee may become eligible shall not be credited during any leave of absence without pay. An employee shall return from leave of absence to the same placement within the salary grade as at the time of commencement of leave of absence. If a pay increase was provided while the employee was on an unpaid leave of absence (other than approved FMLA leave), the increase will be provided upon the employee's return to work effective on the date of return and subject to Article 28.1(c). If the employee does not return to work following an unpaid leave of absence,

any payouts of leave shall be made based on the employee's hourly rate on the last day of work prior to the unpaid leave of absence.

19.2 Any employee covered hereunder may be given educational leave for the purpose of taking courses or attending conferences and/or seminars directly related to the employee's work as determined by the City Manager. Request for such educational leave must be approved in advance by the City Manager. The City Manager shall not be required to approve either the leave or any compensation therefore, but may do so in his absolute discretion.

An employee granted educational leave with full pay shall be entitled to receive all City benefits in the same manner as if he were on active duty during the period of the leave. The granting of benefits for employees on partially compensated or uncompensated educational leave shall be determined by the City Manager. If uncompensated, the employee will be treated in the same manner as if he was on a leave of absence without pay for the purposes of providing pay increases.

19.3 An employee who is a member of the National Guard or an organized military reserve unit of the United States will be allowed paid leave consistent with Florida Statute 115.07 and City policy. Prior to returning to duty (paid status) the City reserves the right to require the employee to take and pass the physical examination and drug screen that is then being required by the City for new hires in the same classification. It is the responsibility of the employee to notify the City immediately upon return to

duty of any injury sustained while participating as a member of the National Guard or an organized military reserve unit of the United States.

19.4 In the event an employee is granted a leave of absence, whether paid or unpaid, the employee shall return to work upon termination of the leave. Absent extenuating circumstances beyond the control of the employee, when neither the employee nor someone acting on his behalf is able to contact the City, failure to return to work shall automatically be construed as resignation by the employee.

19.5 Employees qualifying for leave under the Family and Medical Leave Act (FMLA) will be entitled to such leave pursuant to the Family and Medical Leave Act and City policy.

ARTICLE 20
HOLIDAYS

20.1 The City will recognize the following holidays for employees:

New Year's Day

Martin Luther King Jr. Day

Good Friday

Memorial Day

Independence Day

Labor Day

Veterans Day

Thanksgiving Day

Christmas Day

Two (2) floating holidays, as designated by the City

20.2 If an employee's off-duty day falls on a holiday, he shall receive holiday pay at his regular rate of pay.

20.3 If an employee is required to work on one of the recognized holidays, he shall receive payment at his regular rate of pay for all hours worked in addition to holiday pay equal to the number of hours the employee was scheduled to work. If not required to work, the employee will be paid eight (8) hours pay at the regular straight time rate as holiday pay. Under no circumstances will holiday pay for an employee who is scheduled to work on a holiday exceed the regular rate of pay for all hours worked plus holiday pay

equal to the number of hours the employee was scheduled to work. (For example, if a ten (10) hour shift person works the full ten (10) hours on a holiday, that employee would receive ten (10) hours of regular pay plus ten (10) hours of holiday pay).

20.4 If a holiday falls on a Saturday or Sunday, the City will designate another day as the holiday.

ARTICLE 21

PERSONAL LEAVE TIME & COMPENSATION TIME

21.1 Employees shall start to earn Personal Leave Time allowances as of their date of appointment. Every employee shall be eligible to use paid Personal Leave Time after completing his/her probationary period.

21.2 Personal Leave Time cannot be used before it is earned. Personal Leave Time shall accrue at the following rates for each full calendar month of service:

1st year of employment thru 4th year of employment	Twelve (12) hours per month
5th year thru 9th year of employment	Fourteen (14) hours per month
10th year thru 14th year of employment	Sixteen (16) hours per month
15th year thru 19th year of employment	Eighteen (18) hours per month
20th year and thereafter of employment	Twenty (20) hours per month

21.3 Personal Leave must be requested and approved using the City's leave request form at least 72 hours in advanced of scheduled use. Such scheduled Personal Leave Time will be considered as "time worked"

for the purposes of computing overtime under Article 22. ~~Employees wishing to receive advanced pay while on personal leave for an extended period must submit an approved scheduled personal leave form and the City's Request for Advanced Vacation Pay form to the Finance Department at least three (3) weeks prior to the check date request.~~

21.4 In the event of an emergency, such as personal or family illness or other unforeseen emergency, no advance approval for the use of Personal Leave Time will be required. In order to maintain service, all bargaining unit members agree that unscheduled Personal Leave Time will only be used when it is impossible to give the advance notice normally required for the use of scheduled Personal Leave Time. Employees shall notify management of an absence under this section as soon as possible, but not later than one (1) hour prior to the start of the work period. Extenuating circumstances will be considered. No doctor's certificate or any other proof of illness will be required under this section; provided, however, that if the City believes that the use of unscheduled Personal Leave Time is being abused, the City will so advise NAGE and the employee of the perceived abuse. If the abuse continues, the City reserves the right to refuse to permit the abusing employee to charge subsequent unscheduled leave to Personal Leave Time and any subsequent unscheduled leave will be taken without pay. Unscheduled Personal Leave Time is leave that is not approved in advance in accordance with Section 21.3. Unscheduled Personal Leave Time will not be considered as "time worked" for the purposes of computing overtime under Article 22. Requests for unscheduled Personal Leave which is not

related to an illness or other emergency may be denied by the employee's Supervisor.

21.5 Personal Leave banks cannot exceed 520 hours as of an employee's anniversary date of service. Hours in excess of 520 at an employee's anniversary date, and every anniversary date thereafter, will be automatically forfeited. Exceptions to this automatic forfeiture include unique circumstances approved in advance by the employee's department director and the Human Resources Director.

21.6 Bargaining unit members may elect to be paid up to forty (40) hours of accrued Personal Leave on an annual basis. In order to be eligible for such payment, employees must have a minimum of 240 hours in their Personal Leave bank and request to receive such payment at least two (2) weeks in advance of their anniversary date. Every attempt will be made to process such payment with the payroll immediately preceding the employee's anniversary date. All hours paid under this section will be deducted from the employee's banks as of the date payment is made.

21.7 Upon separating from the City, any bargaining unit employee with time remaining in their Personal Leave Bank will receive full payment for the hours then remaining at termination up to 760 hours. In the event of a death, the employee's estate or the employee's designated beneficiary shall be entitled to a lump-sum payment of all accrued Personal Leave.

21.8 Bargaining Unit employees who are approved to work overtime, may elect to receive compensatory time off in exchange for overtime compensation during any work week in which the hours worked would otherwise require overtime compensation under the provisions of the federal Fair Labor Standards Act – without regard to whether or not the employee is on probation. No employee may be forced to use accrued compensatory time at particular times. Compensatory time is credited to employees at one-and-one-half (1 ½) hours for each overtime hour worked. No Employee may accrue more than 240 hours of compensatory time. This 240-hour limitation represents no more than 160 hours of actual overtime worked.

A. A Bargaining Unit employee who has accrued compensatory time may request (schedule) the use of such compensatory time under the same terms identified in 21.3 and 21.4.

B. Use of earned Compensatory Time that is scheduled at least 72 hours in advance of use ("scheduled compensatory time) will ~~not~~ be considered as "time worked" for the purposes of computing overtime under Article 22. All other compensatory time ("unscheduled compensatory time) will not be considered as "time worked" for the purposes of computing overtime.

C. When a Bargaining Unit employee terminates employment with the City for any reason, all unused compensatory time remaining in the

Compensatory Leave bank will be paid at the final regular rate of pay received by the employee as an employee of the City.

D. It is intended that the provisions of this Subsection be in compliance with the compensatory time requirements of the federal Fair Labor Standards Act and the rules and regulations promulgated there under, as the same exist on the date of the adoption of this Agreement.

ARTICLE 22

HOURS OF WORK AND OVERTIME

22.1 The following provisions shall govern hours of work and overtime.

A. Forty (40) hours shall constitute a normal workweek for an employee covered by this Agreement, except as hereinafter provided. Nothing herein shall guarantee an employee payment for a forty (40) hour workweek unless the employee actually works a forty (40) hour workweek. For the purpose of computing hours worked, Scheduled Personal Leave Time under Article 21.5, Scheduled Compensatory Time under Article 21.8, City recognized holidays under Article 20, and regularly scheduled hours not worked because the employee was on Jury Duty will be considered hours worked. Unscheduled Personal Leave Time, and Unscheduled Compensatory Time under Article 21, and all other time not worked, whether paid or unpaid, will not be considered as hours worked. For the purpose of this Agreement, authorized compensated leave shall mean leave compensated under existing City policy.

B. Hours worked in excess of forty (40) hours per week shall be compensated at the rate of time and one-half (1½) of the employee's regular straight time.

C. If an employee covered by this Agreement is "called out" to work at a time outside his normal working hours, he shall receive a minimum

of three (3) hours pay at the rate of time and one-half (1½). If “called out” again during the three-hour period an employee shall not receive any other compensation. “Call-out” time does not extend a regularly scheduled workday; it is an unforeseen circumstance requiring an employee to work beyond their normal schedule where advanced notice of such need to work is not possible to give.

D. Any employee, who in the exercise of his official duties, is ordered or required by the City to appear before any person or agency on his regular day off shall receive a minimum of three (3) hours pay at the rate of time and one-half (1½) of his regular rate. Any fee paid for the appearance shall be paid or turned over to the City by the employee. All hours under this section in excess of the three (3) hour minimum will be considered hours worked and be paid at the regular straight time or overtime rate, if more than 40 hours has been worked during the week.

E. The City will make a good faith effort to provide, wherever possible, forty-eight (48) consecutive hours off.

F. Employees required to respond for “on call” duty assignment by pager and/or cell phone shall be paid \$1 per hour for each hour they are required to be “on call”. “On call” duty will be assigned in accordance with the Overtime Guidelines Policy. In the event an employee does not respond to a call out, the employee will not be entitled to receive call out pay for that day.

ARTICLE 23
UNIFORM, CLEANING, AND EQUIPMENT

23.1 The City will provide uniforms when the wearing of a uniform is required by the City and cleaning will be provided as is currently in effect.

23.2 Any employee who shall receive any breakage, damage, or loss to any personal tool in the line of duty shall have it replaced or repaired at no cost to the employee. The use of such tools must be approved in advance by the Department Director.

23.3 The City agrees to have each City vehicle inspected by a qualified mechanic on a schedule to be determined by the Fleet Operations Section.

23.4 The City will provide a safe working place and issue the proper safety equipment and tools in order to enhance the safety and welfare of all employees. Employees will be required to use such safety equipment as provided.

23.5 Employees that are required to wear protective footwear as determined by specific job duties will receive an annual shoe allowance of \$175.00. Generally, positions requiring protective footwear to be worn are those where a majority of the work is performed outdoors or are of a

hazardous nature. The annual allowance will be dispersed annually in October.

ARTICLE 24
WORKERS' COMPENSATION

24.1 The City will provide benefits in accordance with the provisions of Chapter 440, Florida Statutes, and Chapter 38F, Florida Administrative Code.

ARTICLE 25

AUTHORIZED USE OF PRIVATE AUTOMOBILES

25.1 Any employee authorized to use his/her private automobile in the performance of his/her official City duties will be compensated at the rate established by the Florida Statutes. Such mileage shall be computed by the Finance Department based on the distance between the employee's regular duty station and the place of assignment or the employee's residence and place of assignment, whichever is shorter.

ARTICLE 26
LEGAL BENEFITS

26.1 The City will defend employees against any legal actions taken against them as a result of their actions while acting in the scope of their employment (i.e., in the line of duty), unless such employee acted in bad faith or with malicious purpose or in a manner exhibiting wanton and willful disregard of human rights, safety, or property, and will initiate any proper and appropriate counter-suits.

26.2 The City agrees to indemnify all employees against judgments levied against them as a result of their actions while acting in the scope of their employment provided that the City will not indemnify employees for punitive damages.

ARTICLE 27
INSURANCE

27.1 The City agrees to maintain a health/hospitalization/dental/vision insurance program. Employees will be entitled to the same benefit on the same basis provided to other City employees. NAGE agrees during the duration of this agreement there may be changes to the provided insurance plan, however the City will make a good faith effort to maintain current levels of coverage. The City will also make a good faith effort to maintain low cost dependent coverage.

27.2 Eligibility for hospitalization/dental/vision insurance coverage under the City's plan shall begin on the first day of the month following thirty (30) days of employment.

ARTICLE 28

WAGES

28.1 Upon ratification of this Agreement by both parties, employees shall receive wage adjustments as follows, increases will not be applied retroactively:

A. Employees shall receive a 5% increase ~~the greater of a \$1.53 an hour increase, a 3% increase, or brought to the minimum of their position pay range, as recommended in the 2022 Classification and Compensation Study,~~ for the fiscal year beginning October 1, ~~2022~~2025, and ending September 30, ~~2023~~2026.

B. Employees shall receive an a 4% increase ~~increase which equals the greater of a 2% increase for each year of service in the employee's current classification from the proposed minimum rate as recommended in the 2022 Classification and Compensation Study, or a 3% increase,~~ for the fiscal year beginning October 1, ~~2023~~2026, and ending September 30, ~~2024~~2027.

C. Employees shall receive a ~~3.5~~3% increase for the fiscal year beginning October 1, ~~2024~~2027, and ending September 30, ~~2025~~2028.

D. Each employee with an annual performance evaluation of “Meets Standards” or above will receive wage adjustments as described in Paragraph A, B, and C above. An annual performance rating of lower than “Meets Standards” or equivalent will disqualify an employee from receiving said bonus and increase. However, an employee so rated will be reevaluated at the end of three (3) months and if rated “Meets Standards” (or equivalent) or above at that time, will receive the wage increase effective on the date of the “Meets Standards” (or equivalent) or above performance rating. A rating of "unsatisfactory" or equivalent at any time may result in discharge.

E. Employees assigned to the afternoon shift (regular shift starts at 12:00 noon or after but prior to 8:00 p.m.) will receive an additional 2.5% shift differential per hour for all hours worked. Employees assigned to the night shift (regular shift starts at 8:00 p.m. or after but prior to 6:00 a.m.) will receive an additional 5% per hour shift differential for all hours worked. Employees assigned to the Day Shift (regular shift starts at 6:00 a.m. or after but prior to 12:00 noon) will not receive any shift differential. Shift differentials are applied to each individual shift, regardless of whether the shifts are worked continuously.

ARTICLE 29
DRUGS AND ALCOHOL

29.1 All members of the bargaining unit shall be subject to the City's Drug Free Work Place Policy, Administrative Policy #59.

ARTICLE 30
SEVERABILITY CLAUSE

30.1 If any provision of this Agreement or any part thereof be rendered or declared invalid by reason of any existing or subsequently enacted legislation, or by any decree of a court of competent jurisdiction, all other provisions and parts of this Agreement shall remain in full force and effect for the duration of the Agreement.

30.2 If any Article is rendered or declared invalid, it shall be re-negotiated within sixty (60) days.

ARTICLE 31

PROHIBITION AGAINST REOPENING NEGOTIATIONS

31.1 This Agreement contains the entire agreement of the parties on all matters relative to wages, hours, working conditions and all other matters which have been, or could have been, negotiated by and between the parties prior to the execution of this Agreement. Neither party shall be permitted to re-open or re-negotiate this Agreement or any part of this Agreement, except as provided herein.

ARTICLE 32

EDUCATION

32.1 All members of the bargaining unit will be entitled to educational benefits according to the City's Education/Training Reimbursement Policy, Administrative Policy #58.

32.2 If the City requires an employee to attend certification or re-certification classes the City will make every reasonable effort to facilitate the employee attending such training during normal working hours and the City will pay for such training. In the event the City is unable to schedule the employee to attend such training during normal working hours the provisions of 18.2 will apply. This section includes training and costs associated with obtaining a commercial driver's license (CDL) if it is a job requirement of the employee's current position. If the employee does not pass the CDL exam, additional costs incurred in obtaining a CDL will not be paid by the City and are the responsibility of the employee. The City will reimburse employees for CDL renewal costs.

ARTICLE 33
BEREAVEMENT LEAVE

33.1 The City agrees that when a death occurs in the immediate family of an employee, the employee shall be granted up to three (3) days off with pay. For a death that requires out of state travel, two (2) additional days will be allowed. These days will not be charged against any other leave time.

33.2 The City agrees that the “immediate family” shall be defined as: father, mother, spouse, child, step-child, legally-placed foster child, brother, sister, father-in-law, mother-in-law, sister-in-law, brother-in-law, step-parents, grandparents and grandchildren. If the employee was raised by someone other than one of the persons listed, he may request the leave as though he had been reared by one of the persons listed.

33.3 For additional bereavement leave, unscheduled Personal Leave Time may be granted.

ARTICLE 34

PENSION

34.1 The City will provide a 2.5% multiplier defined benefit plan to employees ~~agrees to the present defined benefit pension plan for bargaining unit members~~ hired with the City prior to December 19, 2012. Effective October 1, 2025, The City will provide a 2.25% multiplier defined benefit plan to employees hired on or after December 19, 2012. The 2.25% multiplier defined benefit plan is not retroactive to any wages paid prior to October 1, 2025, however, -employees hired prior to October 1, 2025, will receive years of service credit for vesting purposes equal to the number of months of full-time employment the employee had prior to October 1, 2025. Employees who entered the plan's DROP program prior to December 19, 2012 will remain in the program under the same terms and conditions in place prior to this date.

~~34.1~~34.2 Bargaining unit members ~~employed with the City prior to December 19, 2012 who had not entered~~who enter the DROP program ~~as of this same date~~ will be eligible to enter the program with an interest rate equal to the plan's actual rate of return but not less than zero.

34.3 Employees will contribute four percent (4%) of base wages to the employee's retirement account. Bargaining unit members hired on or after December 19, 2012 will automatically participate in a defined contribution retirement plan upon commencing full-time employment. The City shall

~~contribute nine percent (9%) of base wages to the employee's retirement account. The employee may also elect to make tax deferred contributions to their retirement account subject to the annual Internal Revenue Service (IRS) limitations.~~

~~34.2~~ Effective October 1, 2025, the City will no longer make contributions to the City's defined contribution plan. Although the City will not be making contributions, the accounts established on behalf of employees currently enrolled in the defined contribution plan (hired on or after December 19, 2012, and before October 1, 2025) will remain open. If an employee is not vested in the defined contribution plan at the time the plan closes, the employee will continue to accrue vesting rights in accordance with the plan's eligibility and vesting schedule. Employees that are, or become, vested in the defined contribution plan will retain ownership of all funds contributed into their account by the City.

~~34.3~~34.4 The City agrees to allow pension plan members to recommend improvements to the pension plan. It is expressly understood that any costs associated with said improvements will be the permanent obligation of the pension plan members.

ARTICLE 35
JOB CLASSIFICATIONS

35.1 There will be thorough and complete job descriptions for all employee classifications covered by this Agreement.

35.2 Proposed changes in job descriptions will be submitted to the other party for review and comments. However, the City retains the right to modify job descriptions after considering comments, if any, received from the Union.

ARTICLE 36
TERM OF AGREEMENT

36.1 This Agreement will become effective on the date it is last executed by the respective parties and will remain in effect until September 30, ~~2025~~2028. This agreement contains no reopeners.

36.2 This Agreement will remain in full force and effect until its successor is ratified and implemented or until the statutory impasse procedure has been exhausted.

IN WITNESS WHEREOF, the parties hereto have hereunder set their hands and seals on the date shown.

CITY OF ORMOND BEACH

Jason Leslie, Mayor Date

Joyce Shanahan, City Manager Date

NATIONAL ASSOCIATION OF GOVERNMENT EMPLOYEES

Vince Champion, Regional Director Date



City of Ormond Beach
City Commission Agenda
Staff Report

Agenda Date	November 4, 2025	Item No	7.B.
Section	CONSENT AGENDA	Category	Consent - Resolution
Subject	Nova Community Center Gym Ceiling Repairs		
Recommended Action	Staff recommends award of the work authorization for professional services for the ceiling repairs to the Nova Community Center to A. M. Weigel Construction, Inc.		
Strategic Goal	Quality of Life - Other		
Department Staff Contact	Parks and Recreation Robert Carolin, Parks and Recreation Director		

Summary

The purpose of this item is to seek approval for an emergency repair project of the Nova Community Center Gym Ceiling.

The Nova Community Center Gym ceiling was identified as being in urgent need of repair due to ongoing issues with the original drop ceiling. Over time, numerous ceiling panels have loosened and fallen, creating safety concerns. City building maintenance staff was able to complete many minor repairs. As staff was in the process of identifying the full extent of needed repairs and identify the scope of work necessary to fully renovate the gymnasium ceiling, damage deteriorated at an accelerated rate with needed repairs exceeding what could be addressed through routine maintenance by city staff.

Staff partnered with AM Weigel Construction, Inc. to carry out the comprehensive project to repair and prevent further damage to the new gym floor and the adjacent structure of the facility. The project proposal amount is \$99,309.

This emergency procurement was possible through the City's contract with A.M. Weigel Construction for construction management services on a continuing contract basis, approved by the Commission on September 7, 2022. This partnership ensures the work is completed thoroughly and efficiently, restoring the gym to full capacity as quickly as possible. While limited activities continue to be provided to residents, the facility has closed half of the gym to ensure safety, disrupting many regular activities typically held in that portion of the facility. Completion of this work will allow the gym to return to full operation in a timely manner.

Financial Impact

As this project was not budgeted, an amendment transferring funds from General Fund to Fund 317-Facilities Maintenance Fund in the amount of \$99,308 will be needed.

Citizen Impact

Completing the ceiling repairs will restore a safe environment for visitors and staff at the Nova Community Center, allowing the community to enjoy its programs and activities.

Attachments

1. 25-162 Nova Gym Ceiling-AM Weigel (P25-0129G)
2. Work Authorization 2025 Page 1
3. Work Authorization 2025 Page 2
4. Exhibit A
5. Cost Summary Ceiling Repairs 2025
6. Purchase Order

RESOLUTION NO. 2025-162

A RESOLUTION ACCEPTING A PROPOSAL FROM A.M. WEIGEL CONSTRUCTION, INC. FOR CONSTRUCTION MANAGEMENT SERVICES REGARDING CEILING REPAIRS IN THE GYM AT THE NOVA COMMUNITY CENTER; AUTHORIZING THE EXECUTION OF A WORK AUTHORIZATION AND PAYMENT THEREFOR; AND SETTING FORTH AN EFFECTIVE DATE.

WHEREAS, pursuant to the Continuing Contract for Construction Management Services between the City and A.M. Weigel Construction, Inc., the appropriate City staff members have negotiated with A.M. Weigel Construction, Inc. to provide construction management services for ceiling repairs in the gym at the Nova Community Center (“the Project”), as described on the attached Work Authorization and Scope of Work, at a cost not to exceed \$99,309.74, and

WHEREAS, the City Manager has certified that funds for the Project have been appropriated to the credit of the Facilities Renewal and Replacement Fund (317) in the amount of \$99,309.74 and that these funds have not been appropriated for any other purpose, and

WHEREAS, the City Commission concurs with the foregoing recommendations, now therefore,

BE IT RESOLVED BY THE CITY COMMISSION OF THE CITY OF ORMOND BEACH, FLORIDA, THAT:

SECTION ONE. The proposal submitted by A.M. Weigel Construction, Inc. to perform the Project at a total cost not to exceed \$99,309.74 is hereby accepted.

SECTION TWO. The Mayor and the City Manager are hereby authorized and directed to execute a Work Authorization with A.M. Weigel Construction, Inc. for the

performance of the Project at the said price, and to pay the cost thereof from the Facilities Renewal and Replacement Fund.

SECTION THREE. This Resolution shall take effect immediately upon its adoption.

APPROVED AND AUTHENTICATED this 4th day of November, 2025.

JASON LESLIE
Mayor

ATTEST:

SUSAN CARROLL DAUDERIS
City Clerk

WORK AUTHORIZATION

In accordance with and incorporating the terms of the Contract for Construction Management Services on a Continuing Basis dated September 7, 2022 between the City of Ormond Beach, Florida, and A.M. Weigel Construction, Inc., the following Scope of Work and Schedule of Payments are agreed to by the parties to the Agreement:

Project Title: Nova Gym Ceiling Removal and Insulation

Project Description: Construction management services to perform the removal of falling ceiling tiles and replace with R-21 Enertite G 5.5" thick open cells spray foam insulation. This will allow a safe playing environment and eliminate costly repairs to the existing ceiling as detailed in the attached proposal dated August 12, 2025.

Schedule of Payments and Fee Basis

<u>Required Work Task</u>	<u>Fee Basis</u>	<u>Fee</u>
Nova Gym Ceiling Repairs	Guaranteed Maximum Price	\$99,309.74
Total Fee Authorized:	Not to Exceed	<u>\$99,309.74</u>

Funding Source: Facilities R & R Fund (317)

Estimated Time for Completion: 2 Months from Authorization to Proceed

AUTHORIZED:
CITY OF ORMOND BEACH

ACCEPTED:
A.M. WEIGEL CONSTRUCTION, INC.

By: _____
Jason Leslie
Mayor

By: _____
A. Michael Weigel
President

Date: _____

Date: 9.23.2025

By: _____
Joyce A. Shanahan
City Manager

Date: _____

I. COMPLIANCE WITH FLORIDA PUBLIC RECORDS LAW

Contractor expressly agrees that it shall comply with the public records law provided in Florida Statutes, Chapter 119, and specifically to:

- (a) Keep and maintain public records required by the City to perform the contracted service.
- (b) Upon request from the City Clerk, provide the City with a copy of the requested records or allow the records to be inspected or copied within a reasonable time at a cost that does not exceed the cost provided in Chapter 119, Florida Statutes, or as otherwise provided by law.
- (c) Ensure that public records that are exempt or confidential and exempt from public records disclosure requirements are not disclosed except as authorized by law for the duration of the contract term and following completion of the contract if the contractor does not transfer the records to the City.
- (d) Upon completion of the contract transfer, at no cost to the City, all public records in possession of the contractor or keep and maintain public records required by the City to perform the service. If the contractor transfers all public records to the City upon completion of the contract, the contractor shall destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. If the contractor keeps and maintains public records upon the completion of the contract, the contractor shall meet all applicable requirements for retaining public records. All records stored electronically must be provided to the City, upon request from the City Clerk, in a format that is compatible with the information technology systems of the City.
- (e) Failure of the Contractor to comply with Public Records Law as provided by Florida Statutes, Chapter 119, shall subject the Contractor to penalties under Chapter 119.10 and subject this Agreement to termination for cause by the City.

IF THE CONTRACTOR HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO THE CONTRACTOR'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS CONTRACT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT:

**CITY CLERK
22 SOUTH BEACH STREET
ORMOND BEACH, FLORIDA 32174 (386) 676-3331
CITYCLERK@ORMONDBEACH.ORG**

Ref: Fla. Stat. §119.0701(2016)

II. VERIFICATION OF EMPLOYMENT STATUS USING E-VERIFY SYSTEM

- 1. Section 448.09, *Florida Statutes*, makes it unlawful for any person to knowingly employ, hire, recruit, or refer, either for herself or himself, or on behalf of another, for private or public employment within the state, an alien who is not duly authorized to work in the United States. Contractor warrants that it is registered with the U.S. Department of Homeland Security's E-Verify system, and is compliant with the requirements of Sections 448.09 and 448.095, *Florida Statutes*.
- 2. Contractor agrees that if the contractor enters into an agreement with a subcontractor, the subcontractor must provide the contractor with an affidavit stating that the subcontractor does not employ, contract with, or subcontract with an unauthorized alien, and contractor warrants it shall maintain any such affidavits for the duration of the contract. If the City has a good faith belief that a subcontractor knowingly violated Section 448.09 (1), the City shall promptly notify the contractor and order the contractor to immediately terminate the contract with the subcontractor.
- 3. In the event the City has a good faith belief that the contractor has knowingly violated Section 448.09 (1), *Florida Statutes*, the City shall terminate the contract, and as provided by statute, the contractor may not be awarded a public contract for at least one (1) year after the date of termination. The contractor may also be held liable for any additional costs incurred by the City as a result of the termination of the contract.

PROPOSAL - ASSUMPTIONS and QUALIFICATIONS

A. QUALIFICATIONS:

1. In general terms, the scope of the Project is to demolish and remove existing foam ceiling tiles and grid in the main gym room of the Nova Community Park Gymnasium at 440 N. Nova Road, Ormond Beach, Florida 32174. After removal, spray-foam insulation and fire-retardant coating will be applied to the underside of the roof where ceiling is removed.
2. This proposal is based on the Proposal Document, these Assumptions & Qualifications identified as Exhibit "A", the Cost Summary identified as Exhibit "B".
3. All work will be performed during normal working hours. Premiums for shift work or overtime are not included in the Contract Sum.
4. 6% State Sales Tax, 0.5% County Sales Tax (on the first \$5,000) – is included on all materials.

B. EXCLUSIONS:

5. Work in any rooms other than the gymnasium are excluded.
6. Roof system repair is excluded.
7. Basketball hoops, speakers, lighting, and HVAC shall remain as-is. Contractor shall protect these items during work. Replacement or modification of these systems are excluded.
8. Fire Suppression and Fire Alarm work are excluded.
9. No new ceilings have been priced to replaced the removed ceilings.
10. Wall insulation or metal building repairs are excluded.
11. We have not included any costs associated with removal of hazardous materials found on site.
12. The gymnasium cannot be occupied during construction. Partial occupancy work is excluded.
13. Permit Fees are excluded.

C. QUALIFICATIONS BY TRADE:

Division 01 – General Requirements

14. We have included the necessary project management and full-time jobsite supervision for the entire period of construction.
15. The project is based on one (1) month of permitting and two (2) months of construction.
16. We have included the cost of Liability Insurance and Builders Risk Insurance coverage and Performance and Payment Bond premiums as described in our contract agreement.
17. It is assumed that all temporary utility services will be connected to existing facilities and that the cost associated with temporary water, sewer, and power consumption are not included.
18. We have included cleanup at the end of the project and dumpsters for demolition debris.
19. We have included ½" plywood to protect the existing gym floor and distribute lift equipment loads across the gym floor.

PROPOSAL - ASSUMPTIONS and QUALIFICATIONS

Division 02A – Selective Demolition

- 20. We have included removing the existing foam panel ceiling and ceiling grid.
- 21. We have included removal of existing blown-in insulation above the ceiling grid.

Division 07A – Thermal Insulation

- 22. We have included spraying the exposed roof system with R-21 Enertite G 5.5" Thick Open Cell Spray Thermal Insulation, approximately 14,000 SF.
- 23. In accordance with building codes, the spray insulation will be then coated with No-Burn, Inc. Plus XD Fire Retardant Intumescent Coating in standard Grey color.

Owner Controlled Contingency

- 24. We have included a \$10,000 Owner-Controlled Contingency for existing conditions that may be discovered when the ceiling is demolished.

OB Nova Gym Ceiling					
Bid Pkg	Description	Quantity	UM	Unit Cost	Total Cost
1A	Project Management	5	DAYS	422.00	2,110.00
1A	Superintendent	20	DAYS	482.56	9,651.20
1A	Fueling	1	MO	250.00	250.00
1A	Communication	1	MO	70.00	70.00
Total 01A					
1B	Permitting Allowance	1	LS	BY CITY	BY CITY
1B	Signed and Sealed Design for Permitting	1	LS	2,000.00	2,000.00
1C	Dumpsters	7	EA	480.00	3,360.00
1C	Day Labor / Cleanup	2	DAYS	170.00	340.00
Total 01C					
	Owner's Contingency Allowance - Existing Conditions	1	LS	10,000.00	10,000.00
Total 01D Owner's Contingency Allowance					
02A SELECTIVE DEMOLITION					
	Remove existing foam ceiling and grid - Gym	12,600	SF	0.96	12,140.00
Total 02A - SELECTIVE DEMOLITION					
07 INSULATION					
	R-21 Evertite G 5.5" thick Open Cell Spray Foam Insulation	12,600	SF	3.83	48,195.00
	No-Burn Plus XD Fire Retardant Coating	12,600	SF		Included
Total 07 INSULATION					
				SUBTOTAL	88,116.20
				Liability Insurance	881.16
				Performance & Payment Bond	1,286.51
				Overhead and Profit	9,025.87
				TOTAL	99,309.74
Owner's Contingency Allowances					
Contingency allowance monies will not be spent without prior approval of the City. If/When conditions					
requiring remediation are encountered, the condition will be presented to the City with a recommendation					
to remedy along with an associated cost. Upon approval from the City, work will proceed and the actual cost					
will be applied against the Contingency. Upon completion of the project, any unused Contingency funds					
will be returned to the City via deductive Change Order.					



Purchase Order

Fiscal Year 2025

Page: 1 of: 1

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City of Ormond Beach
PO Box 277
Ormond Beach, FL 32175-0277

THIS NUMBER MUST APPEAR ON ALL
INVOICES, PACKAGES AND SHIPPING PAPERS.

Purchase Order # **20250782**

Delivery must be made within doors of
specified destination.

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A M WEIGEL CONSTRUCTION INC
166 S PALMETTO AVE
DAYTONA BEACH, FL 32114
Email: PJAROSZ@AMWEIGEL.COM
Fax: 386-257-6143

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Building Maintenance
501 North Orchard Street
Ormond Beach, FL 32174
Email: David.lisicki@ormondbeach.org

Vendor Phone Number		Vendor Fax Number	Requisition Number	Delivery Reference		
386-257-6691		386-257-6143	2500967			
Date Ordered	Vendor Number	Date Required	Freight Method/Terms		Department/Location	
09/22/2025	112				PARKS AND RECREATION SERVICES	
Item#	Description/PartNo		QTY	UOM	Unit Price	Extended Price
1	Emergency Procurement-Nova Gym Ceiling Removal & Insulation. All labor, materials & equipment necessary to remove the existing defective foam ceiling system & add insulation above. As detailed in the Guaranteed Maximum Price proposal dated August 12, 2025.		1.0	EACH	\$99,309.00	\$99,309.00

VENDOR COPY

Total Ext. Price \$99,309.00
PO Total ~~\$99,309.00~~



City of Ormond Beach
City Commission Agenda
Staff Report

Agenda Date	November 4, 2025	Item No	7.C.
Section	CONSENT AGENDA	Category	Consent - Resolution
Subject	RFP - Motor and Pump Repair		
Recommended Action	Staff recommends approval of contracts to Florida Armature Works, Inc. and Electrical and Mechanical Maintenance, Inc. for services pertaining to Utilities Motor and Pump Repair Services.		
Strategic Goal	Water Quality & The Environment - Other		
Department Staff Contact	Public Works - Utilities Management Bob Preis, Utilities Manager		

Summary

This is a request to award a contract to Florida Armature Works, Inc. and Electrical and Mechanical Maintenance, Inc., for services pertaining to the Utilities Motor and Pump Repair Services, RFP 2025-40.

The City utilizes a variety of pumps and motors throughout the City's service area. These motor and pump systems are involved with maintaining the raw water, potable water, waste water, and reclaimed water systems. In order to maintain these systems with adequate levels of service, these pumps and motors need to be serviced and maintained on a regular basis. Maintenance activities include, but are not limited to: rebuilding motors, replacing bearings and shafts, replacing seals, and troubleshooting mechanical or electrical components in the field.

The Utilities Motor and Pump Repair Services, RFP 2025-40, was advertised via Demandstar on August 10, 2025. The City received and opened proposals on September 10, 2025. Two proposals were received - Florida Armature Works, Inc. and Electrical and Mechanical Maintenance, Inc. The proposals were rated on: 1) Technical Qualifications, 2) Technical Qualifications of Project Team, 3) References, 4) Responsiveness, 5) Pricing, 6) The firm's location in relation to City Hall, and 7) Completeness of Proposal. The proposals received ratings from the review committee with the values of 239 and 204 out of a maximum of 300 points.

The RFP review committee recommended awarding a contract to both applicants. Members of the review committee noted having more than one contract in place aids when there is time-

sensitive equipment repair. Under the previous pump and motor repair contract, the City had awarded a similar contract to 3 vendors.

Financial Impact

Utilities Motor and Pump Repair Services are accounted for in Fund 401 - Utilities Operating account. Approximately \$102,000 was spent on these services in FY 2024-25.

Citizen Impact

Regular maintenance and upkeep of motors and pumps is essential to provide reliable utility service to the City's customers.

Attachments

1. 25-167 Motor & Pump As Needed Svcs - Armature (P25-0139G)
2. Florida Armature Works Agr
3. Electrical & Mechanical Maintenance Agr
4. RFP 2025-40 Utilities Motor and Pump Repair Services (5)
5. Florida Armature RFP2025-40
6. EMM2 City of Ormond Beach RFP 2025-40 Utilities Motor and Pump Repair Services Final
7. EMM1 City of Ormond Beach RFP 2025-40 Utilities Motor and Pump Repair Services Bid
8. RFP 2025-40 score summary

RESOLUTION NO. 2025-167

A RESOLUTION ACCEPTING PROPOSALS AND AUTHORIZING THE EXECUTION OF CONTRACTS WITH TWO PROFESSIONAL FIRMS FOR UTILITIES MOTOR AND PUMP REPAIR SERVICES ON AN AS-NEEDED BASIS, UNDER RFP 2025-40; AND SETTING FORTH AN EFFECTIVE DATE.

WHEREAS, the City advertised a Request for Proposals (RFP 2025-40) for motor and pump repair services on an as needed basis relative to various mechanical and electrical utilities infrastructure throughout the City (“the Project”), and

WHEREAS, the City's professional staff have reviewed the proposals received and have negotiated contracts with two (2) firms to provide the aforescribed repair services (copies of said proposals being incorporated in the contracts which are attached hereto and incorporated herein by reference), and

WHEREAS, based on the foregoing, the City’s professional staff recommends that the City Commission accept the proposals of Florida Armature Works, Inc. and Electrical and Mechanical Maintenance, Inc. to provide repair services for the Project at the prices set forth on the attached contracts, and

WHEREAS, the City Manager has certified that money for the project, not to exceed \$150,000.00 annually, has been appropriated to the Water & Wastewater Operating Fund (401) and the said funds have not been appropriated for any other purpose, and

WHEREAS, the City Commission concurs with the foregoing recommendations, now therefore,

**BE IT RESOLVED BY THE CITY COMMISSION OF THE CITY OF ORMOND
BEACH, FLORIDA, THAT:**

SECTION ONE. The Mayor and the City Manager are hereby authorized and directed to execute a contract with Florida Armature Works, Inc. to provide utilities motor and pump repair services on an as needed basis relative to various mechanical and electrical utilities infrastructure throughout the City.

SECTION TWO. The Mayor and the City Manager are hereby authorized and directed to execute a contract with Electrical and Mechanical Maintenance, Inc. to provide utilities motor and pump repair services on an as needed basis relative to various mechanical and electrical utilities infrastructure throughout the City.

SECTION THREE. This Resolution shall take effect immediately upon its adoption.

APPROVED AND AUTHENTICATED this 4th day of November, 2025.

JASON LESLIE
Mayor

ATTEST:

SUSAN CARROLL DAUDERIS
City Clerk

AGREEMENT

THIS AGREEMENT is made and entered into by and between the **City of Ormond Beach** ("City"), a Florida municipal corporation, 22 South Beach Street, Ormond Beach, Volusia County, Florida and **Florida Armature Works, Inc.** ("Contractor"), 2460 Smith Street, Kissimmee, FL 34744, and in consideration of the mutual promises and covenants herein contained, the receipt and sufficiency of which are hereby acknowledged, the parties hereby agree to the following:

1. **Scope of Work.** The Proposal dated September 10, 2025 ("RFP #2025-40 "Utilities Motor and Pump Repair Services") attached hereto as Exhibit "A" and the Proposal Pricing attached hereto as Exhibit "B", are incorporated herein by reference and are a material part of this Agreement. The Contractor shall fully comply with the terms and conditions described in the attached exhibits.

A. Authorization for Services.

1. Prior to authorization for professional services by Contractor:
 - (a) City and Contractor shall develop a well-defined project description and complete understanding of the scope of services to be provided.
 - (b) Contractor shall provide City with a detailed proposal that provides the total estimated cost for each phase of services based on the prices set forth in Exhibit "B". If the proposal is accepted by City, the City shall issue and execute a written Work Authorization to be signed by Contractor.
 - (c) Based on the nature and cost of the services, City may obtain an independent estimate to evaluate the reasonableness of Contractor's estimate.
2. Each Work Authorization shall contain:
 - (a) The project description.
 - (b) The scope of work. The scope of work shall be attached and incorporated into the Work Authorization. It shall describe the services to be performed for each phase of work, and state the percentage of the total scope assigned to each phase.
 - (c) The dates for commencement and completion of work.

The Work Authorizations will be issued under and shall incorporate the terms of this Agreement. City makes no covenant or promise as to the number of available projects or that Contractor will perform any project for City during the life of this Agreement. City reserves the right to contract with other parties for the services contemplated by this Agreement when it is determined by City to be in the best interest of City to do so.

2. **Term.** This Agreement shall be effective on the date it is fully executed by the parties and shall have an initial term of three (3) years. This Agreement will be automatically renewed for two (2) additional one-year periods unless either party provides at least ninety (90) days prior written notice of their intent not to renew.

3. **Consideration.** Contractor shall provide the equipment and perform the services at the prices set forth on the attached exhibits. Contractor shall prepare and submit invoices to the City at the address set forth in Paragraph 9 of this Agreement. All such invoices shall be paid by the City within thirty (30) days.
4. **Delivery.** Contractor shall complete the project within the time frame set forth on Exhibit "A".
5. **Termination of Agreement.**
 - (a) The City Commission shall have the right to terminate the Agreement in the event the Contractor files any petition or proceeding for bankruptcy relief, or is adjudicated to be bankrupt or insolvent, or fails to pay just debts as they ordinarily become due; or for a material breach of this agreement that remains uncured for at least thirty days after prior written receipt of a notice of violation of same.
 - (b) This Agreement may not be terminated by the Contractor.
6. **Assignment.** The Contractor shall not assign, convey or transfer all or any part of this Agreement, or all or any part of Contractor's interest herein, or all or any part of any interest in the Contractor, without the prior written consent of the City Commission, which consent shall not be unreasonably withheld.
7. **Complete Agreement.** This Agreement, including the provisions set forth in the exhibits attached hereto and incorporated by reference herein, constitutes the entire and complete agreement of the parties, and the promises and covenants herein contained shall survive the life of this Agreement.
8. **Amendment to Agreement.** Any amendment, change, or modification of this Agreement must be in writing and fully executed by both parties.
9. **Notices.** All notices which are required by this Agreement shall be provided to the parties at the following addresses, or such other addresses as may be requested in writing by either party:

City of Ormond Beach
Joyce Shanahan, City Manager
(copy to City Attorney)
22 South Beach Street
Ormond Beach, FL 32174

Florida Armature Works, Inc.
Herman A. Garcia, Vice President
2460 Smith Street
Kissimmee, FL 34744

10. **Sovereign Immunity.** The City expressly retains and reserves all rights, privileges, immunities, and benefits of sovereign immunity. This provision shall be construed broadly in favor of the City.
11. **Venue.** The terms and conditions of this Agreement shall be construed and enforced under the laws of the State of Florida. Any action or proceeding, either at law or in equity,

regarding this Agreement shall be brought in the circuit court, Seventh Judicial Circuit in and for Volusia County, Florida. Venue in any other jurisdiction or forum, whether it be any other circuit, state or federal venue, is hereby expressly waived.

12. **Waiver of Conditions.** No waiver by the City of any condition or breach of performance by the Contractor shall constitute an irrevocable, continuing, or subsequent waiver by the City of the same condition or breach of performance, or of any other condition or other breach of performance.
13. **Severability.** If any part of this Agreement is declared to be unenforceable or void by a court of competent jurisdiction, the remaining parts of the Agreement shall remain in full force and effect as long as the services to be provided by the Contractor are not materially affected, altered or impaired as a result of said judicial declaration.
14. **Conflicting Provisions.** In the event of any conflict between the provisions of this Agreement and any exhibits, the provision most favorable to the City shall control and shall be given full force and effect.
15. **Indemnification.** The City, its agents, employees, and officials, both elected and appointed, shall be indemnified and held harmless by Contractor from any and all liabilities, claims, and causes of action which may arise out of the willful, negligent, or unlawful acts or omissions of the Contractor or its subcontractors in the performance of this Agreement, unless such claims are a result of the City's sole negligence, as determined by the final decision maker of such claim.
16. **Duty to Defend.** The Contractor shall defend all suits and administrative actions, including all appellate proceedings, brought against the City, its agents, employees, and officials, both elected and appointed and shall pay all attorneys' fees and costs associated with the City's legal defense, as may be selected by the City, arising from all claims and causes of action described in Section 15 above. Such payment on behalf of the City shall be in addition to any and all other legal or equitable remedies available to the City and shall not be considered to be the City's exclusive remedy.
17. **Contractor's Insurance.** The Contractor shall purchase and maintain for the entire life of this Agreement, including any and all approved time extensions, until its final acceptance by the City, such insurance as will protect the Contractor from claims under Workers' Compensation, disability benefit laws or other similar employee benefit laws; from claims for damages because of bodily injury, occupational sickness or disease, or death of Contractor's employees; from claims insured by usual or unusual injury liability coverage; from claims or injury to or destruction of tangible property and from claims insured by usual Commercial General Liability coverage. This includes loss of use resulting therefrom, any or all of which may arise out of the Contractor's operations under this Agreement, whether such operations be by the Contractor, or by any Subcontractor, or by anyone directly or indirectly employed by any of them or for whose acts any of them may be legally liable. The Contractor's deductibles/self-insured retentions shall be disclosed to the City and may be disapproved by the City, and may be reduced or eliminated at the sole

discretion of the City. The Contractor is responsible for the amount of any deductible or self-insured retention.

18. Types of Insurance and Limits of Liability

The insurance required herein shall be written for not less than any limits of liability specified and incorporated as part of the Contract Documents or as required by law, whichever is greater, and shall include and not limited to the following:

- (a) Workers' Compensation Insurance in statutory limits for the State of Florida with Coverage B - Employer's Liability limits of not less than:

\$100,000 Each Accident Bodily Injury by Accident
\$100,000 Each Employee Bodily Injury by Disease
\$500,000 Policy Limit Bodily Injury by Disease

Certificate of Exemptions. If the contractor has a State-issued Certificate of Exemption, the contractor may provide a copy in place of the requirement for coverage. However, if the contractor subcontracts or retains any other person or entity to perform under the contract, that person or entity must provide proof of workers' compensation insurance as required by law or provide a Certificate of Exemption.

It is the intent of the City that any individual who either contracts directly with the city or performs any work on behalf of any such contractor be covered by workers' compensation insurance or have a valid exemption from said coverage.

(If applicable to the Project, the policy must include benefits under the United States Longshoremen's and Harbor Workers' Act and the Jones Act coverage--all maritime coverage.)

- (b) Commercial General Liability Insurance shall be written on a coverage form as broad as Insurance Services Office (ISO) Form CG 00 01 11 85, or its successor form, including but not limited to the following coverage (any deviation shall be noted on the Certificates of Insurance):

- a. Premises, Operations, Products and Completed Operations
- b. Owners' & Contractors' Protective
- c. Products & Completed Operation
- d. Explosion, Collapse & Underground Conditions
- e. Blanket Contractual Liability
- f. Personal Injury Liability
- g. Broad Form Property Damage Endorsement, including Completed Operations
- h. Independent Contractors

- i. Watercraft--Owned and Non-Owned (if applicable, endorsement must be included in General Liability policy or a separate Protection & Indemnity Policy must be written)
- j. Pollution Liability (if applicable)
- k. Asbestos Abatement (if applicable)
- l. Fire Damage Liability

Certain coverage outlined above may not be required if they do not relate to the Project, as may be determined at the sole discretion of the City.

Commercial General Liability Coverage shall be written on an occurrence basis and the limits shall be no less and not limited to the following amounts:

Limits (not less than)

\$1 Million Each Occurrence

\$2 Million General Aggregate

\$1 Million Aggregate Products & Completed Operations

NOTE: Commercial General Liability Coverage must be purchased on either a project basis (separate policy per contract) or an endorsement allocating an aggregate limit per location or specified project.

- (c) Automobile Liability Insurance is required if an Automobile(s) is used in the performance of the contract.

ISO Symbol 1 (Any Auto), or alternatively a combination of Symbol 2 (Owned Autos), Symbol 8 (Hired Autos), and Symbol 9 (Non-Owned Autos), and limits shall be no less than:

\$1 Million

Combined Single Limit for Bodily Injury
and Property Damage

- (d) Excess Liability**

For contracts \$250,000 or greater an Excess Liability Policy of at least but not limited to \$1,000,000 in addition to the scheduled underlying policies for Commercial General Liability, Automobile Liability and Employers' Liability, the Contractor shall also provide an Excess Liability Policy with a maximum self-insured retention not to exceed \$25,000 per occurrence.

- (e) Builder's Risk**

Contractor shall purchase Builder's Risk Insurance for any contracts that are deemed to be vertical construction on an All-Risk policy, and shall also include

coverage for wind, hail, and named storm. Limits of coverage shall be at least and not limited to the value of the project.

(f) Professional Liability, Malpractice and/or Errors and Omissions

The Contractor shall purchase and maintain professional liability, malpractice, or errors or omissions insurance with minimum limits of \$1,000,000 per occurrence. If a claims made form of coverage is provided, the retroactive date of coverage shall be no later than the inception date of claims made coverage, unless the prior policy was extended indefinitely to cover prior acts. Coverage shall be extended beyond the policy year either by a supplemental extended reporting period (ERP) of as great a duration as is available, and with no less coverage and with reinstated aggregate limits, or by requiring that any new policy provides a retroactive date no later than the inception date of claims made coverage.

19. Requirements for Certificates of Insurance.

- (a) With the execution of this Agreement, the Contractor shall provide certificates of such insurance acceptable to the City. These certificates and insurance policies shall contain a provision that the coverage under the policies will not be canceled, non-renewed or materially changed until at least **thirty (30)** days' prior written notice of such cancellation, non-renewal or change [except for nonpayment of premium, which shall be **ten (10)** days] has been given to the City. The Contractor shall be required to replace any expired or canceled policies in like amount and coverage to the satisfaction of the City. The Certificate of Insurance shall be the ACCORD FORM 25-S (7/90), or its successor form, and shall be made a part of this Agreement.
- (b) New certificates of insurance shall be provided to the City at least fifteen (15) days prior to coverage renewals.
- (c) If requested by the City, the Contractor shall furnish complete copies of the Contractor's insurance policies, forms and endorsements.
- (d) For Commercial General Liability coverage the Contractor shall, at the option of the City, provide an indication of the amount of claims payments or reserves chargeable to the aggregate amount of liability coverage. If the Commercial General Liability form of coverage includes an annual aggregate limitation on the amount of insurance provided, a separate project aggregate limit may be required by the City for the given contract.
- (e) If the Contractor fails to obtain and maintain for the life of the Agreement the insurance required hereby or to replace any such expired or canceled policy, the City may obtain and maintain such insurance with such company as it deems satisfactory. Any amounts expended by the City in payment of premiums for such insurance shall be deducted by the City from the amount due the Contractor for the work covered by the Agreement.

(f) **Policies of Insurance**

1. Except as otherwise provided herein, all insurance policies shall be issued by insurers licensed to do business in the State of Florida on an admitted basis or which is an eligible surplus lines insurer in the State of Florida, and any such insuring company is required to have a minimum financial rating of (A-) in the latest edition of "Best's Key Rating Guide", published by A. M. Best Co., Inc., or some similarly nationally recognized rating authority, including Standard and Poors and Demotech.

2. For Workers' Compensation coverage only, self-insurance programs are acceptable with a minimum A- rated reinsurance carriers; written confirmation is required.

3. All policies of insurance or certificates thereof referred to herein shall be deposited with the City Clerk.

4. The City shall be named an Additional Insured on General Liability and Automobile Liability policies of insurance and certificates thereof.

20. **Enforcement of Costs.** If any legal action or other proceeding is brought for the enforcement of this Agreement, or because of an alleged dispute, breach, default, or misrepresentation in connection with any provision of this Agreement, the successful or prevailing party or parties shall be entitled to recover reasonable attorneys' fees, court costs, and all expenses even if not taxable court costs (including, without limitation, all such fees, costs and expenses incident to arbitration, appellate, bankruptcy, and post-judgment proceedings), incurred in that action or proceeding or any appeal, in addition to any other relief to which the party or parties may be entitled. Attorneys' fees include legal assistant fees, expert witness fees, investigative fees, administrative costs, and all other charges billed by the attorney for the prevailing party.

21. **Compliance With Laws.** Contractor shall comply with all applicable federal, state and local laws and regulations.

22. **Compliance With Florida Public Records Law.** Contractor expressly agrees that it shall comply with the public records law provided in Florida Statutes, Chapter 119, and specifically to:

(a) Keep and maintain public records required by the City to perform the contracted service.

(b) Upon request from the City Clerk, provide the City with a copy of the requested records or allow the records to be inspected or copied within a reasonable time at a cost that does not exceed the cost provided in Chapter 119, Florida Statutes, or as otherwise provided by law.

(c) Ensure that public records that are exempt or confidential and exempt from public records disclosure requirements are not disclosed except as authorized by

law for the duration of the contract term and following completion of the contract if the contractor does not transfer the records to the City.

(d) Upon completion of the contract, transfer at no cost, to the City all public records in possession of the contractor or keep and maintain public records required by the City to perform the service. If the contractor transfers all public records to the City upon completion of the contract, the contractor shall destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. If the contractor keeps and maintains public records upon the completion of the contract, the contractor shall meet all applicable requirements for retaining public records. All records stored electronically must be provided to the City, upon request from the City Clerk, in a format that is compatible with the information technology systems of the City.

(e) Failure of the Contractor to comply with Public Records Law as provided by Florida Statutes, Chapter 119, shall subject the Contractor to penalties under Chapter 119.10 and subject this Agreement to termination for cause by the City.

IF THE CONTRACTOR HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO THE CONTRACTOR'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS CONTRACT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT:

**CITY CLERK
22 SOUTH BEACH STREET
ORMOND BEACH, FLORIDA 32175. (386)677-0311
CITYCLERK@ORMONDBEACH.ORG**

Ref: Fla. Stat. §119.0701(2016)

23. **Limitation of Remedy and Liability.** Contractor and Owner expressly waive any claim for consequential damages against the other including but not limited to, a waiver of claims for diminished bonding capacity, loss of financing, loss of business reputation, lost profits on other projects or other lost opportunity damage claims.

Contractor expressly agrees that any claim (tort, contract, claim in equity, or otherwise) by Contractor for damages against Owner shall not exceed the total amount of the contract price, less any amounts actually paid to the Contractor by the Owner.

24. **Waiver of Right to Jury Trial.** THE PARTIES HEREBY KNOWINGLY, VOLUNTARILY AND INTENTIONALLY WAIVE ANY RIGHT WHICH ANY PARTY MAY HAVE TO TRIAL BY JURY IN RESPECT OF ANY PROCEEDING, LITIGATION OR COUNTERCLAIM BASED ON, OR ARISING OUT OF, UNDER OR IN CONNECTION WITH THIS AGREEMENT OR ANY COURSE OF CONDUCT,

COURSE OF DEALING, STATEMENTS (WHETHER VERBAL OR WRITTEN) OR ACTIONS OF ANY PARTY. IF THE SUBJECT MATTER OF ANY LAWSUIT IS ONE IN WHICH THE WAIVER OF JURY TRIAL IS PROHIBITED, NO PARTY TO THIS AGREEMENT SHALL PRESENT AS A NON-COMPULSORY COUNTERCLAIM IN ANY SUCH LAWSUIT ANY CLAIM BASED ON, OR ARISING OUT OF, UNDER OR IN CONNECTION WITH THIS AGREEMENT. FURTHERMORE, NO PARTY TO THIS AGREEMENT SHALL SEEK TO CONSOLIDATE ANY SUCH ACTION IN WHICH A JURY TRIAL CANNOT BE WAIVED.

25. **Verification of Employment Status Using E-Verify System**

- (a) Section 448.09, *Florida Statutes*, makes it unlawful for any person to knowingly employ, hire, recruit, or refer, either for herself or himself, or on behalf of another, for private or public employment within the state, an alien who is not duly authorized to work in the United States. Contractor warrants that it is registered with the U.S. Department of Homeland Security's E-Verify system, and is compliant with the requirements of Sections 448.09 and 448.095, *Florida Statutes*.
- (b) Contractor agrees that if the contractor enters into an agreement with a subcontractor, the subcontractor must provide the contractor with an affidavit stating that the subcontractor does not employ, contract with, or subcontract with an unauthorized alien, and contractor warrants it shall maintain any such affidavits for the duration of the contract. If the City has a good faith belief that a subcontractor knowingly violated Section 448.09 (1), the City shall promptly notify the contractor and order the contractor to immediately terminate the contract with the subcontractor.
- (c) In the event the City has a good faith belief that the contractor has knowingly violated Section 448.09 (1), *Florida Statutes*, the City shall terminate the contract, and as provided by statute, the contractor may not be awarded a public contract for at least one (1) year after the date of termination. The contractor may also be held liable for any additional costs incurred by the City as a result of the termination of the contract.

26. **No Conflict of Interest.** The Contractor warrants and agrees that neither it, nor any of its employees, agents, officers, directors, shareholders and independent contractors are, or will become, under contract with or accept compensation from any individual, business, corporation or governmental entity that has the possibility of an adverse interest to those of the City of Ormond Beach. The Contractor and its officers, directors, shareholders, employers, agents and subcontractors, agree not to provide any services or assistance to any entity directly or indirectly relating to the services provided to the City and to immediately notify the City Manager and City Attorney of any contact with any entity that has, or potentially has, a conflict of interest with the City of Ormond Beach. This provision shall be interpreted as broadly as possible to prevent any potential or actual conflict of interest presently or in the future by the Contractor.

27. **Effective Date.** This Agreement shall become effective upon the date last signed by the parties hereto.

IN WITNESS WHEREOF, the undersigned parties have caused this Agreement to be signed on the dates indicated hereinbelow.

DATED this _____ day of _____, 2025.

Witnesses:

CITY OF ORMOND BEACH

Print Name: _____

By: _____
JASON LESLIE
Mayor

Print Name: _____

By: _____
JOYCE SHANAHAN
City Manager

DATED this _____ day of _____, 2025.

Witnesses:

FLORIDA ARMATURE WORKS, INC.

Print Name: _____

By: _____
Print Name: _____

Title: _____

Print Name: _____

Attest: _____
Print Name: _____

Title: _____

EXHIBIT "A"

REQUEST FOR PROPOSAL #2025-40
UTILITIES MOTOR AND PUMP REPAIR SERVICES

SEPTEMBER 10, 2025



HERMAN A. GARCIA
FLORIDA ARMATURE WORKS, INC.
2460 SMITH ST.
KISSIMMEE, FL 34744
407.846.1745

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C. Standard General Requirements

Florida Armature Works, Inc
2460 Smith St.
Kissimmee, FL 34744
Phone: 407.846.1745
Fax: 407.846.6129

FEIN – 59-3263174

Florida Armature Works, Inc. is a family owned and operated electric motor and pump repair center located in Kissimmee, FL. Since being established in 1993. Run by President German Garcia, Vice President, Leslie Barnett, and Vice President Herman Garcia, Florida Armature Works repairs multiple types of equipment including Floway turbine pumps, to Flygt submersible pumps, to U.S. Motor or Leeson, we have never shy away from a project that was within our capability. Over the years Florida Armature Works has completed over 10 Different Contracts, and to this day, we have completed them all, without falter. In our 32 years of business, thankfully, we haven't had any lawsuits or arbitrations against our company.

2460 Smith Street
Kissimmee, FL 34744



Phone: (407) 846-1745

Fax: (407) 846-6129

Letter of Transmittal

September 10th, 2025

City of Ormond Beach
22 South Beach Street
Ormond Beach, Florida 32174

Subject: Utilities Motor and Pump Repair Services

To Whom It May Concern:

We are writing you with the proposal titled "Utilities Motor and Pump Repair Services." The purpose of writing this proposal is to inform the City of Ormond Beach of our qualifications as a firm and its employees, experience in working with municipalities like yourselves, and the expectations you will receive if you decide to work with Florida Armature Works. This Proposal is made without collusion with any other person or entity submitting a proposal pursuant to this RFP.

All decision makers, including myself, have reviewed the proposal and understand what's expected from the awarded bidder. Along with reviewing the proposal we have put together our best effort in gathering all the documentation needed to submit the proposal. We believe our quality as well as turnaround time is best suited for this type of contract as we have already proven ourselves with a larger contract in that past that lasted several years. We hope you will take our proposal into consideration, as our offer is firm for the entire period of this contract.

Sincerely,

A handwritten signature in blue ink, appearing to read "Herman Garcia", is written over a light blue circular stamp.

Herman Garcia
Vice President

E. Technical Qualifications of Firm:

Florida Armature Works, Inc. is a family owned and operated electric motor and pump repair center located in Kissimmee, FL. Since being established in 1993, we have committed ourselves to our customers by providing quality workmanship and efficient customer service. Our highly skilled technicians have over 100 years of combined experience in the electrical apparatus repair industry. In the past 25 years we have grown from a two man shop repairing pool motors and smaller industrial motors, to 11 full time employees with the capability of working on Motors as large as 800 Horse power. We previously held a contract that serviced over 430 lift stations as well as 10 combined Waste Water Treatment Plants and Water Treatment Plants. Currently, we hold five contracts with various municipalities, from locations far south as Jupiter, FL to far west as Hernando County, FL.

Since the beginning, Florida Armature Works has worked on vast machinery that pumps water or generates power. From Floway turbine pumps, to Flygt submersible pumps, to U.S. Motor or Leeson, we have never shied away from a project that was within our capability. Over the years we have seen an increase in the repairs for submersible pumps, which we would say is our expertise. By having an onsite machine shop this allows us to either repair damaged parts or machine a brand new part to the manufactures specifications. Being able to work on these items in-house, has allowed us to pass the savings onto our customers through lower repair costs. Florida Armature Works does have access to majority of the OEM parts, but we leave it to the discretion of the customer if they want to spend the extra money which can lead to a longer lead time due to availability.

Being a member of EASA (Electrical Apparatus Service Association) allows us to use EASA's many resources such as, direct technical consulting/support, the industry repair standard, education, technical resources, software, management and sales training, industry research, networking and more. This has allowed us to elevate our performance and success. We have recently been added as a Service Warranty Repair Center for the Leeson Motor brand but this does not limit us to the brands of motors we can work on. Listed below are the current brands that we work with on a consistent basis:

<u>Submersible Pumps</u>	<u>Electric Motors</u>	<u>Turbines/Split Case</u>
Flygt	U.S. Motor	Floway Weir
ABS	Leeson	Byron Jackson
Hydro-matic	Baldor	Aurora
EMU	Teco Westinghouse	Deming
Barnes	Marathon	Flotronex
KSB	A.O. Smith	Goulds
Meyers	G.E.	Cornell

Florida Armature Works is located on a ½ acre in Kissimmee, FL in which we occupy two adjacent 5000sqft buildings. In one building all repairs, rewinding and testing are done, while the other holds our fully equipped machine shop, welding and storage. Expansions are currently underway to add a 3 ton bridge crane in our second building for the assembly of longer items as well as to open more space for repairs. We are approximately 4 miles East of Toho Water Authority's pick up location. Work completed by Florida Armature works allows monies spent and taxes paid to be left in the Osceola county area. The capacity of this contract can help with job growth, particular adding new jobs to the Osceola county market. All team members report to our location where all of our repairs are completed, as well as key employees are no more than 15 minutes away in case of emergencies.

Florida Armature Works has a handful of trusted vendors that supply the majority of our replacement parts as well as our fabricating pieces that we use for repairs. These vendors keep common stock items for our needs and typically have them within 1-2 business days shipping notice. Like any Motor Repair Facility, specialty items or back order items are at the discretion of the manufacturer and may take up to several weeks.

List of Equipment:

- Yale Forklift – 6000lbs
- 60 Ton Vertical Press, 55 Ton Ramco Vertical Press
- 100KW/480 Volt Test Panel, 40KW/480 Volts Test Panel
- Namseon Hi-Tech 18 x 60 Lathe, Acra 36 x 120 Lathe (2015)
- Enco 13 x 36 Lathe, Jet 10 24 Lathe, LeBlond 16 x 30 Lathe
- Ex-Cell-O Milling Machine, Ramco Band Saw, Power Matic
- Dyna-Bal D-15 Balance Machine (2015) – 1500lbs capacity
- Lexseco 1801 Core Loss Tester
- (2) 1.5 Ton Cleveland Tramrail Bridge Crane
- Ace Armature Coil Maker, Baker ST103E Surge Tester
- 5 x 4 x 4 Varnish Tank
- 4 x 4 x 4 Steelman Bank Oven, 6 x 6 x 5 Bake Oven
- 48 x 52 x 60 PCP Burn Out Oven, 36 x 42 x 32 PCP Burn Out Oven
- 7.5 Ton Florida Handling System Bridge Crane, 60 ton Portable Hydraulic Puller
- 5 Ton J. Herbert Bridge Crane
- Ford F 450 2004 with a 5K Auto Crane, Dodge Ram 2016 4500 with 5k Auto Crane

F. Technical Qualifications of Project Team:

Being in the Industry for over 40 years, the owner of Florida Armature Works was able to work with many experienced mechanics, winders and machinists. Through those years he developed a camaraderie with these employees which allowed Florida Armature Works to hire them as the company grew. With his ability to teach others, the owner was able hire other service type mechanics and teach them the trait of Electric Motor Repair. Below are our key employees who will be handling the services of Toho Water Authority contract.

German Garcia – Owner

Not only is he the owner, but with his 45 years of experience, he is able to teach new employees the proper steps in the electric motor repair process. During our busy time, he is able to fill in the gap when other core team members are absent as well as delegate tasks to the appropriate team members to complete. Through his 45 year career, he has learned the techniques and teachings of a machinist, he worked for a large manufacturers (Magnetek) rewinding motors, and has managed a crew of 8 employees at a previous motor shop. With his experience, he decided to venture out on his own in 1993 and to this day has grown a two man shop, to 11 full time employees.

Justyne Sansoucy – Mechanic / Submersible Pumps

Started off working in Texas for a motor Manufacturer, working the assembly line. He came on board in March of 2016 in which he mentored under the owner for one year. In that time, he picked up the dismantling and assembling of Submersible pumps quickly and was on his own after 18 months. Through the years he also gained experience through service calls in which he would pull motors with our boom truck as well as laser align them back when installing. His main focus is Submersible pumps and close coupled pumps.

Darrell Lunnon – Shop Foreman / Mechanic

Darrell came to us from a competing motor shop in 2014. In the course of his previous employment, he met our owner and created a good camaraderie in which they always kept in touch. His daily duties consist of quality control, assigning jobs to mechanics, helping with work overflow as well as handling all the paperwork needed for repairs. His experience is one that is on par with the owners, ranging from 4000 Horse power motors to 5 Horse power magnetic drive Motors.

Edy Carcases – Winder

Edy learned how to rewind motors through a family business located in San Juan, Puerto Rico, in the late 80's. Edy has been with Florida Armature works for a combined 18 plus years. He started with the company in 1998 but left for 2 years from 2002-2004 in which he returned back to Florida Armature Works late 2004. His specialty lies in the rewinding process of electric motor repair. From recording electric data through winding coils, to hot spot testing stators for any deficiencies, Edy is going to be involved in the repair process no matter what. Edy is a very dependable employee who has helped our company succeed during the hurricane seasons.

Gary Tordi – Machinist

Gary has been a machinist for 25 plus years. Before coming to Florida Armature he received an opportunity to work for a competing Electric Motor Repair shop where he continued to fine tune his trade as a machinist. He specializes in measuring, examining, and testing completed units in order to detect defects and ensure conformance to specifications, using precision instruments such as micrometers. Whether it's building a shaft sleeve from scratch or rebuilding a shaft by metalizing and trimming it down to factory specifications, his abilities as a machinist are endless.

H. Responsiveness:

Florida Armature Works prides itself in three things; quality workmanship, completion in a timely manner and affordable repair cost. Our process is very simple, once we have received a job for repair, we assign it to one of our team members in which they dismantle the project. From there, our shop foreman and the mechanic will go over what items needed to be repaired and/or replaced. From this inspection, we can give an accurate number of hours on how long it will take to repair the job and what parts need to be replaced. Once the job is quoted, typically within 48 hours of being received, we await on the customer for the Purchase Order for approval. If the customer decides to repair the job, we then will work on completing the item for return, typically 7-10 business days. This is subject to parts being available but we do keep inventory of common used bearings, seals, cable and misc. parts. Please note, once a job is quoted after inspection there is a zero chance for a price increase unless it has exceeded the 30 day quote window from our distributors.

UTILITIES MOTOR AND PUMP REPAIR SERVICES**RFP NO. 2025 – 40****PROPOSAL PRICING –Motor and Pump Repair**

Proposer submits the following prices for the work described in this solicitation:

Item of Work	Per (Unit)	Unit Price
1. Trailer Truck Service to transport pump to and from repair facility (time must be reasonable compared to Google Maps estimate. No pay for breakdowns).	HR	\$ \$0.00
2. Crane Truck Service (including operator) for removing and install pump or motor	HR	\$ \$175.00
3. Standard Labor Rate (Mechanic) Monday – Friday, 8:00 am – 5:00 pm	HR	\$ \$45.00
4. Non-Standard Labor Rate (Mechanic) After hours, weekend, and holidays	HR	\$ \$55.00
5. Standard Labor Rate (Machinist) Monday – Friday, 8:00 am – 5:00 pm	HR	\$ \$55.00
6. Non-Standard Labor Rate (Machinist) After hours, weekend, and holidays	HR	\$ \$65.00
7. Tear Down and Inspection	HR	\$
Parts Allowance: Cost plus markup %		<u>15</u> . ____%

J. Location:

Florida Armature Works is located in Kissimmee, FL. We are 3 miles from Florida's Turnpike which allows us to pick up and deliver north or south fairly quickly and connects us to multiple highways in which we can head east or west. We are approximately 81 miles south of Ormond Beach. All team members report to our location where all of our repairs are completed. Key Members in the previous section live in the county of Osceola where our shop is located and have access to the building in case of emergencies. Our hours of operation are noted as 7:30-4pm, M-F, but a team member is always here before 7 as well as after 4pm.



City of Ormond Beach

22 South Beach Street
Ormond Beach, Florida 32174
Telephone (386) 676-3223

REQUEST FOR PROPOSALS

PROPOSER ACKNOWLEDGEMENT FORM

THIS FORM MUST BE COMPLETED AND RETURNED WITH YOUR PROPOSAL

RFP TITLE: **UTILITIES MOTOR AND PUMP REPAIR SERVICES**
RFP NUMBER: **2025-40**
RFP OPENING DATE & TIME: **September 10, 2025 at 2:00 pm**
RFP OPENING LOCATION: **City Hall Training Room at Ormond Beach City Hall**
PRE-PROPOSAL MEETING DATE & TIME: **None**
PRE-SUBMITTAL MEETING: **N/A**

Submittals Received After The Above Date And Time Will Not Be Accepted.

PROPOSER'S NAME: Florida Armature Works, Inc.

PROPOSER'S MAILING ADDRESS: 2460 Smith St.

CITY-STATE-ZIP: Kissimmee, FL 34744

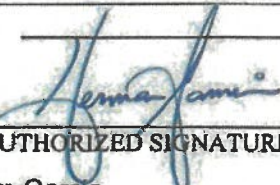
F.E.I.N.: 59-3263174

PHONE NUMBER: 407.846.1745

EMAIL: Herman@flarmworks.com

If returning as a "No Submittal", please state reason (s) _____

I certify that this Proposal is made without prior understanding, agreement, or connection with any corporation, firm, or person submitting a Proposal for the same materials, services, supplies, or equipment, and is in all respects fair and made without collusion or fraud. I agree to abide by all conditions of this RFP and certify that I am authorized to sign this RFP for the Proposer. In submitting a RFP to the City of Ormond Beach, the Proposer offers and agrees that if the Proposal is accepted, the Proposer will convey, assign or transfer to the City of Ormond Beach all rights, title, and interest in and to all causes of action it may now or hereafter acquire under the Antitrust laws of the United States and the State of Florida for price fixing relating to the particular commodities or services purchased or acquired by the City of Ormond Beach. At the City's discretion, such assignment shall be made and become effective at the time the City renders final payment to the Proposer.

X 
AUTHORIZED SIGNATURE (MANUAL)

Herman Garcia
NAME (TYPED)

Vice President
TITLE

09/09/2025
DATED

GENERAL CONDITIONS

PUBLIC ENTITY CRIMES: A person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a proposal on a contract to provide any goods or services to a public entity, may not submit a proposal on a contract with a public entity for the construction or repair of a public building or public work, may not submit Proposals on leases or real property to a public entity, may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity, and may not transact business with any public entity in excess of the threshold amount provided in Section 287.017, for CATEGORY TWO for a period of 36 months from the date of being placed on the convicted vendor list.

DISCRIMINATION: Pursuant to Section 287.134(2)(a), Florida Statutes, an entity or affiliate who has been placed on the discriminatory vendor list may not submit a bid or proposal on a contract to provide any goods or services to a public entity, may not submit a bid or proposal on a contract with a public entity for the construction or repair of a public building or public work, may not submit bid or proposal on leases of real property to a public entity, may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity, and may not transact business with any public entity.

PUBLIC RECORDS/NON-CONFIDENTIALITY OF BIDS AND/OR PROPOSALS.

The City of Ormond Beach cannot and does not warrant the confidentiality of any information submitted in response to this solicitation. Florida law provides that municipal records shall at all times be open for personal inspection by any person, Section 119.01, F.S., The Public Records Law. Information and materials received by the City of Ormond Beach in connection with all Proposers' response shall be deemed to be public records subject to public inspection upon award, recommendation for award, or 30 days after bid opening, whichever occurs first. Section 119.071, F.S.

DISTRIBUTION OF BIDS AND RFP'S: The City uses the services of DemandStar (www.demandstar.com) to distribute its bids and RFP's on-line on the Internet. If you have received a copy of this RFP from any source other than DemandStar, please be aware that you may not have received the latest version of the RFP or any related addendums.

SUBMISSION OF RESPONSES: All Submittals shall be delivered in a sealed envelope. The Request for Proposals (RFP) number, title, and opening date shall be clearly displayed on the outside of the sealed envelope (and on the outside of any express shipping package). The delivery of said submittal to the Purchasing Office on or before the specified opening date and time is solely and strictly the responsibility of the Submitter. Any submittal received by the Purchasing Office after the specified date and time will not be accepted. Submittals must be presented on forms provided by the City. No other forms will be accepted. Responses submitted by telephone, fax or email will not be

considered. No Submittal may be modified after opening. No Submittal may be withdrawn after opening for a period of ninety (90) days unless otherwise specified.

EXECUTION OF SUBMITTAL: Submittals must contain a manual signature of authorized representative in the space(s) provided. Submittals must be typed or printed in ink. Use of erasable ink is not permitted. All corrections made by Submitter to any Submittal entry must be initialed. The company name and Federal Employer Identification Number (F.E.I.N.) number shall appear in the space(s) provided.

RFP OPENING: Submittals shall be opened and the name of the submitters shall be read publicly. No discussion of the Submittals will occur at this time.

SUBMITTAL TABULATION: The RFP Tabulation will be posted on Demandstar (www.demandstar.com). Any submitter wishing to receive a paper copy of the tabulation is required to enclose a stamped, self-addressed envelope with their Submittal response.

CLARIFICATION/CORRECTION OF RFP ENTRY: The City of Ormond Beach reserves the right to allow for the clarification of questionable entries and for the correction of obvious mistakes.

INTERPRETATION: Any questions concerning conditions and specifications shall be directed to the Purchasing Coordinator rob.hart@ormondbeach.org. Those interpretations which may affect the eventual outcome of this Submittal will be furnished in writing to all prospective Submitters. No interpretation shall be considered binding unless provided in writing by the City of Ormond Beach.

PROCUREMENT COMMUNICATION PROTOCOL: To protect the integrity of the procurement process, respondents, suppliers, contractors, sub-contractors or person acting on behalf of any of the above are prohibited from all communications regarding the solicitation with City staff, City consultants, City legal counsel, City agents, or elected officials unless such communication is specifically authorized in the City's solicitation or addenda. Violation of this provision may be grounds for rejecting a response.

MINORITY POLICIES: The City of Ormond Beach, Florida, encourages the full participation of Disadvantaged and Women Business Enterprises (D&WBE) in the provision of goods and services.

RESPONSIBILITY DETERMINATION: Pursuant to the provisions of Florida Statutes Chapter 287.05701, the City does not request or consider a vendor's social, political, or ideological interests in making a responsibility determination.

LICENSES AND PERMITS: The Vendor/Contractor is responsible for obtaining all necessary permits and licenses to comply with all Federal, State, local laws, rules and regulations required to perform work in accordance with the specifications.

ADDITIONAL TERMS AND CONDITIONS: The City of Ormond Beach reserves the right to reject Submittals containing any additional terms or conditions not specifically requested in the original conditions and specifications.

TAXES: The City of Ormond Beach is exempt from Federal Excise Taxes and all sales taxes.

SILENCE OF SPECIFICATIONS: The apparent silence of any specification and any supplemental specifications as to any details or the omission from same of any detailed description concerning any point shall be regarded as meaning that only the best commercial practices are to prevail and that only materials of first quality and correct type, size, and design are to be used. All workmanship is to be first quality. All interpretations of the specifications shall be made upon the basis of this statement.

ASSIGNMENT: Any purchase order or contract issued pursuant to a Submittal and the monies which may become due hereunder are not assignable except with the prior written approval of the City Manager or City Commissioner, whichever authorized the purchase or Agreement.

LIABILITY: The Contractor shall hold and save the City of Ormond Beach, its officers, agents, and employees harmless against claims by third parties resulting from the Contractor's or supplier's breach of contract or negligence, including all attorney's fees and costs, and shall pay any and all damages, fees, and costs assessed on behalf of the City. The City expressly reserves all rights, privileges and benefits of sovereign immunity.

PATENTS AND ROYALTIES: The Contractor, without exception, shall indemnify and save harmless the City of Ormond Beach and its employees from liability of any kind, including cost and expenses for or on account of any copyrighted, patented, or unpatented invention, process, or article manufactured or used in the performance of the contract, including its use by the City of Ormond Beach. If the Contractor uses any design, device, or materials covered by letters, patent or copyright, it is mutually agreed and understood without exception that the Submittal prices shall include all royalties or cost arising from the use of such design, device, or materials in any way involved in the work.

NON-APPROPRIATION OF FUNDS: In the event sufficient budget funds are not available for a new fiscal period, the CITY shall notify the VENDOR/CONTRACTOR of such occurrence and the contract shall terminate on the last day of the current fiscal period, without any penalty or expense to the CITY of any kind whatsoever.

AWARDS: The CITY reserves the right, in its sole discretion, as the best interest of the CITY may require, to make award(s) by individual item, group of items, all or none, or a combination thereof; on a geographical basis and/or with one or more vendors, contractors, consultants or specialists; or to reject any and all Submittals or waive any minor irregularity or technicality in the Submittals received.

OTHER AGENCIES: All Bidder(s) awarded contracts from this bid or proposal may, permit any municipality or other government agency to participate in the contract under the same prices, terms, and conditions, if agreed to by both parties.

It is understood that at no time will any city, municipality, or other agency be obligated for placing an order for any other city, municipality, or agency: nor will any city, municipality, or agency be obligated for any bills incurred by any other city, municipality, or agency. Further, it is understood that each agency will issue its own purchase orders to the awarded bidder(s).

COMPLIANCE WITH FLORIDA PUBLIC RECORDS LAW:

Contractor expressly agrees that it shall comply with the public records law provided in Florida Statutes, Chapter 119, and specifically to:

- (a) Keep and maintain public records required by the City to perform the contracted service.
- (b) Upon request from the City Clerk, provide the City with a copy of the requested records or allow the records to be inspected or copied within a reasonable time at a cost that does not exceed the cost provided in Chapter 119, Florida Statutes, or as otherwise provided by law.
- (c) Ensure that public records that are exempt or confidential and exempt from public records disclosure requirements are not disclosed except as authorized by law for the duration of the contract term and following completion of the contract if the contractor does not transfer the records to the City.
- (d) Upon completion of the contract, transfer at no cost, to the City all public records in possession of the contractor or keep and maintain public records required by the City to perform the service. If the contractor transfers all public records to the City upon completion of the contract, the contractor shall destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. If the contractor keeps and maintains public records upon the completion of the contract, the contractor shall meet all applicable requirements for retaining public records. All records stored electronically must be provided to the City, upon request from the City Clerk, in a format that is compatible with the information technology systems of the City.
- (e) Failure of the Contractor to comply with Public Records Law as provided by Florida Statutes, Chapter 119, shall subject the Contractor to penalties under Chapter 119.10 and subject this Agreement to termination for cause by the City.

IF THE CONTRACTOR HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO THE CONTRACTOR'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS CONTRACT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT:

CITY CLERK
22 SOUTH BEACH STREET
ORMOND BEACH, FLORIDA 32174
(386)677-0311
CITYCLERK@ORMONDBEACH.ORG
or online at
<https://www.ormondbeach.org/prr>

Ref: Fla. Stat. §119.0701(2016)

THE CITY OF ORMOND BEACH RESERVES THE RIGHT TO REJECT ANY OR ALL PROPOSALS, AND TO WAIVE INFORMALITIES AS MAY BE DEEMED TO BE IN THE BEST INTEREST OF THE CITY.

TERMS AND CONDITIONS

- A. The City of Ormond Beach reserves the right without prejudice to reject any or all proposals, to request clarification of information submitted, and to request additional information of one or more proposers.
- B. The City reserves the right to award the contract to the next most qualified firm if the successful firm fails to execute a contract within two weeks after the award of the contract by the City Commission.
- C. In accordance with federal, State, and local regulations, the firm shall not discriminate under the contract against any person.
- D. The firm shall not assign or transfer any interest in the contract without prior approval of the City Commission.
- E. The City reserves the right to terminate the contract at any time due to the vendor's default under terms of agreement.
- F. Submission of a proposal indicates acceptance by the firm of the conditions contained in this Request for Proposals unless clearly and specifically noted in the proposal submitted and confirmed in the contract between the City of Ormond Beach and the firm selected.
- G. Submittals should include a copy of firm's insurance certificate, Conflict, Non-Conflict of Interest Statement/Litigation Statement, Drug Free Workplace Certificate and E-Verify Statement.

I. OBJECTIVE OF THE REQUEST FOR PROPOSALS

The City of Ormond Beach is a coastal community located in northeast Volusia County, Florida, occupying an area of approximately 38 square miles. The City Utility Service Area extends outside of the City limits into part of unincorporated Volusia County as well as providing service to portions of neighboring Flagler County. Customer data for 2024 included 23,788 active water accounts, of which 16,972 were located within the City limits. Records indicate there were 18,027 active sewer accounts, of which 17,451 were located within City limits. The City's fiscal year begins on October 1 and ends on September 30.

The Utilities Division of the City's Public Works Department is responsible for providing quality potable water, sanitary sewer and reclaimed water services to utility customers in a manner that balances social, environmental, and economic factors. The Utilities Division of the Public Works Department consists of five operating sections: Water Production, Water Reclamation (sometimes referred to as the Wastewater Treatment Facility), Potable Water Distribution, Wastewater Collection & Reclaimed Water Distribution, and Equipment Maintenance.

The Water Production Division is responsible for the safe and efficient operation of the City's Water Treatment Plant (WTP), 38 wells, 3 water storage tanks, and four water distribution booster stations. The WTP has a design capacity of 12.0 million gallons per day.

The Water Reclamation Facility (also referred to as the Wastewater Treatment Facility) is responsible for the safe and efficient treatment of wastewater, the supply of reclaimed water for irrigation, and the subsequent stabilization and disposal of solid wastes produced to ensure the protection of public health and the environment. The City's Water Reclamation Facility is designed to treat sewage at a rate of 8 million gallons per day. The City utilizes 95 sanitary sewer lift stations to transmit wastewater to the Wastewater Reclamation Facility. Meanwhile, the reclaimed water system has a permitted capacity of 10 million gallons per day and utilizes three (3) reclaimed water storage tanks and associated pump stations.

It is the intent of the City of Ormond Beach, Florida to award a contract(s) to the successful proposer(s) of this request for proposals to provide **UTILITIES MOTOR AND PUMP REPAIR SERVICES** on an "as needed" basis.

II. SCOPE OF SERVICES

The work shall be performed on an "as needed basis" for the Utilities Division of the Public Works Department. Awarded firms will be responsible for:

1. Pickup of equipment requested for evaluation and/or repair from affected City of Ormond Beach facility within 72 hours of request.
2. After assessment of equipment, development of a quote for the work necessary to repair to include pricing in accordance with the agreement and timeline to complete the work
3. Execution of work on the equipment, once a Purchase Order referencing the quote has been issued
4. Timely completion of the work
5. Return of repaired equipment within 48 hours of completion of work
6. General responsiveness to requests for evaluation/repair, phone calls and emails

Service under this award will include a full range of pump and electric motor repair services. These services will include but not be limited to inspection, evaluation and repair of vertical turbine, split case centrifugal pumps, centrifugal fans/blowers, lift station pumps, inspection, evaluation and repair of 3-phase electric motors, professional pump and electric motor reports, and other services as needed. Firms selected shall be capable of providing services including, but not limited to, the following:

PUMP REPAIR SERVICES:

Shaft Repair

Shaft Replacement and Bearing Replacement Seal Repair

Seal Replacement

Wear Ring Replacement Impeller Repair Impeller Replacement

Apply Protective Coatings Volute Repair

Volute Replacement Casing Repair Casing Replacement Dynamic Balancing Clean Pump Assembly of Pump

Performance Testing Pump Curves

Provide Detailed Shop Reports, and Recommendations

ELECTRIC MOTOR REPAIR SERVICES:

Repair Shaft

Replace Bearings

Rewind Motor

Dip and Bake Motor

Balance Motor

Motor Diagnostic

MOTOR TESTING SERVICES:

Megging

HiPot Testing

Surge Testing

Voltage Drop Testing

Core Loss Testing

Provide Detailed Shop Reports and Recommendations

III. TERM OF AGREEMENT

The initial term of this agreement shall be for a period of three (3) years and will be automatically renewed for two additional one (1) year periods thereafter unless either party provides at least ninety (90) days prior written notice to the other party of their intent not to renew the agreement. All terms and conditions shall remain firm for the initial three (3) year period and any optional renewal period of this contract based on contractor's acceptance, level of performance and approved funding.

IV. PROPOSAL PROCESS

The firm or individual(s) interested in this contract should include a response to each of the following items in their written proposal:

- A. Title Page: Title page marked, "**UTILITIES MOTOR AND PUMP REPAIR SERVICES**", the firm's name; the name, address and telephone number of a contact person; and the date of the proposal.
- B. Table of Contents: Include a clear identification of the material included in the proposal by page number.
- C. Standard General Requirements: Include Proposer's name and principal address; contact person's name and title; telephone and fax number; FEIN; number of years organization has been in business; number of years your firm has been in business under your present business name; number of years your firm has been in business in work specific to this RFP; names and titles of all officers, partners or individuals doing business under trade name; statement of whether your firm has ever failed to complete work awarded to you; list all claims, arbitrations, administrative hearings and lawsuits brought by or against the Proposer or its predecessor organization(s) during the last five (5) years; list and describe all criminal proceedings or hearings concerning business related offenses in which the Proposer, its principals or officers or predecessor organization(s) were defendants; state whether the Proposer, its principals, officers or predecessor organization(s) have been CONVICTED of a Public Entity Crime, debarred or suspended from bidding by any government entity.

- D. Transmittal Letter: A signed letter of transmittal briefly stating the proposer's understanding of the work to be done, the commitment to perform the work within the time period, a statement why the firm believed itself to be best qualified to perform the engagement and a statement that the proposal is a firm and irrevocable offer for the engagement period. The transmittal letter shall have an original signature of an authorized official of the firm who has been designated to submit the proposal on behalf of the firm.
- E. Technical Qualifications of Firm: Provide a description and overview of firm, including the size, range of activities, licenses, certifications etc. Detail expertise in, and experience with troubleshooting and repair of pumps and electric motors such as lift station pump/motors, well pump/motors, transfer pump/motors, and high service pump/motors (5 HP to 300 HP and up to 5000 GPM) of similar size and materials. (Limit response to two pages maximum) Identify any subcontractors(s) that will be involved if work not performed in house, including address and a description of qualifications. (Limit response to one page maximum per subcontractor)
- F. Technical Qualifications of the Project Team: Identify the primary individuals (Project Team) who will be responsible for supervising, managing and executing the work for this Contract. List all certifications appropriate to the work. (Limit response to one page per person)
- G. References: Using the "List of References" sheet supplied herewith, provide list of six (6) utility clients for whom work has been performed within the past 5 years. Be sure to include:
- Entity/Client
 - Location
 - Year Completed
 - Client contact name, Phone and Email
 - Types of equipment serviced
- H. Responsiveness: Describe your approach to timely completion of work and provide general turnaround times.
- I. Pricing: Provide not to exceed pricing using the Proposal Pricing Form.
- J. Location: Provide shop location(s) where the bulk of work will occur and indicate which member of the Project Team primarily works from each. Provide information on alternate or backup facilities, if available. Points shall be awarded as follows: Within 25 miles of Ormond City Hall (15 points), Within 50 miles of Ormond Beach City Hall (10 points), Within 100 miles of Ormond Beach City Hall (5 points), Beyond 100 miles of Ormond Beach City Hall (0 points)

V. PROPOSAL SUBMITTAL

Please check the contents of your RFP package carefully to ensure that you have in your possession all the necessary documents, as referenced within this RFP, including any addenda. If you are missing any items, please contact the City's Purchasing Coordinator at 386-676-3223, or by e-mail at: rob.hart@ormondbeach.org.

Submission of a proposal pursuant to this RFP shall constitute acknowledgement and acceptance of the terms and conditions set forth herein. Portions of this RFP and the contents of the proposal submitted by the successful proposer may become contractual obligations if an Agreement is awarded. Failure of the successful proposer to accept these obligations may result in cancellation of the award of contract.

The City reserves the right to withdraw this RFP at any time without prior notice. All proposals submitted in response to this RFP become the property of the City of Ormond Beach.

Deadline for Submission: To be considered, proposals must be received no later than 2:00 p.m., September 10, 2025.

Inquiries: Technical questions may arise as firms are preparing their proposals. The City will accept written inquiries regarding this RFP until September 3rd at 4:00 PM. Questions received after that time will not be responded to. Answers to questions that warrant attention of all the potential proposers will be distributed in the form of an addendum. Please direct written inquiries to:

Rob Hart
City of Ormond Beach
22 South Beach Street, Room 102
Ormond Beach, Florida 32174
Telephone: (386) 676-3223
FAX: (386) 676-3374
rob.hart@ormondbeach.org

Signature Requirements: Proposals must be signed by a duly authorized official(s) of the proposing firm. Consortiums, joint ventures, or teams submitting proposals, although permitted and encouraged, will not be considered responsive unless it is established that all contractual responsibility rests solely with one firm or legal entity which shall not be a subsidiary or affiliate with limited resources. Each proposal shall indicate the entity responsible for execution on behalf of the proposal team.

Proposal Delivery: You must submit one (1) unbound original plus one (1) electronic copy on compact disk (CD) or flash drive of the proposal no later than the date and time specified above. Submit proposals to: Rob Hart, Purchasing Coordinator, at City Hall down stairs in Room 102, 22 South Beach Street, Ormond Beach, FL 32174. The RFP title and number shall be plainly marked on the outside of the delivery envelope or

package. It is solely the responsibility of the submitter to ensure that the Proposal is delivered on or before the specified date and time. Late proposals will not be accepted.

Addenda and Supplements to the Request for Proposals (RFP): In the event that it becomes necessary to revise any part of this RFP, or if additional information is necessary to enable the proposing firm to make an adequate interpretation of the provisions of this RFP, a supplement to the RFP will be provided to each firm that has requested a copy of this document.

Rejection Rights: The City of Ormond Beach reserves the right, at any time, to modify, waive or otherwise vary the terms and conditions of this RFP including, but not limited to, the deadlines for submission and submission requirements. The City further reserves the right to reject any or all submittals, to cancel or withdraw this RFP at any time and to negotiate with any party prior to or after submittal of proposals. Selection is also dependent upon the negotiation of a mutually acceptable contract with the successful proposers.

Cost of Proposal Preparation: No reimbursement will be made by the City of Ormond Beach for any costs incurred in the preparation of the proposal or presentation.

Proposals to be in Effect: Each proposal shall state that it is valid for a period of not less than 90 days from date of receipt.

VI. EVALUATION PROCESS AND CRITERIA

The City of Ormond Beach will conduct an evaluation of all proposals, submitted by the deadline, to determine compliance with proposal requirements and mandatory document submissions. The committee will consist of three individuals from the City's public works department. The committee will evaluate proposals and select the Proposer that meets the best interests of the City, and will make a recommendation of Award of Contract to the City Commission.

The City reserves the following rights:

- Modify, extend, or cancel this RFP at any time to obtain additional proposals or for any other reason the City determines to be in its best interest;
- Issue a new RFP with terms and conditions that are the same, similar or substantially different as those set forth in this or a previous RFP in order to obtain additional proposals or for any other reason the City determines to be in its best interest;
- Conduct pre-award discussion and/or pre-award negotiations with any or all responsive and responsible proposer(s) who submit proposals determined to be reasonably acceptable of being selected for award; and, conduct personal interviews or require presentations of any or all proposer(s) prior to selection.

- Request that proposer(s) furnish additional information as the City may reasonably require.
- Accept or reject qualifications or proposals in part or whole, and/or waive any defect or deficiency in any proposal, if in the City's sole judgment, the defect or deficiency is not material in response to this RFP;
- Limit and/or determine the actual contract services to be included in a contract.
- Engage outside experts to assist staff in evaluating the merits and viability of each proposer.
- Obtain information for use in evaluating submittals from any source.
- Verify the information received in the proposal. If a proposer knowingly and willfully submits false information or data, the City of Ormond Beach reserves the right to reject that proposal. If it is determined that an Agreement was awarded as a result of false statements or other data submitted in response to this RFP, the City of Ormond Beach reserves the right to terminate the Agreement.

The City shall be the sole judge of the proposer's qualifications.

Evaluation Criteria:

For the purposes of further evaluation, the responsive proposals will be evaluated on, but shall not be limited to, consideration of the following criteria:

EVALUATION CRITERIA	MAXIMUM POSSIBLE POINTS
Technical Qualifications	20
Technical Qualifications of Project Team	20
References	20
Responsiveness	10
Pricing	10
Location	15
Completeness of Proposal	5
TOTAL	100

VII. PRICING AND REFERENCE SHEETS

The following forms are provided to assist firms with preparing proposals:

UTILITIES MOTOR AND PUMP REPAIR SERVICES**RFP NO. 2025 – 40****LIST OF REFERENCES**

1. Entity/Client	New Smyrna Utilities		
Location	Port Orange, FL	Year Completed:	Ongoing
Client Contact Name	Matt Johnson		
Email	mjohnson@nsbufl.com	Phone:	386.424.3182
Types of equipment serviced			
Repair all brands of submersible pumps (ABS, Flygts, Hydr-Matic, Barnes, etc.) Vertical and Horizontal motors, horizontal split case pumps and vertical turbines			

2. Entity/Client	City of Ocala		
Location	Ocala, FL	Year Completed:	Ongoing
Client Contact Name	Luis Acosta		
Email	lacosta@ocalafl.org	Phone:	352.629.8456
Types of equipment serviced			
Electric Motor Repair, Split Case and Vertical Turbine Pumps			

3. Entity/Client	Toho Water Authority		
Location	Kissimmee, FL	Year Completed:	Ongoing
Client Contact Name	Matthew Radaskiewicz		
Email	mradaski@tohowater.com	Phone:	
Types of equipment serviced			
Repaired all Vertical and Horizontal Motors, Submersible Pumps (over 350 lift stations), Vertical turbines and horizontal split case pumps.			

UTILITIES MOTOR AND PUMP REPAIR SERVICES
RFP NO. 2025 – 40
LIST OF REFERENCES

4. Entity/Client	Indian River Utilities		
Location	Vero Beach, FL	Year Completed:	Ongoing
Client Contact Name	Kevin Gibson		
Email	kgibson@IRCgov.com	Phone:	772.770.5244
Types of equipment serviced			
Repairs for all Electric Motors, Submersible Pumps, Split Case Pumps and Vertical Turbines			

5. Entity/Client	Hernando County Utilities		
Location	Brooksville, FL	Year Completed:	Ongoing
Client Contact Name	Larry Cooper		
Email	Lcooper@co.hernando.fl.us	Phone:	352.754.4773
Types of equipment serviced			
Repair of Electric Motors and Submersible Pumps			

6. Entity/Client	Town of Jupiter Utilites		
Location	Jupiter, FL	Year Completed:	Ongoing
Client Contact Name	Christopher Mckenzie		
Email	chrism@jupiter.fl.us	Phone:	561 741 2605
Types of equipment serviced			
Repairs for Electrical Motors, Split Case Pumps and Vertical Turbines			

UTILITIES MOTOR AND PUMP REPAIR SERVICES**RFP NO. 2025 – 40****PROPOSAL PRICING –Motor and Pump Repair**

Proposer submits the following prices for the work described in this solicitation:

Item of Work	Per (Unit)	Unit Price
1. Trailer Truck Service to transport pump to and from repair facility (time must be reasonable compared to Google Maps estimate. No pay for breakdowns).	HR	\$ \$0.00
2. Crane Truck Service (including operator) for removing and install pump or motor	HR	\$ \$175.00
3. Standard Labor Rate (Mechanic) Monday – Friday, 8:00 am – 5:00 pm	HR	\$ \$45.00
4. Non-Standard Labor Rate (Mechanic) After hours, weekend, and holidays	HR	\$ \$55.00
5. Standard Labor Rate (Machinist) Monday – Friday, 8:00 am – 5:00 pm	HR	\$ \$55.00
6. Non-Standard Labor Rate (Machinist) After hours, weekend, and holidays	HR	\$ \$65.00
7. Tear Down and Inspection	HR	\$
Parts Allowance: Cost plus markup %		15 .__%

REGISTRATION AND INSURANCE REQUIREMENTS FOR VENDOR/CONTRACTOR WORKING ON CITY PROJECTS

REGISTRATION REQUIREMENTS FOR VENDOR/CONTRACTOR WORKING ON CITY PROJECTS

Registration Requirements

VENDORS doing business within the City Limits must be registered with the City.

Requirements for registering a business are as follows:

Copy of City Business Tax Receipt (where your business is located).

Certificate of Insurance showing General Liability and Workers' Comp (or State Workers' Comp Exemption form).

Application Fee: \$25.00 For more information, contact the City's Business Tax Receipt official at 386-676-3233 or btonline@ormondbeach.org You can apply online here: <https://ormondbeachfl-energovweb.tylerhost.net/apps/selfservice#/home>

State Certified/Registered Contractors

All registered State contractors must be registered with Volusia County. Volusia County Contractor Licensing, 123 W. Indiana Ave., Rm 203, Deland, FL 32720 (386) 736-5957 contractorlicensing@volusia.org
<https://connectivepermits.org/citizenportal/app/landing>

State certified contractors have the option of registering with Volusia County, or providing information directly to the business tax receipt official, to include copy of State license, certificate of insurance and copy of local business tax receipt. This information is provided with the permit application.

If you have any questions regarding the above requirements, please contact the business tax receipt official at (386) 676-3233 or btonline@ormondbeach.org

EXHIBIT A
Risk Management and Insurance Requirements

A. Payment and Performance Bonds

1. Except as otherwise provided herein, the Contractor shall, prior to beginning performance, deliver to the City, and the City shall record in the public records of Volusia County, Florida, the Contractor's Payment and Performance Bond in an amount equal to the full amount of the Contract.
2.
 - (a) Payment and Performance Bonds shall not be required for any contract except those which are for the construction of a public building, for the prosecution and completion of a public work (as described in Section 180.06, **Florida Statutes**, as amended from time to time) or for repairs upon a public building or public work (as described in Section 180.06, **Florida Statutes**, as amended from time to time).
 - (b) With respect to those Contracts for which Payment and Performance Bonds are otherwise required:
 - i. Unless the City Manager, or his designee, determines such Bond to be necessary to protect the interests of the City, no Contractor shall be required to provide a Payment and Performance Bond for any Contract which is for \$25,000.00 or less.
 - ii. Upon the request of the contractor, good cause shown by the Contractor, and a determination that the public health, safety and welfare will be sufficiently protected, the City Commission may exempt the contractor from the requirement of providing a Payment and Performance Bond for any Contract which is for more than \$25,000.00 but is less than \$200,000.00.
3. The Payment and Performance Bond shall list the Contractor as Principal and be issued by a surety insurer authorized to do business in Florida as a surety and listed as an acceptable surety in the Federal Register.
4. The Payment and Performance Bond shall be executed pursuant to Section 255.05, **Florida Statutes**, and be in a form substantially similar to the form set forth in Section 255.05(3), **Florida Statutes**.
5. The Payment and Performance Bond shall specifically provide coverage for delay damages due to a default by the Contractor.
6. The Payment and Performance Bond shall not make the Contract part of the Bond agreement.

7. In lieu of the Payment and Performance Bond, the Contractor may file with the Finance Director of the City, in an amount equal to the full amount of the Contract, cash, a money order, a certified check, a cashier's check, an irrevocable letter of credit, or a security of a type listed in Part II, Chapter 625, **Florida Statutes**.
8. In the event the surety on any Payment and Performance Bond furnished by the Contractor is declared bankrupt or becomes insolvent, or its right to do business in the State of Florida is terminated, the Contractor shall, within five (5) working days thereafter, substitute another Payment and Performance Bond and surety acceptable to the City.
9. The Contractor is totally and solely responsible for keeping its surety informed as to the Base Contract Price as bid, significant changes in the Project Scope, and the overall progress and completion of the Project for the entire life of the Contract.
10. The payment and performance bond requirements stated herein above shall not be applicable to service-related contracts unless otherwise determined by the City Manager in order to protect the health, safety and welfare of the general public.

B. Contractual Provisions Relative to Risk Management

All contracts for any public works to be performed, and service-related contracts, for or on behalf of the City shall include at a minimum, the following, or substantially similar, provisions:

1. Hold Harmless and Indemnity

The Contractor agrees to assume liability for and indemnify, hold harmless, and defend the City, its commissioners, mayor, officers, employees, agents, and attorneys of, from, and against all liability and expense, including reasonable attorney's fees, in connection with any and all claims, demands, damages, actions, causes of action, and suits in equity of whatever kind or nature, including claims for personal injury, property damage, equitable relief, or loss of use, to the extent caused by the negligence, recklessness, or intentionally wrongful conduct of the Contractor, its agents, officers, contractors, subcontractors, employees, or anyone else employed or utilized by the Contractor in the performance of this Contract. The Contractor's liability hereunder shall include all attorney's fees and costs incurred by the City in the enforcement of this provision.

2. Payment on Behalf of City

The Contractor shall pay all costs of the City's legal defense, as may be selected by the City, for all claims described in the Hold Harmless

paragraph. Such payment on behalf of the City shall be in addition to any and all other legal remedies available to the City and shall not be considered to be the City's exclusive remedy.

3. Loss Control/Safety

Precaution shall be exercised at all times by the Contractor for the protection of all persons, including employees and property. The Contractor shall comply with all applicable laws, regulations and ordinances related to safety and health, shall make special efforts to detect hazardous conditions, and shall take prompt action when loss control/safety measures are reasonably necessary. The City may order work to be stopped if conditions exist that present an immediate danger to persons or property. The Contractor acknowledges that such work stoppage will not shift responsibility for any damages from the Contractor to the City.

4. Service Bond

For Service-related contracts only, the City may require the Contractor to secure a service bond with a minimum \$25,000 coverage limit for the period of the service agreement. The service bond covers dishonest acts of the contractor's employees against the City. A copy of the bond shall be provided to the City when the agreement commences. Service-related contracts include and are not limited to businesses providing janitorial, pest control, general repair, security, carpet cleaning, locksmith, temporary employment, painting, moving services or other contracts as determined in the discretion of the Risk Manager as necessary to minimize loss.

C. Contractor's Insurance

1. General

The Contractor, including service-related contractors, shall purchase and maintain for the entire life of the Project, including any and all approved time extensions, until its final acceptance by the City, such insurance as will protect the Contractor from claims under Workers' Compensation, disability benefit laws or other similar employee benefit laws; from claims for damages because of bodily injury, occupational sickness or disease, or death of Contractor's employees; from claims insured by usual or unusual injury liability coverage; from claims or injury to or destruction of tangible property and from claims insured by usual Commercial General Liability coverage. This includes loss of use resulting therefrom, any or all of which may arise out of the Contractor's operations under the Contract Documents, whether such operations be by the Contractor, by any Subcontractor, or by anyone directly or indirectly employed by any of them or for whose acts any of them may be legally liable. The Contractor's deductibles/self-insured retentions shall be disclosed to the City and may be disapproved by the City, and may be reduced or eliminated at the sole discretion of the City. The Contractor is responsible for the amount of any deductible or self-insured retention.

2. Types of Insurance and Limits of Liability

The insurance required herein shall be written for not less than any limits of liability specified and incorporated as part of the Contract Documents or as required by law, whichever is greater, and shall include and not limited to the following:

- (a)** Workers' Compensation Insurance in statutory limits for the State of Florida with Coverage B - Employer's Liability limits of not less than:

\$100,000 Each Accident Bodily Injury by Accident
\$100,000 Each Employee Bodily Injury by Disease
\$500,000 Policy Limit Bodily Injury by Disease

Certificate of Exemptions. If the contractor has a State-issued Certificate of Exemption, the contractor may provide a copy in place of the requirement for coverage. However, if the contractor subcontracts or retains any other person or entity to perform under the contract, that person or entity must provide proof of workers' compensation insurance as required by law or provide a Certificate of Exemption.

It is the intent of the City that any individual who either contracts directly with the city or performs any work on behalf of any such contractor be covered by workers' compensation insurance or have a valid exemption from said coverage.

(If applicable to the Project, the policy must include benefits under the United States Longshoremen's and Harbor Workers' Act and the Jones Act coverage--all maritime coverage.)

- (b)** Commercial General Liability Insurance shall be written on a coverage form as broad as Insurance Services Office (ISO) Form CG 00 01 11 85, or its successor form, including but not limited to the following coverage (any deviation shall be noted on the Certificates of Insurance):

- a. Premises, Operations, Products and Completed Operations
- b. Owners' & Contractors' Protective
- c. Products & Completed Operation
- d. Explosion, Collapse & Underground Conditions
- e. Blanket Contractual Liability
- f. Personal Injury Liability
- g. Broad Form Property Damage Endorsement, including Completed Operations
- h. Independent Contractors
- i. Watercraft--Owned and Non-Owned (if applicable, endorsement must be included in General Liability policy or a separate Protection & Indemnity Policy must be written)

- j. Pollution Liability (if applicable)
- k. Asbestos Abatement (if applicable)
- l. Fire Damage Liability

Certain coverage outlined above may not be required if they do not relate to the Project, as may be determined at the sole discretion of the City.

Commercial General Liability Coverage shall be written on an occurrence basis and the limits shall be no less and not limited to the following amounts:

Limits (not less than)

\$1 Million Each Occurrence
 \$2 Million General Aggregate
 \$1 Million Aggregate Products & Completed Operations

NOTE: Commercial General Liability Coverage must be purchased on either a project basis (separate policy per contract) or an endorsement allocating an aggregate limit per location or specified project.

- (c) Automobile Liability Insurance is required if an Automobile(s) is used in the performance of the contract. ISO Symbol 1 (Any Auto), or alternatively a combination of Symbol 2 (Owned Autos), Symbol 8 (Hired Autos), and Symbol 9 (Non-Owned Autos), and limits shall be no less than:

\$1 Million Combined Single Limit for Bodily Injury
 and Property Damage

- (d) Excess Liability

For contracts \$250,000 or greater an Excess Liability Policy of at least but not limited to \$1,000,000 in addition to the scheduled underlying policies for Commercial General Liability, Automobile Liability and Employers' Liability, the Contractor shall also provide an Excess Liability Policy with a maximum self-insured retention not to exceed \$25,000 per occurrence.

- (e) Builder's Risk

Contractor shall purchase Builder's Risk Insurance for any contracts that are deemed to be vertical construction on an All-Risk policy, and shall also include coverage for wind, hail, and named storm. Limits of coverage shall be at least and not limited to the value of the project.

(f) Professional Liability, Malpractice and/or Errors and Omissions

The Contractor shall purchase and maintain professional liability, malpractice, or errors or omissions insurance with minimum limits of \$1,000,000 per occurrence. If a claims made form of coverage is provided, the retroactive date of coverage shall be no later than the inception date of claims made coverage, unless the prior policy was extended indefinitely to cover prior acts. Coverage shall be extended beyond the policy year either by a supplemental extended reporting period (ERP) of as great a duration as is available, and with no less coverage and with reinstated aggregate limits, or by requiring that any new policy provides a retroactive date no later than the inception date of claims made coverage.

D. Requirements for Certificates of Insurance

1. With the execution of the Contract Documents, the Contractor, including service related contractors, shall provide certificates of such insurance acceptable to the City. These certificates and insurance policies shall contain an endorsement that the coverage under the policies will not be canceled, non-renewed or materially changed until at least thirty (30) days' prior written notice of such cancellation, non-renewal or change (except for nonpayment of premium, which shall be ten (10) days) and a copy of the cancellation endorsement signed by an authorized representative of the insurer, be given to the City. The contractor shall be required to replace any expired or canceled policies in like amount and coverage to the satisfaction of the City. The Certificate of Insurance shall be the ACORD FORM 25-S (7/90), or its successor form, and shall be made a part of the Contract Documents.
2. New certificates of insurance shall be provided to the City at least fifteen (15) days prior to coverage renewals.
3. If requested by the City, the contractor shall immediately furnish complete copies of the Contractor's insurance policies, forms and endorsements.
4. For Commercial General Liability coverage the Contractor shall, at the option of the City, provide an indication of the amount of claims payments or reserves chargeable to the aggregate amount of liability coverage. If the Commercial General Liability form of coverage includes an annual aggregate limitation on the amount of insurance provided, a separate project aggregate limit may be required by the City for the given contract.
5. If the Contractor fails to obtain and maintain for the life of the Project the insurance required hereby or to replace any such expired or canceled policy, the City may obtain and maintain such insurance with such company as it deems satisfactory. Any amounts expended by the City in payment of premiums for such insurance shall be deducted by the City from the amount due the Contractor for the work covered by the Contract.

E. Policies of Insurance

- 1.** Except as otherwise provided in this Exhibit, all insurance policies shall be issued by insurers licensed to do business in the State of Florida on an admitted basis or which is an eligible surplus lines insurer in the State of Florida, and any such insuring company is required to have a minimum financial rating of (A-), in the latest edition of "Best's Key Rating Guide", published by A. M. Best Co., Inc., or some similarly nationally recognized rating authority, including Standard and Poors and Demotech.
- 2.** For Workers' Compensation coverage only, self-insurance programs are acceptable with a minimum A- rated reinsurance carrier; written confirmation is required.
- 3.** All policies of insurance or certificates thereof referred to in this Exhibit shall be deposited with the City Clerk.
- 4.** The City shall be named an Additional Insured on General Liability including products and completed operations and Automobile Liability policies of insurance and certificates thereof.

City of Ormond Beach
Request for Proposals (RFP)
UTILITIES MOTOR AND PUMP REPAIR SERVICES
(RFP No. 2025-40)

VERIFICATION OF EMPLOYMENT STATUS USING E-VERIFY SYSTEM

1. Undersigned firm warrants it IS currently registered with the U.S. Department of Homeland Security's E-Verify system, and is compliant with the requirements of Sections 448.09 and 448.095, *Florida Statutes*.
2. Undersigned firm warrants It has not had any contracts terminated as a result of violations of Sections 448.09 or 448.095, *Florida Statutes*, that prohibit it from contracting with a public agency.
3. Undersigned firm warrants that if it enters into an agreement with a subcontractor, an express provision shall be included in all of its subcontracts requiring subcontractors, who perform work or provide services pursuant to the contract, to use the E-Verify system to verify employment eligibility of all new employees hired by the subcontractor during the contract term.
4. Undersigned firm understands that any subcontractor must provide the contractor with an affidavit stating that the subcontractor does not employ, contract with, or subcontract with an unauthorized alien, and the contractor understands it shall maintain any such affidavits for the duration of the contract, and the contract with the subcontractor must be immediately terminated if the City has a good faith belief that the subcontractor knowingly violated Section 448.09 (1), *Florida Statutes*.
5. Undersigned firm understands that in the event the City has a good faith belief that the contractor has knowingly violated Section 448.09 (1), *Florida Statutes*, the City shall terminate the contract, and the contractor may not be awarded a public contract for a period of at least one (1) year after the date of termination. The contractor may be held liable for any additional costs incurred by the City as a result of termination of the contract.

Florida Armature Works, Inc.

COMPANY NAME


AUTHORIZED SIGNATURE
Herman Garcia

NAME
Vice President

TITLE
09/09/2025

DATE

**City of Ormond Beach
Request for Proposals (RFP)
UTILITIES MOTOR AND PUMP REPAIR SERVICES
(RFP No. 2025-40)**

RFP RESPONSE FORM

THIS RESPONSE IS SUBMITTED TO:

Purchasing Coordinator
City of Ormond Beach
22 S. Beach Street
Ormond Beach, Florida 32174

The undersigned SUBMITTER proposes and agrees, if this Submittal is accepted, to enter into a Contract with the CITY that reflects the items of this Request for Proposal (RFP) and to provide all services, as specified or indicated in the RFP Documents, in full accordance with the terms and conditions set forth in therein.

SUBMITTER accepts all of the terms and conditions of the General Conditions. SUBMITTER will sign the Contract) and submit the Contract security (when applicable) and other documents required by the Contract Documents within ten (10) days after the date of CITY's Notice of Award.

In submitting this information, SUBMITTER represents, as more fully set forth in the Agreement, that:

SUBMITTER has examined copies of all the RFP Documents and of the following Addenda:

Addendum Date

N/A

Addendum Number

N/A

Receipt of all of which is hereby acknowledged.

This Submittal is genuine and not made in the interest of or on behalf of any undisclosed person, firm or corporation and is not submitted in conformity with any agreement or rules of any group, association, organization or corporation; SUBMITTER has not directly or indirectly induced or solicited any other Submitter to submit a false or sham Submittal; SUBMITTER has not solicited or induced any person, firm or a corporation to refrain from bidding; and SUBMITTER has not sought by collusion to obtain for himself any advantage over any other Bidder or over the CITY.

THIS RESPONSE IS SUBMITTED BY:

COMPANY NAME: Florida Armature Works, Inc.

VENDOR/CONTRACTOR LICENSE NUMBER: _____

ADDRESS: 2460 Smith St.

Kissimmee, FL 34741

PHONE NO.: 407.846.1745

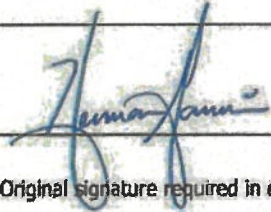
FAX NO.: 407.846.6129

SUBMITTER'S NAME: Herman Garcia

(Typed or Printed in Ink)

TITLE: Vice President

AUTHORIZED SIGNATURE: I, _____
hereby


(Original signature required in each document)

declare that I have read and fully understand the RFP Documents and, including the General Conditions and the Scope of Work, and that I am duly authorized to sign and submit this Submittal.

The CITY reserves the right to reject any and all Submittals, to waive informalities, and to accept any Submittal or parts thereof as the CITY, in its sole discretion, determines to be in the best interest of the CITY.

PROPOSER: PLEASE ENSURE THAT YOU HAVE SIGNED THE RFP RESPONSE FORM OF THIS REQUEST FOR PROPOSAL. OMISSION OF A SIGNATURE ON THAT PAGE MAY RESULT IN REJECTION OF YOUR PROPOSAL.

THIS PAGE MUST BE COMPLETED AND RETURNED WITH YOUR PROPOSAL

City of Ormond Beach
CONFLICT, NON-CONFLICT OF INTEREST STATEMENT
LITIGATION STATEMENT

1.

☒ To the best of our knowledge, the undersigned firm has no potential conflicts of interest due to any other clients or contracts for this project.

☐ The undersigned firm, by attachment to this form, submits information which may be a potential conflict of interest due to other clients or contracts for this project.

2.

☒ The undersigned firm has had no litigation on any project in the last five (5) years.

☐ The undersigned firm, by attachment to this form, submits a summary and disposition of individual cases of litigation during the past five (5) years.

Florida Armature Works, Inc.

COMPANY NAME

AUTHORIZED SIGNATURE

Herman Garcia

SIGNER'S NAME (PRINT OR TYPE)

Vice President

TITLE

09/09/2055

DATE

THIS PAGE MUST BE COMPLETED AND RETURNED WITH YOUR PROPOSAL

City of Ormond Beach
Request for Proposals (RFP)
UTILITIES MOTOR AND PUMP REPAIR SERVICES
(RFP No. 2025-40)
CITY OF ORMOND BEACH, FLORIDA
DRUG-FREE WORKPLACE CERTIFICATION

IDENTICAL OR "TIE" SUBMITTALS: Preference shall be given to businesses with drug-free workplace programs. Whenever two or more proposals which are equal in respect to price, quality, and service are received by the State or by any political subdivision for the procurement of commodities or contractual services, a bid received from a business that certifies that it has implemented a drug-free workplace program shall be given preference in the award process. Established procedures for processing tie bids will be followed if none of the tied vendors have a drug-free workplace program. In order to have a drug-free workplace program, a business shall:

- 1) Publish a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the workplace and specifying the actions that will be taken against employees for violations of such prohibition.
- 2) Inform employees about the dangers of drug abuse in the workplace, the business's policy of maintaining a drug-free workplace, any available drug counseling, rehabilitation, and employee assistance programs, and the penalties that may be imposed upon employees for drug abuse violation.
- 3) Give each employee that engages in providing the commodities or contractual services that are under bid a copy of the statement specified in subsection (1).
- 4) In the statement specified in subsection (1), notify the employees that, as a condition of working on the commodities or contractual services that are under bid, the employee will abide by the terms of the statement and will notify the employer of any conviction of, or plea of guilty or nolo contendere to, any violation of Chapter 893 or of any controlled substance law of the United States or any state, for a violation occurring in the workplace no later than five (5) calendar days after such conviction.
- 5) Impose sanctions on, or require the satisfactory participation in a drug abuse assistance or rehabilitation program if such is available in the employee's community, by any employee who is so convicted.
- 6) Make a good faith effort to continue to maintain a drug-free workplace through implementation of this section.

N/A

Company Name

Authorized Signature

Print Name

Title



AFFIDAVIT OF COMPLIANCE WITH SECTION 287.138, FLORIDA STATUTES

AFFIDAVIT OF COMPLIANCE WITH SECTION 287.138, FLORIDA STATUTES CONTRACTING WITH FOREIGN ENTITIES OF CONCERN

The undersigned ("Affiant"), on behalf of the entity listed below ("Entity"), hereby attests under penalty of perjury as follows:

1. Affiant is the Vice President of Florida Amature Works, Inc.
(Title) (Business Name)
which does business in the State of Florida, hereinafter called the "Entity".
2. Entity is not owned by the government of a foreign country of concern, as defined in Section 287.138 (1) (c), Florida Statutes.
3. The government of a foreign country of concern does not have a controlling interest in Entity, as defined in Section 287.138 (1)(a), Florida Statutes.
4. Entity is not organized under the laws of, and does not have a principal place of business in, a foreign country of concern.
5. Entity is not owned or controlled by the government of a foreign country of concern.
6. For purposes of this affidavit, a foreign country of concern means the People's Republic of China, the Russian Federation, the Islamic Republic of Iran, the Democratic People's Republic of Korea, the Republic of Cuba, the Venezuelan regime of Nicolas Maduro, or the Syrian Arab Republic, including any agency of or any other entity of significant control of such foreign country of concern, as defined in Section 287.138(1)(c), Florida Statutes.

The undersigned is authorized to execute this affidavit on behalf of the Entity.

Date: September 8th, 2025 Signed: [Signature]

Entity: Florida Amature Works, Inc. Name: Herman Garcia

Title: Vice President

STATE OF: Florida COUNTY OF: Orange

The foregoing instrument was acknowledged before me by means of ☐ physical presence or ☐ online notarization, this 8th day of September, 2025, by Herman Garcia and who: ☒ Is personally known to me; or ☐ has produced _____ as identification.

Danielle Fernandez

Notary Public, State of Florida at Large:

(seal)

Printed Name/Seal of Notary, Commission and Expiration Date:

My commission expires: April 19, 2027



Danielle Fernandez
Comm.: HH 348257
Expires: April 19, 2027
Notary Public - State of Florida

This document must be completed and returned with your Submittal



HUMAN TRAFFICKING AFFIDAVIT
(SECTION 787.06, FLORIDA STATUTES)

STATE OF FLORIDA §
 §
COUNTY OF VOLUSIA §

The undersigned ("Affiant"), on behalf of the entity listed below ("Entity"), after being duly sworn, hereby attests as follows:

1. My name is Herman Garcia. I am over the age of Twenty-one years old. I am the Vice President of Florida Armature Works, a non- governmental entity which does
(Title) (Business Name)
business in the State of Florida, hereinafter called the "Entity."
2. I have personal knowledge of each and every statement of fact contained herein, and each and every statement of fact is true and correct.
3. Entity does not use coercion, as defined in Section 787.06, Florida Statutes, for labor or services.
4. The undersigned is an officer or representative of the entity and is authorized to execute this affidavit on behalf of the Entity.
5. Under penalties of perjury, I declare that I have read the foregoing Human Trafficking Affidavit and that the facts stated herein are true.

Further Affiant sayeth not.

Date: September 8, 2025

Signed: [Signature]
Print Name: Herman Garcia
Title: Vice President

SUBSCRIBED AND SWORN before me by means of ☒ physical presence or ☐ online notarization on the 8th day of September, 2025 by Herman Garcia as Vice President on behalf of Florida Armature Works who is personally known to me or who has produced Drivers License as identification.

(Notary Seal)



Danielle Fernandez
Comm.: HH 348257
Expires: April 19, 2027
Notary Public - State of Florida

Notary Public, State of Florida
Printed name, commission and expiration of commission term

This document must be completed and returned with your Submittal

UTILITIES MOTOR AND PUMP REPAIR SERVICES

RFP NO. 2025 – 40

PROPOSAL PRICING – Motor and Pump Repair

Proposer submits the following prices for the work described in this solicitation:

Item of Work	Per (Unit)	Unit Price
1. Trailer Truck Service to transport pump to and from repair facility (time must be reasonable compared to Google Maps estimate. No pay for breakdowns).	HR	\$ \$0.00
2. Crane Truck Service (including operator) for removing and install pump or motor	HR	\$ \$175.00
3. Standard Labor Rate (Mechanic) Monday – Friday, 8:00 am – 5:00 pm	HR	\$ \$45.00
4. Non-Standard Labor Rate (Mechanic) After hours, weekend, and holidays	HR	\$ \$55.00
5. Standard Labor Rate (Machinist) Monday – Friday, 8:00 am – 5:00 pm	HR	\$ \$55.00
6. Non-Standard Labor Rate (Machinist) After hours, weekend, and holidays	HR	\$ \$65.00
7. Tear Down and Inspection	HR	\$
Parts Allowance: Cost plus markup %		15.00%

AGREEMENT

THIS AGREEMENT is made and entered into by and between the **City of Ormond Beach** ("City"), a Florida municipal corporation, 22 South Beach Street, Ormond Beach, Volusia County, Florida and **Electrical and Mechanical Maintenance, Inc.** ("Contractor"), 6115 31st Street East, Bradenton, FL 34203, and in consideration of the mutual promises and covenants herein contained, the receipt and sufficiency of which are hereby acknowledged, the parties hereby agree to the following:

1. **Scope of Work.** The Proposal dated September 10, 2025 ("RFP #2025-40 "Utilities Motor and Pump Repair Services") attached hereto as Exhibit "A" and the Proposal Pricing attached hereto as Exhibit "B" are incorporated herein by reference and are a material part of this Agreement. The Contractor shall fully comply with the terms and conditions described in the attached exhibits.

A. Authorization for Services.

1. Prior to authorization for professional services by Contractor:
 - (a) City and Contractor shall develop a well-defined project description and complete understanding of the scope of services to be provided.
 - (b) Contractor shall provide City with a detailed proposal that provides the total estimated cost for each phase of services based on the prices set forth on Exhibit "B". If the proposal is accepted by City, the City shall issue and execute a written Work Authorization to be signed by Contractor.
 - (c) Based on the nature and cost of the services, City may obtain an independent estimate to evaluate the reasonableness of Contractor's estimate.
2. Each Work Authorization shall contain:
 - (a) The project description.
 - (b) The scope of work. The scope of work shall be attached and incorporated into the Work Authorization. It shall describe the services to be performed for each phase of work, and state the percentage of the total scope assigned to each phase.
 - (c) The dates for commencement and completion of work.

The Work Authorizations will be issued under and shall incorporate the terms of this Agreement. City makes no covenant or promise as to the number of available projects or that Contractor will perform any project for City during the life of this Agreement. City reserves the right to contract with other parties for the services contemplated by this Agreement when it is determined by City to be in the best interest of City to do so.

2. **Term.** This Agreement shall be effective on the date it is fully executed by the parties and shall have an initial term of three (3) years. This Agreement will be automatically renewed for two (2) additional one-year periods unless either party provides at least ninety (90) days prior written notice of their intent not to renew.

3. **Consideration.** Contractor shall provide the equipment and perform the services at the prices set forth on the attached exhibits. Contractor shall prepare and submit invoices to the City at the address set forth in Paragraph 9 of this Agreement. All such invoices shall be paid by the City within thirty (30) days.
4. **Delivery.** Contractor shall complete the project within the time frame set forth on Exhibit "A".
5. **Termination of Agreement.**
 - (a) The City Commission shall have the right to terminate the Agreement in the event the Contractor files any petition or proceeding for bankruptcy relief, or is adjudicated to be bankrupt or insolvent, or fails to pay just debts as they ordinarily become due; or for a material breach of this agreement that remains uncured for at least thirty days after prior written receipt of a notice of violation of same.
 - (b) This Agreement may not be terminated by the Contractor.
6. **Assignment.** The Contractor shall not assign, convey or transfer all or any part of this Agreement, or all or any part of Contractor's interest herein, or all or any part of any interest in the Contractor, without the prior written consent of the City Commission, which consent shall not be unreasonably withheld.
7. **Complete Agreement.** This Agreement, including the provisions set forth in the exhibits attached hereto and incorporated by reference herein, constitutes the entire and complete agreement of the parties, and the promises and covenants herein contained shall survive the life of this Agreement.
8. **Amendment to Agreement.** Any amendment, change, or modification of this Agreement must be in writing and fully executed by both parties.
9. **Notices.** All notices which are required by this Agreement shall be provided to the parties at the following addresses, or such other addresses as may be requested in writing by either party:

City of Ormond Beach Joyce Shanahan, City Manager (copy to City Attorney) 22 South Beach Street Ormond Beach, FL 32174	Electrical and Mechanical Maintenance, Inc. Paul Rademaker, Vice President 6115 31 st Street East Bradenton, FL 34203
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10. **Sovereign Immunity.** The City expressly retains and reserves all rights, privileges, immunities, and benefits of sovereign immunity. This provision shall be construed broadly in favor of the City.
11. **Venue.** The terms and conditions of this Agreement shall be construed and enforced under the laws of the State of Florida. Any action or proceeding, either at law or in equity,

regarding this Agreement shall be brought in the circuit court, Seventh Judicial Circuit in and for Volusia County, Florida. Venue in any other jurisdiction or forum, whether it be any other circuit, state or federal venue, is hereby expressly waived.

12. **Waiver of Conditions.** No waiver by the City of any condition or breach of performance by the Contractor shall constitute an irrevocable, continuing, or subsequent waiver by the City of the same condition or breach of performance, or of any other condition or other breach of performance.
13. **Severability.** If any part of this Agreement is declared to be unenforceable or void by a court of competent jurisdiction, the remaining parts of the Agreement shall remain in full force and effect as long as the services to be provided by the Contractor are not materially affected, altered or impaired as a result of said judicial declaration.
14. **Conflicting Provisions.** In the event of any conflict between the provisions of this Agreement and any exhibits, the provision most favorable to the City shall control and shall be given full force and effect.
15. **Indemnification.** The City, its agents, employees, and officials, both elected and appointed, shall be indemnified and held harmless by Contractor from any and all liabilities, claims, and causes of action which may arise out of the willful, negligent, or unlawful acts or omissions of the Contractor or its subcontractors in the performance of this Agreement, unless such claims are a result of the City's sole negligence, as determined by the final decision maker of such claim.
16. **Duty to Defend.** The Contractor shall defend all suits and administrative actions, including all appellate proceedings, brought against the City, its agents, employees, and officials, both elected and appointed and shall pay all attorneys' fees and costs associated with the City's legal defense, as may be selected by the City, arising from all claims and causes of action described in Section 15 above. Such payment on behalf of the City shall be in addition to any and all other legal or equitable remedies available to the City and shall not be considered to be the City's exclusive remedy.
17. **Contractor's Insurance.** The Contractor shall purchase and maintain for the entire life of this Agreement, including any and all approved time extensions, until its final acceptance by the City, such insurance as will protect the Contractor from claims under Workers' Compensation, disability benefit laws or other similar employee benefit laws; from claims for damages because of bodily injury, occupational sickness or disease, or death of Contractor's employees; from claims insured by usual or unusual injury liability coverage; from claims or injury to or destruction of tangible property and from claims insured by usual Commercial General Liability coverage. This includes loss of use resulting therefrom, any or all of which may arise out of the Contractor's operations under this Agreement, whether such operations be by the Contractor, or by any Subcontractor, or by anyone directly or indirectly employed by any of them or for whose acts any of them may be legally liable. The Contractor's deductibles/self-insured retentions shall be disclosed to the City and may be disapproved by the City, and may be reduced or eliminated at the sole

discretion of the City. The Contractor is responsible for the amount of any deductible or self-insured retention.

18. Types of Insurance and Limits of Liability

The insurance required herein shall be written for not less than any limits of liability specified and incorporated as part of the Contract Documents or as required by law, whichever is greater, and shall include and not limited to the following:

- (a) Workers' Compensation Insurance in statutory limits for the State of Florida with Coverage B - Employer's Liability limits of not less than:

\$100,000 Each Accident Bodily Injury by Accident
\$100,000 Each Employee Bodily Injury by Disease
\$500,000 Policy Limit Bodily Injury by Disease

Certificate of Exemptions. If the contractor has a State-issued Certificate of Exemption, the contractor may provide a copy in place of the requirement for coverage. However, if the contractor subcontracts or retains any other person or entity to perform under the contract, that person or entity must provide proof of workers' compensation insurance as required by law or provide a Certificate of Exemption.

It is the intent of the City that any individual who either contracts directly with the city or performs any work on behalf of any such contractor be covered by workers' compensation insurance or have a valid exemption from said coverage.

(If applicable to the Project, the policy must include benefits under the United States Longshoremen's and Harbor Workers' Act and the Jones Act coverage--all maritime coverage.)

- (b) Commercial General Liability Insurance shall be written on a coverage form as broad as Insurance Services Office (ISO) Form CG 00 01 11 85, or its successor form, including but not limited to the following coverage (any deviation shall be noted on the Certificates of Insurance):

- a. Premises, Operations, Products and Completed Operations
- b. Owners' & Contractors' Protective
- c. Products & Completed Operation
- d. Explosion, Collapse & Underground Conditions
- e. Blanket Contractual Liability
- f. Personal Injury Liability
- g. Broad Form Property Damage Endorsement, including Completed Operations
- h. Independent Contractors

- i. Watercraft--Owned and Non-Owned (if applicable, endorsement must be included in General Liability policy or a separate Protection & Indemnity Policy must be written)
- j. Pollution Liability (if applicable)
- k. Asbestos Abatement (if applicable)
- l. Fire Damage Liability

Certain coverage outlined above may not be required if they do not relate to the Project, as may be determined at the sole discretion of the City.

Commercial General Liability Coverage shall be written on an occurrence basis and the limits shall be no less and not limited to the following amounts:

Limits (not less than)

\$1 Million Each Occurrence

\$2 Million General Aggregate

\$1 Million Aggregate Products & Completed Operations

NOTE: Commercial General Liability Coverage must be purchased on either a project basis (separate policy per contract) or an endorsement allocating an aggregate limit per location or specified project.

- (c) Automobile Liability Insurance is required if an Automobile(s) is used in the performance of the contract.

ISO Symbol 1 (Any Auto), or alternatively a combination of Symbol 2 (Owned Autos), Symbol 8 (Hired Autos), and Symbol 9 (Non-Owned Autos), and limits shall be no less than:

\$1 Million

**Combined Single Limit for Bodily Injury
and Property Damage**

- (d) Excess Liability**

For contracts \$250,000 or greater an Excess Liability Policy of at least but not limited to \$1,000,000 in addition to the scheduled underlying policies for Commercial General Liability, Automobile Liability and Employers' Liability, the Contractor shall also provide an Excess Liability Policy with a maximum self-insured retention not to exceed \$25,000 per occurrence.

- (e) Builder's Risk**

Contractor shall purchase Builder's Risk Insurance for any contracts that are deemed to be vertical construction on an All-Risk policy, and shall also include

coverage for wind, hail, and named storm. Limits of coverage shall be at least and not limited to the value of the project.

(f) Professional Liability, Malpractice and/or Errors and Omissions

The Contractor shall purchase and maintain professional liability, malpractice, or errors or omissions insurance with minimum limits of \$1,000,000 per occurrence. If a claims made form of coverage is provided, the retroactive date of coverage shall be no later than the inception date of claims made coverage, unless the prior policy was extended indefinitely to cover prior acts. Coverage shall be extended beyond the policy year either by a supplemental extended reporting period (ERP) of as great a duration as is available, and with no less coverage and with reinstated aggregate limits, or by requiring that any new policy provides a retroactive date no later than the inception date of claims made coverage.

19. Requirements for Certificates of Insurance.

- (a)** With the execution of this Agreement, the Contractor shall provide certificates of such insurance acceptable to the City. These certificates and insurance policies shall contain a provision that the coverage under the policies will not be canceled, non-renewed or materially changed until at least **thirty (30)** days' prior written notice of such cancellation, non-renewal or change [except for nonpayment of premium, which shall be **ten (10)** days] has been given to the City. The Contractor shall be required to replace any expired or canceled policies in like amount and coverage to the satisfaction of the City. The Certificate of Insurance shall be the ACCORD FORM 25-S (7/90), or its successor form, and shall be made a part of this Agreement.
- (b)** New certificates of insurance shall be provided to the City at least fifteen (15) days prior to coverage renewals.
- (c)** If requested by the City, the Contractor shall furnish complete copies of the Contractor's insurance policies, forms and endorsements.
- (d)** For Commercial General Liability coverage the Contractor shall, at the option of the City, provide an indication of the amount of claims payments or reserves chargeable to the aggregate amount of liability coverage. If the Commercial General Liability form of coverage includes an annual aggregate limitation on the amount of insurance provided, a separate project aggregate limit may be required by the City for the given contract.
- (e)** If the Contractor fails to obtain and maintain for the life of the Agreement the insurance required hereby or to replace any such expired or canceled policy, the City may obtain and maintain such insurance with such company as it deems satisfactory. Any amounts expended by the City in payment of premiums for such insurance shall be deducted by the City from the amount due the Contractor for the work covered by the Agreement.

(f) **Policies of Insurance**

1. Except as otherwise provided herein, all insurance policies shall be issued by insurers licensed to do business in the State of Florida on an admitted basis or which is an eligible surplus lines insurer in the State of Florida, and any such insuring company is required to have a minimum financial rating of (A-) in the latest edition of "Best's Key Rating Guide", published by A. M. Best Co., Inc., or some similarly nationally recognized rating authority, including Standard and Poors and Demotech.

2. For Workers' Compensation coverage only, self-insurance programs are acceptable with a minimum A- rated reinsurance carriers; written confirmation is required.

3. All policies of insurance or certificates thereof referred to herein shall be deposited with the City Clerk.

4. The City shall be named an Additional Insured on General Liability and Automobile Liability policies of insurance and certificates thereof.

20. **Enforcement of Costs.** If any legal action or other proceeding is brought for the enforcement of this Agreement, or because of an alleged dispute, breach, default, or misrepresentation in connection with any provision of this Agreement, the successful or prevailing party or parties shall be entitled to recover reasonable attorneys' fees, court costs, and all expenses even if not taxable court costs (including, without limitation, all such fees, costs and expenses incident to arbitration, appellate, bankruptcy, and post-judgment proceedings), incurred in that action or proceeding or any appeal, in addition to any other relief to which the party or parties may be entitled. Attorneys' fees include legal assistant fees, expert witness fees, investigative fees, administrative costs, and all other charges billed by the attorney for the prevailing party.

21. **Compliance With Laws.** Contractor shall comply with all applicable federal, state and local laws and regulations.

22. **Compliance With Florida Public Records Law.** Contractor expressly agrees that it shall comply with the public records law provided in Florida Statutes, Chapter 119, and specifically to:

(a) Keep and maintain public records required by the City to perform the contracted service.

(b) Upon request from the City Clerk, provide the City with a copy of the requested records or allow the records to be inspected or copied within a reasonable time at a cost that does not exceed the cost provided in Chapter 119, Florida Statutes, or as otherwise provided by law.

(c) Ensure that public records that are exempt or confidential and exempt from public records disclosure requirements are not disclosed except as authorized by

law for the duration of the contract term and following completion of the contract if the contractor does not transfer the records to the City.

(d) Upon completion of the contract, transfer at no cost, to the City all public records in possession of the contractor or keep and maintain public records required by the City to perform the service. If the contractor transfers all public records to the City upon completion of the contract, the contractor shall destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. If the contractor keeps and maintains public records upon the completion of the contract, the contractor shall meet all applicable requirements for retaining public records. All records stored electronically must be provided to the City, upon request from the City Clerk, in a format that is compatible with the information technology systems of the City.

(e) Failure of the Contractor to comply with Public Records Law as provided by Florida Statutes, Chapter 119, shall subject the Contractor to penalties under Chapter 119.10 and subject this Agreement to termination for cause by the City.

IF THE CONTRACTOR HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO THE CONTRACTOR'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS CONTRACT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT:

**CITY CLERK
22 SOUTH BEACH STREET
ORMOND BEACH, FLORIDA 32175. (386)677-0311
CITYCLERK@ORMONDBEACH.ORG**

Ref: Fla. Stat. §119.0701(2016)

23. **Limitation of Remedy and Liability.** Contractor and Owner expressly waive any claim for consequential damages against the other including but not limited to, a waiver of claims for diminished bonding capacity, loss of financing, loss of business reputation, lost profits on other projects or other lost opportunity damage claims.

Contractor expressly agrees that any claim (tort, contract, claim in equity, or otherwise) by Contractor for damages against Owner shall not exceed the total amount of the contract price, less any amounts actually paid to the Contractor by the Owner.

24. **Waiver of Right to Jury Trial.** THE PARTIES HEREBY KNOWINGLY, VOLUNTARILY AND INTENTIONALLY WAIVE ANY RIGHT WHICH ANY PARTY MAY HAVE TO TRIAL BY JURY IN RESPECT OF ANY PROCEEDING, LITIGATION OR COUNTERCLAIM BASED ON, OR ARISING OUT OF, UNDER OR IN CONNECTION WITH THIS AGREEMENT OR ANY COURSE OF CONDUCT,

COURSE OF DEALING, STATEMENTS (WHETHER VERBAL OR WRITTEN) OR ACTIONS OF ANY PARTY. IF THE SUBJECT MATTER OF ANY LAWSUIT IS ONE IN WHICH THE WAIVER OF JURY TRIAL IS PROHIBITED, NO PARTY TO THIS AGREEMENT SHALL PRESENT AS A NON-COMPULSORY COUNTERCLAIM IN ANY SUCH LAWSUIT ANY CLAIM BASED ON, OR ARISING OUT OF, UNDER OR IN CONNECTION WITH THIS AGREEMENT. FURTHERMORE, NO PARTY TO THIS AGREEMENT SHALL SEEK TO CONSOLIDATE ANY SUCH ACTION IN WHICH A JURY TRIAL CANNOT BE WAIVED.

25. **Verification of Employment Status Using E-Verify System**

- (a) Section 448.09, *Florida Statutes*, makes it unlawful for any person to knowingly employ, hire, recruit, or refer, either for herself or himself, or on behalf of another, for private or public employment within the state, an alien who is not duly authorized to work in the United States. Contractor warrants that it is registered with the U.S. Department of Homeland Security's E-Verify system, and is compliant with the requirements of Sections 448.09 and 448.095, *Florida Statutes*.
- (b) Contractor agrees that if the contractor enters into an agreement with a subcontractor, the subcontractor must provide the contractor with an affidavit stating that the subcontractor does not employ, contract with, or subcontract with an unauthorized alien, and contractor warrants it shall maintain any such affidavits for the duration of the contract. If the City has a good faith belief that a subcontractor knowingly violated Section 448.09 (1), the City shall promptly notify the contractor and order the contractor to immediately terminate the contract with the subcontractor.
- (c) In the event the City has a good faith belief that the contractor has knowingly violated Section 448.09 (1), *Florida Statutes*, the City shall terminate the contract, and as provided by statute, the contractor may not be awarded a public contract for at least one (1) year after the date of termination. The contractor may also be held liable for any additional costs incurred by the City as a result of the termination of the contract.

26. **No Conflict of Interest.** The Contractor warrants and agrees that neither it, nor any of its employees, agents, officers, directors, shareholders and independent contractors are, or will become, under contract with or accept compensation from any individual, business, corporation or governmental entity that has the possibility of an adverse interest to those of the City of Ormond Beach. The Contractor and its officers, directors, shareholders, employers, agents and subcontractors, agree not to provide any services or assistance to any entity directly or indirectly relating to the services provided to the City and to immediately notify the City Manager and City Attorney of any contact with any entity that has, or potentially has, a conflict of interest with the City of Ormond Beach. This provision shall be interpreted as broadly as possible to prevent any potential or actual conflict of interest presently or in the future by the Contractor.

27. **Effective Date.** This Agreement shall become effective upon the date last signed by the parties hereto.

IN WITNESS WHEREOF, the undersigned parties have caused this Agreement to be signed on the dates indicated hereinbelow.

DATED this _____ day of _____, 2025.

Witnesses:

CITY OF ORMOND BEACH

Print Name: _____

By: _____
JASON LESLIE
Mayor

Print Name: _____

By: _____
JOYCE SHANAHAN
City Manager

DATED this _____ day of _____, 2025.

Witnesses:

**ELECTRICAL AND MECHANICAL
MAINTENANCE, INC.**

Print Name: _____

By: _____
Print Name: _____

Title: _____

Print Name: _____

Attest: _____
Print Name: _____

Title: _____



UTILITIES MOTOR AND PUMP REPAIR SERVICES

Electrical and Mechanical Maintenance Inc.

Paul Rademaker

6115 31st Street East

Bradenton, FL. 34203

941-915-5313

September 10, 2025

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C. Standard General Requirements

Electrical & Mechanical Maintenance Inc. (EMMI)

6115 31st Street East
Bradenton, FL. 34203

Paul Rademaker – Vice President Business Development
941-915-5313

FEIN – 93-4787107

Our organization has been in business in Sarasota/Bradenton since 1983 under the banner Mader Electric. In February 2024, Mader Electric was sold to Electrical & Mechanical Maintenance Inc. (EMMI). Throughout our 38-year tenure, our company has firmly been established within the water/wastewater marketplace. EMMI is an ESOP company with a majority shareholder and over 30 employee shareholders.

Gary Deremer is our majority shareholder and CEO

John Miller is our VP - GM

Paul Rademaker is our VP – Business Development

Rob Farmer is our Service Manager

Leon LE is our inside salesman

These gentlemen represent the core of the largest shareholders of EMMI. The other shareholders have minimum shares within EMMI.

EMMI/Mader has never failed to complete work awarded to us nor defaulted on any contracts.

EMMI/Mader has never had any claims, arbitrations, administrative hearings or lawsuits brought by or against EMMI or Mader Electric during the last five (5) years; nor have we had any criminal proceedings or hearings concerning business related offenses in which the EMMI, its principals or officers or Mader Electric were defendants; EMMI, its principals, officers or Mader Electric have been CONVICTED of a Public Entity Crime, debarred or suspended from bidding by any government entity.

D. Transmittal Letter

Electrical & Mechanical Maintenance Inc. (EMMI) is fully aware of our understanding of the work to be done. EMMI has been actively working within the municipal marketplace for 42 years. We have been the recipient of many motor/pump repair contracts over the years. Our company has devoted itself to providing excellent service both in our shop and in the field. Our first motor/pump contract we won was for Sarasota County Utilities back in 1991. From there it was a steady climb of winning contracts from Sarasota to City of Daytona Beach where we currently enjoy a piggyback contract with the city. EMMI understands that water and wastewater plants including lift stations and wells, are critical to the infrastructure of a city in keeping water/sewage flowing to residents and businesses. We therefore understand the importance of delivering fast turnarounds on repairs and field service work. Meeting deadlines ahead of schedule has always been a differentiator for EMMI. We are not considered to be among the “large” motor shops in Florida, who cater to the phosphate/power/industrial marketplace. For them, municipal business is simply a filler from what they make their money off. For EMMI and similar companies of our size and stature, we aggressively go after the municipal marketplace because we can best provide them with resources dedicated to their needs 24/7. We don’t have to “squeeze” in their repairs in between servicing one of our large industrial customers. 95% of our business comes from the water/wastewater industry and we are proud of that distinguishing mark. As you will read further, EMMI has what I believe is the most talented work force in Florida, even among the “large” motor shops. I’ve been in this business for 42 years and I’ve never had a motor/pump shop with such experience and dedication in serving our customers. Our service manager has managed the largest motor shop in Florida and has 23 years of experience both in the shop and in the field. There is nothing he can’t fix or find a cure for any field-related problems. That level of professionalism and wisdom has been passed through our entire company. That is what separates us from the rest of the field.

EMMI submits this bid as a firm and irrevocable offer for the engagement period.

Paul Rademaker – VP Business Development

Paul Rademaker

E. Technical Qualifications of Firm

EMMI is headquartered in Bradenton along with a facility that handles our lift station services in New Port Richey. We have just purchased \$275,000.00 worth of motor shop equipment that will be installed in our new 20,000sf building in Jacksonville early next year. Our long-range plan is to open another motor shop somewhere in south Florida around the Miami area.

Currently, we have a 20,000sf facility in Bradenton that handles all our repairs and from where our field services emanate from. Our motor shop is fully air conditioned and can handle motor repairs up to 1500HP at 4160-volts. We have two 5-ton travelling bridge cranes to support the shop in moving heavy equipment around. We have 5 bench mechanics who disassemble and reassemble rotating equipment. We have two winders who provide all our winding needs for all HP and Voltages. We have a machinist who runs our machine shop and provides us with the necessary machining in-house to maintain quality and fast turnaround time. We have 3 teams of field service technicians all equipped with a service vehicle with auto cranes that handle all field-related work. Push/Pulls of rotating equipment, laser alignment of motors/pumps/blowers, controls including VFD/Soft Start troubleshooting and replacements, preventative and predictive maintenance. All field service technicians can work nights and weekends to satisfy the needs of our customers, especially those under contract.

EMMI does not rely on any subcontractors to handle the workload. We have a 17-ton crane that we own. However, sometimes we need to rent a larger crane to handle push/pulls in the field. Other than that, we are independently sufficient with in-house resources. Furthermore, EMMI handles Wells, both pulling well pumps and installing new as well as installing new drop pipes. We do not do drilling, for that we would need to subcontract that out. EMMI does repair turbine pumps in our shop. If we encounter a turbine pump too large for our lathe, we subcontract that out to our vendor. However, we haven't run into a pump coming out of a municipal facility that we couldn't handle in-house.

EMMI is very proficient at rebuilding all brands of Lift Station Pumps. We are equipped to rebuild Flygt and Sulzer Pumps with ease and very competitively. We are the Sulzer Pump rep for the industrial marketplace in Florida along with a slew of other manufacturers of motors and controls.

EMMI is an EASA Motor shop which allows us full access to their database of winding information and training videos/documentation. We subscribe to their published warranties on rewinds and reconditioning of motors/pumps/blowers/gearboxes.

Finally, EMMI is the exclusive rep for Artesis Predictive Maintenance Controllers. With our patented eMCM controller, we can accurately predict the failure of your rotating equipment (motor/pump/gearbox/blower/generator) six months ahead of a failure and with a 90% accuracy rating. We do this without the use of any sensors on the equipment, just by recording the volts and amps of the motor. We can see the electrical/mechanical/and process related faults of the rotating equipment. Vibration, winding insulation degradation, bearing issues, cavitation, etc. We can also show you where on the pump curve your pump is pumping without the need of pressure and flow meters. Allow us to show this cutting-edge technology to you.

F. Technical Qualifications of the Project Team

EMMI has a very talented team supporting our efforts. The company is run by our general manager John Miller. John has been in the motor repair world for 30+ years. John successfully ran Mader Motors in Ft. Myers and Tampa for 12+ years. His background is a motor winder and is one of the best and fastest winders in Florida. He leads a talented crew of shop/field/office workers, dedicated to providing our customers with the finest repair services in the business.

Paul Rademaker is our VP of Business Development. Paul has been in the motor/pump repair business for 42 years. There is nothing he hasn't seen or done throughout his journey. Paul was hired by Mader Electric back in 1989 and was a pivotal player in developing the upswing in business during his first 22 years of service there. Paul went on to open another successful motor/pump repair business for 10 years before coming back to Mader Electric/EMMI two years ago. Paul has successfully managed motor/pump contracts since winning his first contract for Mader with Sarasota County Utilities in 1991. Contracts are his primary priority and will be the City of Ormond Beach's liaison once the contract is ratified (positive thinking!).

Rob Farmer is our service manager and one of the most talented motor/pump technicians in North America. Rob has an excellent resume including years of service running Tampa Armature Works (TAW) for many years. Rob is extraordinary in troubleshooting and repairing rotating equipment in the field or in our shop. He is a certified crane operator, Level II vibration analyzer, certified welder, controls tech for VFD's/PLC's, and provides free training for our customers on lift station control panels, maintenance and repairs or rotating equipment. A tremendous resource to have at your disposal.

Leon Le is our inside salesman. Been in this business for over 25 years. There is no one more resourceful for finding parts and equipment than Leon. He has contacts in every aspect of motors/pumps/controls. He is very knowledgeable in drives and motors specifically. Leon is also very invested in our company as the second largest shareholder. He truly believes in our company and its future success.

Chuggy Lowery is our shop coordinator. She has been in this role for 8 years. Prior to that she ran one of Motion Industries facilities that was embedded inside Tropicana. Chuggy understands motor services and how to serve our customers with great communication skills. Chuggy will be the one coordinating your motor/pump repairs and communicating with you.

Eddie Whitehead is our shop foreman. He was recently promoted from our winding department to shop foreman. Eddie has many years' experience inside a motor shop and the transition to shop foreman has been smooth and beneficial. Eddie will work with Chuggy in coordinating repairs and communicating with the city.

The rest of the company is made up of dedicated employees who handle the many different aspects of running a motor/pump shop.

We have 5 bench mechanics, 2 winders, 1 machinist, 1 driver, 6 field service technicians, 1 service coordinator, 1 field service supervisor, and 1 accountant.

We would invite the city to take a shop tour of our facility should we be considered for this contract. Seeing and talking with our team would certainly provide a better picture and give greater comfort in who EMMI is.

G. References

Please see attached sheet embedded within the bid documents.

H. Responsiveness

EMMI has the ability to turn equipment around in a timely manner commensurate with the requirements of our clientele. We typically can receive a piece of rotating equipment and have it torn down and quoted to our customers within 3 days. We can rewind a motor and return it to our customer within 2 weeks of receiving the motor. We can recondition a motor and return it to our customer within one week of receiving the motor. If the motor is a rush, we can rewind and turn the motor around in 48 -72 hours depending on size and availability of parts. On a recondition, we can sometimes have the motor flipped in 24 hours or less.

On pumps/blowers/gearboxes, the lead times depend on the severity of the parts needed to complete the rebuilds. Most lift station pumps can be turned around in 1 -2 weeks under normal conditions. Rush jobs are obviously quicker. It's all a matter of communication and needs. We ask our customers not to cry wolf unless it is a true emergency. When it is, we go all out to accommodate. Since our shop handles just about all the work in house, we have complete autonomy to govern what jobs need to be bumped up in the rotation to satisfy our customers.

I. Pricing

Regarding how we price our work, we utilize the Vaughens National Price Guidebook. Most if not all motor shops subscribe to this service. It is an excellent tool for providing motor shops with accurate pricing on motor and pump rebuilding. This guide provides the shop with how many hours it should take to perform certain tasks on motor and pump rebuilding. It provides the average costs of labor and materials for the section of the country you are located in. It is where all motor shops estimate their cost vs. sell price.

Allow me at this time to digress a little bit.

I have been bidding on motor repair bids for 35 years. I thoroughly understand how the process works and why municipalities bid this work out. For years the pricing has dropped significantly to where motor shops are cheating their customers by lying to them about their rates just to win a bid. They will publish ridiculously low labor rates just to win a bid and then manipulate the hours they submit to compensate for their low rates. When I came back to Mader/EMMI several years ago, we made a promise to the industry to stop playing the games and start bidding rates that are in line with Vaughens. I'll bet anyone dollars to donuts that if I bid a 100HP motor rewind using my numbers (Vaughens) against a contractor who lowballs a bid to win it at low rates, our final price to the customer will be within a few percentage points of each other. We will invoice the right amount of hours along with the correct hourly rate (per Vaughens and enough to make a profit) and our competitor will invoice that same sell price but have hours that are double or triple our hours. It's a sham, and one that EMMI will never participate in. I encourage the city and every other municipality that bids on this work to carefully vet their vendors rates and question why some are so low. I've seen motor bids where the labor rates are lower than the minimum wage. That is called fraud, and no city should condone those actions by granting them an award.

Price sheet embedded in Bid Document.

J. Location

EMMI is located at 6115 31st Street East, Bradenton, FL 34203. All work for the city will be handled out of this location. All employees are working from this location except our field techs. Most field techs dispatch from their houses every morning and travel directly to the job site. These techs live in the Tampa area close to I-4.

As previously mentioned, EMMI is planning on opening a shop in the Jacksonville area sometime in 2026. Long range goal is to have one opened in Miami as well.

Our Lift Station crews work out of New Port Richey and are dispatched from there to handle all lift station related work.

Our drivers cover the state with pick ups and deliveries on an as needed basis.



City of Ormond Beach

22 South Beach Street
Ormond Beach, Florida 32174
Telephone (386) 676-3223

REQUEST FOR PROPOSALS

PROPOSER ACKNOWLEDGEMENT FORM

THIS FORM MUST BE COMPLETED AND RETURNED WITH YOUR PROPOSAL

RFP TITLE: UTILITIES MOTOR AND PUMP REPAIR SERVICES

RFP NUMBER: 2025-40

RFP OPENING DATE & TIME: September 10, 2025 at 2:00 pm

RFP OPENING LOCATION: City Hall Training Room at Ormond Beach City Hall

PRE-PROPOSAL MEETING DATE & TIME: None

PRE-SUBMITTAL MEETING: N/A

Submittals Received After The Above Date And Time Will Not Be Accepted.

PROPOSER'S NAME: Electrical and Mechanical Maintenance Inc.

PROPOSER'S MAILING ADDRESS: 6115 31st Street East

CITY-STATE-ZIP: Bradenton, FL. 34203

F.E.I.N.: 93-4787107

PHONE NUMBER: 941-351-5858

EMAIL: prademaker@electrical-mechanical.com

If returning as a "No Submittal", please state reason (s

I certify that this Proposal is made without prior understanding, agreement, or connection with any corporation, firm, or person submitting a Proposal for the same materials, services, supplies, or equipment, and is in all respects fair and made without collusion or fraud. I agree to abide by all conditions of this RFP and certify that I am authorized to sign this RFP for the Proposer. In submitting a RFP to the City of Ormond Beach, the Proposer offers and agrees that if the Proposal is accepted, the Proposer will convey, assign or transfer to the City of Ormond Beach all rights, title, and interest in and to all causes of action it may now or hereafter acquire under the Antitrust laws of the United States and the State of Florida for price fixing relating to the particular commodities or services purchased or acquired by the City of Ormond Beach. At the City's discretion, such assignment shall be made and become effective at the time the City tenders final payment to the Proposer.

X

AUTHORIZED SIGNATURE (MANUAL)

Paul Rademaker

NAME (TYPED)

Vice President

TITLE

8-25-25

DATED

GENERAL CONDITIONS

PUBLIC ENTITY CRIMES: A person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a proposal on a contract to provide any goods or services to a public entity, may not submit a proposal on a contract with a public entity for the construction or repair of a public building or public work, may not submit Proposals on leases or real property to a public entity, may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity, and may not transact business with any public entity in excess of the threshold amount provided in Section 287.017, for CATEGORY TWO for a period of 36 months from the date of being placed on the convicted vendor list.

DISCRIMINATION: Pursuant to Section 287.134(2)(a), Florida Statutes, an entity or affiliate who has been placed on the discriminatory vendor list may not submit a bid or proposal on a contract to provide any goods or services to a public entity, may not submit a bid or proposal on a contract with a public entity for the construction or repair of a public building or public work, may not submit bid or proposal on leases of real property to a public entity, may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity, and may not transact business with any public entity.

PUBLIC RECORDS/NON-CONFIDENTIALITY OF BIDS AND/OR PROPOSALS.

The City of Ormond Beach cannot and does not warrant the confidentiality of any information submitted in response to this solicitation. Florida law provides that municipal records shall at all times be open for personal inspection by any person, Section 119.01, F.S., The Public Records Law. Information and materials received by the City of Ormond Beach in connection with all Proposers' response shall be deemed to be public records subject to public inspection upon award, recommendation for award, or 30 days after bid opening, whichever occurs first. Section 119.071, F.S.

DISTRIBUTION OF BIDS AND RFP'S: The City uses the services of DemandStar (www.demandstar.com) to distribute its bids and RFP's on-line on the Internet. If you have received a copy of this RFP from any source other than DemandStar, please be aware that you may not have received the latest version of the RFP or any related addendums.

SUBMISSION OF RESPONSES: All Submittals shall be delivered in a sealed envelope. The Request for Proposals (RFP) number, title, and opening date shall be clearly displayed on the outside of the sealed envelope (and on the outside of any express shipping package). The delivery of said submittal to the Purchasing Office on or before the specified opening date and time is solely and strictly the responsibility of the Submitter. Any submittal received by the Purchasing Office after the specified date and time will not be accepted. Submittals must be presented on forms provided by the City. No other forms will be accepted. Responses submitted by telephone, fax or email will not be

considered. No Submittal may be modified after opening. No Submittal may be withdrawn after opening for a period of ninety (90) days unless otherwise specified.

EXECUTION OF SUBMITTAL: Submittals must contain a manual signature of authorized representative in the space(s) provided. Submittals must be typed or printed in ink. Use of erasable ink is not permitted. All corrections made by Submitter to any Submittal entry must be initialed. The company name and Federal Employer Identification Number (F.E.I.N.) number shall appear in the space(s) provided.

RFP OPENING: Submittals shall be opened and the name of the submitters shall be read publicly. No discussion of the Submittals will occur at this time.

SUBMITTAL TABULATION: The RFP Tabulation will be posted on Demandstar (www.demandstar.com). Any submitter wishing to receive a paper copy of the tabulation is required to enclose a stamped, self-addressed envelope with their Submittal response.

CLARIFICATION/CORRECTION OF RFP ENTRY: The City of Ormond Beach reserves the right to allow for the clarification of questionable entries and for the correction of obvious mistakes.

INTERPRETATION: Any questions concerning conditions and specifications shall be directed to the Purchasing Coordinator rob.hart@ormondbeach.org. Those interpretations which may affect the eventual outcome of this Submittal will be furnished in writing to all prospective Submitters. No interpretation shall be considered binding unless provided in writing by the City of Ormond Beach.

PROCUREMENT COMMUNICATION PROTOCOL: To protect the integrity of the procurement process, respondents, suppliers, contractors, sub-contractors or person acting on behalf of any of the above are prohibited from all communications regarding the solicitation with City staff, City consultants, City legal counsel, City agents, or elected officials unless such communication is specifically authorized in the City's solicitation or addenda. Violation of this provision may be grounds for rejecting a response.

MINORITY POLICIES: The City of Ormond Beach, Florida, encourages the full participation of Disadvantaged and Women Business Enterprises (D&WBE) in the provision of goods and services.

RESPONSIBILITY DETERMINATION: Pursuant to the provisions of Florida Statutes Chapter 287.05701, the City does not request or consider a vendor's social, political, or ideological interests in making a responsibility determination.

LICENSES AND PERMITS: The Vendor/Contractor is responsible for obtaining all necessary permits and licenses to comply with all Federal, State, local laws, rules and regulations required to perform work in accordance with the specifications.

ADDITIONAL TERMS AND CONDITIONS: The City of Ormond Beach reserves the right to reject Submittals containing any additional terms or conditions not specifically requested in the original conditions and specifications.

TAXES: The City of Ormond Beach is exempt from Federal Excise Taxes and all sales taxes.

SILENCE OF SPECIFICATIONS: The apparent silence of any specification and any supplemental specifications as to any details or the omission from same of any detailed description concerning any point shall be regarded as meaning that only the best commercial practices are to prevail and that only materials of first quality and correct type, size, and design are to be used. All workmanship is to be first quality. All interpretations of the specifications shall be made upon the basis of this statement.

ASSIGNMENT: Any purchase order or contract issued pursuant to a Submittal and the monies which may become due hereunder are not assignable except with the prior written approval of the City Manager or City Commissioner, whichever authorized the purchase or Agreement.

LIABILITY: The Contractor shall hold and save the City of Ormond Beach, its officers, agents, and employees harmless against claims by third parties resulting from the Contractor's or supplier's breach of contract or negligence, including all attorney's fees and costs, and shall pay any and all damages, fees, and costs assessed on behalf of the City. The City expressly reserves all rights, privileges and benefits of sovereign immunity.

PATENTS AND ROYALTIES: The Contractor, without exception, shall indemnify and save harmless the City of Ormond Beach and its employees from liability of any kind, including cost and expenses for or on account of any copyrighted, patented, or unpatented invention, process, or article manufactured or used in the performance of the contract, including its use by the City of Ormond Beach. If the Contractor uses any design, device, or materials covered by letters, patent or copyright, it is mutually agreed and understood without exception that the Submittal prices shall include all royalties or cost arising from the use of such design, device, or materials in any way involved in the work.

NON-APPROPRIATION OF FUNDS: In the event sufficient budget funds are not available for a new fiscal period, the CITY shall notify the VENDOR/CONTRACTOR of such occurrence and the contract shall terminate on the last day of the current fiscal period, without any penalty or expense to the CITY of any kind whatsoever.

AWARDS: The CITY reserves the right, in its sole discretion, as the best interest of the CITY may require, to make award(s) by individual item, group of items, all or none, or a combination thereof; on a geographical basis and/or with one or more vendors, contractors, consultants or specialists; or to reject any and all Submittals or waive any minor irregularity or technicality in the Submittals received.

OTHER AGENCIES: All Bidder(s) awarded contracts from this bid or proposal may, permit any municipality or other government agency to participate in the contract under the same prices, terms, and conditions, if agreed to by both parties.

It is understood that at no time will any city, municipality, or other agency be obligated for placing an order for any other city, municipality, or agency: nor will any city, municipality, or agency be obligated for any bills incurred by any other city, municipality, or agency. Further, it is understood that each agency will issue its own purchase orders to the awarded bidder(s).

COMPLIANCE WITH FLORIDA PUBLIC RECORDS LAW:

Contractor expressly agrees that it shall comply with the public records law provided in Florida Statutes, Chapter 119, and specifically to:

- (a) Keep and maintain public records required by the City to perform the contracted service.
- (b) Upon request from the City Clerk, provide the City with a copy of the requested records or allow the records to be inspected or copied within a reasonable time at a cost that does not exceed the cost provided in Chapter 119, Florida Statutes, or as otherwise provided by law.
- (c) Ensure that public records that are exempt or confidential and exempt from public records disclosure requirements are not disclosed except as authorized by law for the duration of the contract term and following completion of the contract if the contractor does not transfer the records to the City.
- (d) Upon completion of the contract, transfer at no cost, to the City all public records in possession of the contractor or keep and maintain public records required by the City to perform the service. If the contractor transfers all public records to the City upon completion of the contract, the contractor shall destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. If the contractor keeps and maintains public records upon the completion of the contract, the contractor shall meet all applicable requirements for retaining public records. All records stored electronically must be provided to the City, upon request from the City Clerk, in a format that is compatible with the information technology systems of the City.
- (e) Failure of the Contractor to comply with Public Records Law as provided by Florida Statutes, Chapter 119, shall subject the Contractor to penalties under Chapter 119.10 and subject this Agreement to termination for cause by the City.

IF THE CONTRACTOR HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO THE CONTRACTOR'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS CONTRACT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT:

CITY CLERK
22 SOUTH BEACH STREET
ORMOND BEACH, FLORIDA 32174
(386)677-0311
CITYCLERK@ORMONDBEACH.ORG
or online at
<https://www.ormondbeach.org/prt>

Ref: Fla. Stat. §119.0701(2016)

THE CITY OF ORMOND BEACH RESERVES THE RIGHT TO REJECT ANY OR ALL PROPOSALS, AND TO WAIVE INFORMALITIES AS MAY BE DEEMED TO BE IN THE BEST INTEREST OF THE CITY.

TERMS AND CONDITIONS

- A. The City of Ormond Beach reserves the right without prejudice to reject any or all proposals, to request clarification of information submitted, and to request additional information of one or more proposers.
- B. The City reserves the right to award the contract to the next most qualified firm if the successful firm fails to execute a contract within two weeks after the award of the contract by the City Commission.
- C. In accordance with federal, State, and local regulations, the firm shall not discriminate under the contract against any person.
- D. The firm shall not assign or transfer any interest in the contract without prior approval of the City Commission.
- E. The City reserves the right to terminate the contract at any time due to the vendor's default under terms of agreement.
- F. Submission of a proposal indicates acceptance by the firm of the conditions contained in this Request for Proposals unless clearly and specifically noted in the proposal submitted and confirmed in the contract between the City of Ormond Beach and the firm selected.
- G. Submittals should include a copy of firm's insurance certificate, Conflict, Non-Conflict of Interest Statement/Litigation Statement, Drug Free Workplace Certificate and E-Verify Statement.

I. OBJECTIVE OF THE REQUEST FOR PROPOSALS

The City of Ormond Beach is a coastal community located in northeast Volusia County, Florida, occupying an area of approximately 38 square miles. The City Utility Service Area extends outside of the City limits into part of unincorporated Volusia County as well as providing service to portions of neighboring Flagler County. Customer data for 2024 included 23,788 active water accounts, of which 16,972 were located within the City limits. Records indicate there were 18,027 active sewer accounts, of which 17,451 were located within City limits. The City's fiscal year begins on October 1 and ends on September 30.

The Utilities Division of the City's Public Works Department is responsible for providing quality potable water, sanitary sewer and reclaimed water services to utility customers in a manner that balances social, environmental, and economic factors. The Utilities Division of the Public Works Department consists of five operating sections: Water Production, Water Reclamation (sometimes referred to as the Wastewater Treatment Facility), Potable Water Distribution, Wastewater Collection & Reclaimed Water Distribution, and Equipment Maintenance.

The Water Production Division is responsible for the safe and efficient operation of the City's Water Treatment Plant (WTP), 38 wells, 3 water storage tanks, and four water distribution booster stations. The WTP has a design capacity of 12.0 million gallons per day.

The Water Reclamation Facility (also referred to as the Wastewater Treatment Facility) is responsible for the safe and efficient treatment of wastewater, the supply of reclaimed water for irrigation, and the subsequent stabilization and disposal of solid wastes produced to ensure the protection of public health and the environment. The City's Water Reclamation Facility is designed to treat sewage at a rate of 8 million gallons per day. The City utilizes 95 sanitary sewer lift stations to transmit wastewater to the Wastewater Reclamation Facility. Meanwhile, the reclaimed water system has a permitted capacity of 10 million gallons per day and utilizes three (3) reclaimed water storage tanks and associated pump stations.

It is the intent of the City of Ormond Beach, Florida to award a contract(s) to the successful proposer(s) of this request for proposals to provide **UTILITIES MOTOR AND PUMP REPAIR SERVICES** on an "as needed" basis.

II. SCOPE OF SERVICES

The work shall be performed on an "as needed basis" for the Utilities Division of the Public Works Department. Awarded firms will be responsible for:

1. Pickup of equipment requested for evaluation and/or repair from affected City of Ormond Beach facility within 72 hours of request.
2. After assessment of equipment, development of a quote for the work necessary to repair to include pricing in accordance with the agreement and timeline to complete the work
3. Execution of work on the equipment, once a Purchase Order referencing the quote has been issued
4. Timely completion of the work
5. Return of repaired equipment within 48 hours of completion of work
6. General responsiveness to requests for evaluation/repair, phone calls and emails

Service under this award will include a full range of pump and electric motor repair services. These services will include but not be limited to inspection, evaluation and repair of vertical turbine, split case centrifugal pumps, centrifugal fans/blowers, lift station pumps, inspection, evaluation and repair of 3-phase electric motors, professional pump and electric motor reports, and other services as needed. Firms selected shall be capable of providing services including, but not limited to, the following:

PUMP REPAIR SERVICES:

Shaft Repair

Shaft Replacement and Bearing Replacement Seal Repair

Seal Replacement

Wear Ring Replacement Impeller Repair Impeller Replacement

Apply Protective Coatings Volute Repair

Volute Replacement Casing Repair Casing Replacement Dynamic Balancing Clean Pump Assembly of Pump

Performance Testing Pump Curves

Provide Detailed Shop Reports, and Recommendations

ELECTRIC MOTOR REPAIR SERVICES:

Repair Shaft

Replace Bearings

Rewind Motor

Dip and Bake Motor

Balance Motor

Motor Diagnostic

MOTOR TESTING SERVICES:

Megging
HiPot Testing
Surge Testing
Voltage Drop Testing
Core Loss Testing
Provide Detailed Shop Reports and Recommendations

III. TERM OF AGREEMENT

The initial term of this agreement shall be for a period of three (3) years and will be automatically renewed for two additional one (1) year periods thereafter unless either party provides at least ninety (90) days prior written notice to the other party of their intent not to renew the agreement. All terms and conditions shall remain firm for the initial three (3) year period and any optional renewal period of this contract based on contractor's acceptance, level of performance and approved funding.

IV. PROPOSAL PROCESS

The firm or individual(s) interested in this contract should include a response to each of the following items in their written proposal:

- A. Title Page: Title page marked, "**UTILITIES MOTOR AND PUMP REPAIR SERVICES**", the firm's name; the name, address and telephone number of a contact person; and the date of the proposal.
- B. Table of Contents: Include a clear identification of the material included in the proposal by page number.
- C. Standard General Requirements: Include Proposer's name and principal address; contact person's name and title; telephone and fax number; FEIN; number of years organization has been in business; number of years your firm has been in business under your present business name; number of years your firm has been in business in work specific to this RFP; names and titles of all officers, partners or individuals doing business under trade name; statement of whether your firm has ever failed to complete work awarded to you; list all claims, arbitrations, administrative hearings and lawsuits brought by or against the Proposer or its predecessor organization(s) during the last five (5) years; list and describe all criminal proceedings or hearings concerning business related offenses in which the Proposer, its principals or officers or predecessor organization(s) were defendants; state whether the Proposer, its principals, officers or predecessor organization(s) have been CONVICTED of a Public Entity Crime, debarred or suspended from bidding by any government entity.

- D. Transmittal Letter: A signed letter of transmittal briefly stating the proposer's understanding of the work to be done, the commitment to perform the work within the time period, a statement why the firm believed itself to be best qualified to perform the engagement and a statement that the proposal is a firm and irrevocable offer for the engagement period. The transmittal letter shall have an original signature of an authorized official of the firm who has been designated to submit the proposal on behalf of the firm.
- E. Technical Qualifications of Firm: Provide a description and overview of firm, including the size, range of activities, licenses, certifications etc. Detail expertise in, and experience with troubleshooting and repair of pumps and electric motors such as lift station pump/motors, well pump/motors, transfer pump/motors, and high service pump/motors (5 HP to 300 HP and up to 5000 GPM) of similar size and materials. (Limit response to two pages maximum) Identify any subcontractors(s) that will be involved if work not performed in house, including address and a description of qualifications. (Limit response to one page maximum per subcontractor)
- F. Technical Qualifications of the Project Team: Identify the primary individuals (Project Team) who will be responsible for supervising, managing and executing the work for this Contract. List all certifications appropriate to the work. (Limit response to one page per person)
- G. References: Using the "List of References" sheet supplied herewith, provide list of six (6) utility clients for whom work has been performed within the past 5 years. Be sure to include:
- Entity/Client
 - Location
 - Year Completed
 - Client contact name, Phone and Email
 - Types of equipment serviced
- H. Responsiveness: Describe your approach to timely completion of work and provide general turnaround times.
- I. Pricing: Provide not to exceed pricing using the Proposal Pricing Form.
- J. Location: Provide shop location(s) where the bulk of work will occur and indicate which member of the Project Team primarily works from each. Provide information on alternate or backup facilities, if available. Points shall be awarded as follows: Within 25 miles of Ormond City Hall (15 points), Within 50 miles of Ormond Beach City Hall (10 points), Within 100 miles of Ormond Beach City Hall (5 points), Beyond 100 miles of Ormond Beach City Hall (0 points)

V. PROPOSAL SUBMITTAL

Please check the contents of your RFP package carefully to ensure that you have in your possession all the necessary documents, as referenced within this RFP, including any addenda. If you are missing any items, please contact the City's Purchasing Coordinator at 386-676-3223, or by e-mail at: rob.hart@ormondbeach.org.

Submission of a proposal pursuant to this RFP shall constitute acknowledgement and acceptance of the terms and conditions set forth herein. Portions of this RFP and the contents of the proposal submitted by the successful proposer may become contractual obligations if an Agreement is awarded. Failure of the successful proposer to accept these obligations may result in cancellation of the award of contract.

The City reserves the right to withdraw this RFP at any time without prior notice. All proposals submitted in response to this RFP become the property of the City of Ormond Beach.

Deadline for Submission: To be considered, proposals must be received no later than 2:00 p.m., September 10, 2025.

Inquiries: Technical questions may arise as firms are preparing their proposals. The City will accept written inquiries regarding this RFP until September 3rd at 4:00 PM. Questions received after that time will not be responded to. Answers to questions that warrant attention of all the potential proposers will be distributed in the form of an addendum. Please direct written inquiries to:

Rob Hart
City of Ormond Beach
22 South Beach Street, Room 102
Ormond Beach, Florida 32174
Telephone: (386) 676-3223
FAX: (386) 676-3374
rob.hart@ormondbeach.org

Signature Requirements: Proposals must be signed by a duly authorized official(s) of the proposing firm. Consortiums, joint ventures, or teams submitting proposals, although permitted and encouraged, will not be considered responsive unless it is established that all contractual responsibility rests solely with one firm or legal entity which shall not be a subsidiary or affiliate with limited resources. Each proposal shall indicate the entity responsible for execution on behalf of the proposal team.

Proposal Delivery: You must submit one (1) unbound original plus one (1) electronic copy on compact disk (CD) or flash drive of the proposal no later than the date and time specified above. Submit proposals to: Rob Hart, Purchasing Coordinator, at City Hall down stairs in Room 102, 22 South Beach Street, Ormond Beach, FL 32174. The RFP title and number shall be plainly marked on the outside of the delivery envelope or

package. It is solely the responsibility of the submitter to ensure that the Proposal is delivered on or before the specified date and time. Late proposals will not be accepted.

Addenda and Supplements to the Request for Proposals (RFP): In the event that it becomes necessary to revise any part of this RFP, or if additional information is necessary to enable the proposing firm to make an adequate interpretation of the provisions of this RFP, a supplement to the RFP will be provided to each firm that has requested a copy of this document.

Rejection Rights: The City of Ormond Beach reserves the right, at any time, to modify, waive or otherwise vary the terms and conditions of this RFP including, but not limited to, the deadlines for submission and submission requirements. The City further reserves the right to reject any or all submittals, to cancel or withdraw this RFP at any time and to negotiate with any party prior to or after submittal of proposals. Selection is also dependent upon the negotiation of a mutually acceptable contract with the successful proposers.

Cost of Proposal Preparation: No reimbursement will be made by the City of Ormond Beach for any costs incurred in the preparation of the proposal or presentation.

Proposals to be in Effect: Each proposal shall state that it is valid for a period of not less than 90 days from date of receipt.

VI. EVALUATION PROCESS AND CRITERIA

The City of Ormond Beach will conduct an evaluation of all proposals, submitted by the deadline, to determine compliance with proposal requirements and mandatory document submissions. The committee will consist of three individuals from the City's public works department. The committee will evaluate proposals and select the Proposer that meets the best interests of the City, and will make a recommendation of Award of Contract to the City Commission.

The City reserves the following rights:

- Modify, extend, or cancel this RFP at any time to obtain additional proposals or for any other reason the City determines to be in its best interest;
- Issue a new RFP with terms and conditions that are the same, similar or substantially different as those set forth in this or a previous RFP in order to obtain additional proposals or for any other reason the City determines to be in its best interest;
- Conduct pre-award discussion and/or pre-award negotiations with any or all responsive and responsible proposer(s) who submit proposals determined to be reasonably acceptable of being selected for award; and, conduct personal interviews or require presentations of any or all proposer(s) prior to selection.

- Request that proposer(s) furnish additional information as the City may reasonably require.
- Accept or reject qualifications or proposals in part or whole, and/or waive any defect or deficiency in any proposal, if in the City's sole judgment, the defect or deficiency is not material in response to this RFP;
- Limit and/or determine the actual contract services to be included in a contract.
- Engage outside experts to assist staff in evaluating the merits and viability of each proposer.
- Obtain information for use in evaluating submittals from any source.
- Verify the information received in the proposal. If a proposer knowingly and willfully submits false information or data, the City of Ormond Beach reserves the right to reject that proposal. If it is determined that an Agreement was awarded as a result of false statements or other data submitted in response to this RFP, the City of Ormond Beach reserves the right to terminate the Agreement.

The City shall be the sole judge of the proposer's qualifications.

Evaluation Criteria:

For the purposes of further evaluation, the responsive proposals will be evaluated on, but shall not be limited to, consideration of the following criteria:

EVALUATION CRITERIA	MAXIMUM POSSIBLE POINTS
Technical Qualifications	20
Technical Qualifications of Project Team	20
References	20
Responsiveness	10
Pricing	10
Location	15
Completeness of Proposal	5
TOTAL	100

VII. PRICING AND REFERENCE SHEETS

The following forms are provided to assist firms with preparing proposals:

UTILITIES MOTOR AND PUMP REPAIR SERVICES**RFP NO. 2025 – 40****LIST OF REFERENCES**

1. Entity/Client US Water Services Corp.		
Location Throughout Florida and 22 other states	Year Completed: ongoing	
Client Contact Name Eddie Schemenauer		
Email Edward Schemenauer <eschemenauer@uswatercorp.net>	Phone: 727-389-9399	
Types of equipment serviced		
We rebuild all their motors/pumps/blowers/gearboxes. We sell them new rotating equipment as well as new VFD's.		

2. Entity/Client Manatee County Utilities		
Location All three WRF plants, WTP, and some LS Pumps	Year Completed: ongoing	
Client Contact Name Rick Svec		
Email rick.svec@mymanatee.org	Phone: 941-812-6388	
Types of equipment serviced		
We rebuild all their motors/pumps/blowers/gearboxes. We sell them new rotating equipment as well as the Artesis PdM controllers		

3. Entity/Client City of Bradenton		
Location All WRF and WTP and LS pumps	Year Completed: ongoing	
Client Contact Name Don DeMonia		
Email donald.demonia@bradentonfl.gov	Phone: 941-290-9392	
Types of equipment serviced		
We rebuild all their motors/pumps/blowers/gearboxes. We sell them new rotating equipment as well as new controls.		

UTILITIES MOTOR AND PUMP REPAIR SERVICES**RFP NO. 2025 – 40****LIST OF REFERENCES**

4. Entity/Client City of Arcadia		
Location WRF and all lift stations	Year Completed: ongoing	
Client Contact Name Dominick Wolcheck		
Email Dominick Wolcheck <dwolcheck@arcadia-fl.gov>	Phone: 863-231-8113	
Types of equipment serviced		
We rebuild all their motors/pumps/blowers/gearboxes. We sell them new rotating equipment as controls and panels.		

5. Entity/Client City of Daytona Beach		
Location WRF	Year Completed: ongoing	
Client Contact Name Mike Riley		
Email rileymichael@codb.us	Phone: 386-473-3010	
Types of equipment serviced		
We have rebuilt some motors and pumps as well as sell them a large pump station for over \$400,000.00.		

6. Entity/Client City of Riviera Beach		
Location WRF/WTP/Wells	Year Completed: ongoing	
Client Contact Name Mike Miller		
Email mmiller@uswatercorp.net	Phone: 727-808-6249	
Types of equipment serviced		
We are currently rebuilding every motor and pump in their WTP and Well Fields. We are selling them all their rotating equipment as well as all their VFD's.		

UTILITIES MOTOR AND PUMP REPAIR SERVICES**RFP NO. 2025 – 40****PROPOSAL PRICING –Motor and Pump Repair**

Proposer submits the following prices for the work described in this solicitation:

Item of Work	Per (Unit)	Unit Price
1. Trailer Truck Service to transport pump to and from repair facility (time must be reasonable compared to Google Maps estimate. No pay for breakdowns).	HR	\$ 100.00
2. Crane Truck Service (including operator) for removing and install pump or motor	HR	\$ 150.00
3. Standard Labor Rate (Mechanic) Monday – Friday, 8:00 am – 5:00 pm	HR	\$ 90.00
4. Non-Standard Labor Rate (Mechanic) After hours, weekend, and holidays	HR	\$ 125.00
5. Standard Labor Rate (Machinist) Monday – Friday, 8:00 am – 5:00 pm	HR	\$ 90.00
6. Non-Standard Labor Rate (Machinist) After hours, weekend, and holidays	HR	\$ 125.00
7. Tear Down and Inspection	HR	\$ 200.00
Parts Allowance: Cost plus markup %		<u>20 .00</u> %

REGISTRATION AND INSURANCE REQUIREMENTS FOR VENDOR/CONTRACTOR WORKING ON CITY PROJECTS

REGISTRATION REQUIREMENTS FOR VENDOR/CONTRACTOR WORKING ON CITY PROJECTS

Registration Requirements

VENDORS doing business within the City Limits must be registered with the City.

Requirements for registering a business are as follows:

Copy of City Business Tax Receipt (where your business is located).

Certificate of Insurance showing General Liability and Workers' Comp (or State Workers' Comp Exemption form).

Application Fee: \$25.00 For more information, contact the City's Business Tax Receipt official at 386-676-3233 or btonline@ormondbeach.org You can apply online here: <https://ormondbeachfl-energovweb.tylerhost.net/apps/selfservice#/home>

State Certified/Registered Contractors

All registered State contractors must be registered with Volusia County. Volusia County Contractor Licensing, 123 W. Indiana Ave., Rm 203, Deland, FL 32720 (386) 736-5957 contractorlicensing@volusia.org
<https://connectlivepermits.org/citizenportal/app/landing>

State certified contractors have the option of registering with Volusia County, or providing information directly to the business tax receipt official, to include copy of State license, certificate of insurance and copy of local business tax receipt. This information is provided with the permit application.

If you have any questions regarding the above requirements, please contact the business tax receipt official at (386) 676-3233 or btonline@ormondbeach.org

EXHIBIT A
Risk Management and Insurance Requirements

A. Payment and Performance Bonds

1. Except as otherwise provided herein, the Contractor shall, prior to beginning performance, deliver to the City, and the City shall record in the public records of Volusia County, Florida, the Contractor's Payment and Performance Bond in an amount equal to the full amount of the Contract.
2.
 - (a) Payment and Performance Bonds shall not be required for any contract except those which are for the construction of a public building, for the prosecution and completion of a public work (as described in Section 180.06, **Florida Statutes**, as amended from time to time) or for repairs upon a public building or public work (as described in Section 180.06, **Florida Statutes**, as amended from time to time).
 - (b) With respect to those Contracts for which Payment and Performance Bonds are otherwise required:
 - i. Unless the City Manager, or his designee, determines such Bond to be necessary to protect the interests of the City, no Contractor shall be required to provide a Payment and Performance Bond for any Contract which is for \$25,000.00 or less.
 - ii. Upon the request of the contractor, good cause shown by the Contractor, and a determination that the public health, safety and welfare will be sufficiently protected, the City Commission may exempt the contractor from the requirement of providing a Payment and Performance Bond for any Contract which is for more than \$25,000.00 but is less than \$200,000.00.
3. The Payment and Performance Bond shall list the Contractor as Principal and be issued by a surety insurer authorized to do business in Florida as a surety and listed as an acceptable surety in the Federal Register.
4. The Payment and Performance Bond shall be executed pursuant to Section 255.05, **Florida Statutes**, and be in a form substantially similar to the form set forth in Section 255.05(3), **Florida Statutes**.
5. The Payment and Performance Bond shall specifically provide coverage for delay damages due to a default by the Contractor.
6. The Payment and Performance Bond shall not make the Contract part of the Bond agreement.

7. In lieu of the Payment and Performance Bond, the Contractor may file with the Finance Director of the City, in an amount equal to the full amount of the Contract, cash, a money order, a certified check, a cashier's check, an irrevocable letter of credit, or a security of a type listed in Part II, Chapter 625, **Florida Statutes**.
8. In the event the surety on any Payment and Performance Bond furnished by the Contractor is declared bankrupt or becomes insolvent, or its right to do business in the State of Florida is terminated, the Contractor shall, within five (5) working days thereafter, substitute another Payment and Performance Bond and surety acceptable to the City.
9. The Contractor is totally and solely responsible for keeping its surety informed as to the Base Contract Price as bid, significant changes in the Project Scope, and the overall progress and completion of the Project for the entire life of the Contract.
10. The payment and performance bond requirements stated herein above shall not be applicable to service-related contracts unless otherwise determined by the City Manager in order to protect the health, safety and welfare of the general public.

B. Contractual Provisions Relative to Risk Management

All contracts for any public works to be performed, and service-related contracts, for or on behalf of the City shall include at a minimum, the following, or substantially similar, provisions:

1. Hold Harmless and Indemnity

The Contractor agrees to assume liability for and indemnify, hold harmless, and defend the City, its commissioners, mayor, officers, employees, agents, and attorneys of, from, and against all liability and expense, including reasonable attorney's fees, in connection with any and all claims, demands, damages, actions, causes of action, and suits in equity of whatever kind or nature, including claims for personal injury, property damage, equitable relief, or loss of use, to the extent caused by the negligence, recklessness, or intentionally wrongful conduct of the Contractor, its agents, officers, contractors, subcontractors, employees, or anyone else employed or utilized by the Contractor in the performance of this Contract. The Contractor's liability hereunder shall include all attorney's fees and costs incurred by the City in the enforcement of this provision.

2. Payment on Behalf of City

The Contractor shall pay all costs of the City's legal defense, as may be selected by the City, for all claims described in the Hold Harmless

paragraph. Such payment on behalf of the City shall be in addition to any and all other legal remedies available to the City and shall not be considered to be the City's exclusive remedy.

3. Loss Control/Safety

Precaution shall be exercised at all times by the Contractor for the protection of all persons, including employees and property. The Contractor shall comply with all applicable laws, regulations and ordinances related to safety and health, shall make special efforts to detect hazardous conditions, and shall take prompt action when loss control/safety measures are reasonably necessary. The City may order work to be stopped if conditions exist that present an immediate danger to persons or property. The Contractor acknowledges that such work stoppage will not shift responsibility for any damages from the Contractor to the City.

4. Service Bond

For Service-related contracts only, the City may require the Contractor to secure a service bond with a minimum \$25,000 coverage limit for the period of the service agreement. The service bond covers dishonest acts of the contractor's employees against the City. A copy of the bond shall be provided to the City when the agreement commences. Service-related contracts include and are not limited to businesses providing janitorial, pest control, general repair, security, carpet cleaning, locksmith, temporary employment, painting, moving services or other contracts as determined in the discretion of the Risk Manager as necessary to minimize loss.

C. Contractor's Insurance

1. General

The Contractor, including service-related contractors, shall purchase and maintain for the entire life of the Project, including any and all approved time extensions, until its final acceptance by the City, such insurance as will protect the Contractor from claims under Workers' Compensation, disability benefit laws or other similar employee benefit laws; from claims for damages because of bodily injury, occupational sickness or disease, or death of Contractor's employees; from claims insured by usual or unusual injury liability coverage; from claims or injury to or destruction of tangible property and from claims insured by usual Commercial General Liability coverage. This includes loss of use resulting therefrom, any or all of which may arise out of the Contractor's operations under the Contract Documents, whether such operations be by the Contractor, by any Subcontractor, or by anyone directly or indirectly employed by any of them or for whose acts any of them may be legally liable. The Contractor's deductibles/self-insured retentions shall be disclosed to the City and may be disapproved by the City, and may be reduced or eliminated at the sole discretion of the City. The Contractor is responsible for the amount of any deductible or self-insured retention.

2. Types of Insurance and Limits of Liability

The insurance required herein shall be written for not less than any limits of liability specified and incorporated as part of the Contract Documents or as required by law, whichever is greater, and shall include and not limited to the following:

- (a)** Workers' Compensation Insurance in statutory limits for the State of Florida with Coverage B - Employer's Liability limits of not less than:

\$100,000 Each Accident Bodily Injury by Accident
\$100,000 Each Employee Bodily Injury by Disease
\$500,000 Policy Limit Bodily Injury by Disease

Certificate of Exemptions. If the contractor has a State-issued Certificate of Exemption, the contractor may provide a copy in place of the requirement for coverage. However, if the contractor subcontracts or retains any other person or entity to perform under the contract, that person or entity must provide proof of workers' compensation insurance as required by law or provide a Certificate of Exemption.

It is the intent of the City that any individual who either contracts directly with the city or performs any work on behalf of any such contractor be covered by workers' compensation insurance or have a valid exemption from said coverage.

(If applicable to the Project, the policy must include benefits under the United States Longshoremen's and Harbor Workers' Act and the Jones Act coverage--all maritime coverage.)

- (b)** Commercial General Liability Insurance shall be written on a coverage form as broad as Insurance Services Office (ISO) Form CG 00 01 11 85, or its successor form, including but not limited to the following coverage (any deviation shall be noted on the Certificates of Insurance):

- a. Premises, Operations, Products and Completed Operations
- b. Owners' & Contractors' Protective
- c. Products & Completed Operation
- d. Explosion, Collapse & Underground Conditions
- e. Blanket Contractual Liability
- f. Personal Injury Liability
- g. Broad Form Property Damage Endorsement, including Completed Operations
- h. Independent Contractors
- i. Watercraft--Owned and Non-Owned (if applicable, endorsement must be included in General Liability policy or a separate Protection & Indemnity Policy must be written)

- j. Pollution Liability (if applicable)
- k. Asbestos Abatement (if applicable)
- l. Fire Damage Liability

Certain coverage outlined above may not be required if they do not relate to the Project, as may be determined at the sole discretion of the City.

Commercial General Liability Coverage shall be written on an occurrence basis and the limits shall be no less and not limited to the following amounts:

Limits (not less than)

\$1 Million Each Occurrence
 \$2 Million General Aggregate
 \$1 Million Aggregate Products & Completed Operations

NOTE: Commercial General Liability Coverage must be purchased on either a project basis (separate policy per contract) or an endorsement allocating an aggregate limit per location or specified project.

- (c) Automobile Liability Insurance is required if an Automobile(s) is used in the performance of the contract. ISO Symbol 1 (Any Auto), or alternatively a combination of Symbol 2 (Owned Autos), Symbol 8 (Hired Autos), and Symbol 9 (Non-Owned Autos), and limits shall be no less than:

\$1 Million Combined Single Limit for Bodily Injury and Property Damage

- (d) Excess Liability

For contracts \$250,000 or greater an Excess Liability Policy of at least but not limited to \$1,000,000 in addition to the scheduled underlying policies for Commercial General Liability, Automobile Liability and Employers' Liability, the Contractor shall also provide an Excess Liability Policy with a maximum self-insured retention not to exceed \$25,000 per occurrence.

- (e) Builder's Risk

Contractor shall purchase Builder's Risk Insurance for any contracts that are deemed to be vertical construction on an All-Risk policy, and shall also include coverage for wind, hail, and named storm. Limits of coverage shall be at least and not limited to the value of the project.

(f) Professional Liability, Malpractice and/or Errors and Omissions

The Contractor shall purchase and maintain professional liability, malpractice, or errors or omissions insurance with minimum limits of \$1,000,000 per occurrence. If a claims made form of coverage is provided, the retroactive date of coverage shall be no later than the inception date of claims made coverage, unless the prior policy was extended indefinitely to cover prior acts. Coverage shall be extended beyond the policy year either by a supplemental extended reporting period (ERP) of as great a duration as is available, and with no less coverage and with reinstated aggregate limits, or by requiring that any new policy provides a retroactive date no later than the inception date of claims made coverage.

D. Requirements for Certificates of Insurance

1. With the execution of the Contract Documents, the Contractor, including service related contractors, shall provide certificates of such insurance acceptable to the City. These certificates and insurance policies shall contain an endorsement that the coverage under the policies will not be canceled, non-renewed or materially changed until at least thirty (30) days' prior written notice of such cancellation, non-renewal or change (except for nonpayment of premium, which shall be ten (10) days) and a copy of the cancellation endorsement signed by an authorized representative of the insurer, be given to the City. The contractor shall be required to replace any expired or canceled policies in like amount and coverage to the satisfaction of the City. The Certificate of Insurance shall be the ACORD FORM 25-S (7/90), or its successor form, and shall be made a part of the Contract Documents.
2. New certificates of insurance shall be provided to the City at least fifteen (15) days prior to coverage renewals.
3. If requested by the City, the contractor shall immediately furnish complete copies of the Contractor's insurance policies, forms and endorsements.
4. For Commercial General Liability coverage the Contractor shall, at the option of the City, provide an indication of the amount of claims payments or reserves chargeable to the aggregate amount of liability coverage. If the Commercial General Liability form of coverage includes an annual aggregate limitation on the amount of insurance provided, a separate project aggregate limit may be required by the City for the given contract.
5. If the Contractor fails to obtain and maintain for the life of the Project the insurance required hereby or to replace any such expired or canceled policy, the City may obtain and maintain such insurance with such company as it deems satisfactory. Any amounts expended by the City in payment of premiums for such insurance shall be deducted by the City from the amount due the Contractor for the work covered by the Contract.

E. Policies of Insurance

- 1.** Except as otherwise provided in this Exhibit, all insurance policies shall be issued by insurers licensed to do business in the State of Florida on an admitted basis or which is an eligible surplus lines insurer in the State of Florida, and any such insuring company is required to have a minimum financial rating of (A-), in the latest edition of "Best's Key Rating Guide", published by A. M. Best Co., Inc., or some similarly nationally recognized rating authority, including Standard and Poors and Demotech.
- 2.** For Workers' Compensation coverage only, self-insurance programs are acceptable with a minimum A- rated reinsurance carrier; written confirmation is required.
- 3.** All policies of insurance or certificates thereof referred to in this Exhibit shall be deposited with the City Clerk.
- 4.** The City shall be named an Additional Insured on General Liability including products and completed operations and Automobile Liability policies of insurance and certificates thereof.

**City of Ormond Beach
Request for Proposals (RFP)
UTILITIES MOTOR AND PUMP REPAIR SERVICES
(RFP No. 2025-40)**

VERIFICATION OF EMPLOYMENT STATUS USING E-VERIFY SYSTEM

1. Undersigned firm warrants it **IS** currently registered with the U.S. Department of Homeland Security's E-Verify system, **and** is compliant with the requirements of Sections 448.09 and 448.095, *Florida Statutes*.
2. Undersigned firm warrants it **has not** had any contracts terminated as a result of violations of Sections 448.09 or 448.095, *Florida Statutes*, that prohibit it from contracting with a public agency.
3. Undersigned firm warrants that if it enters into an agreement with a subcontractor, an express provision shall be included in all of its subcontracts requiring subcontractors, who perform work or provide services pursuant to the contract, to use the E-Verify system to verify employment eligibility of all new employees hired by the subcontractor during the contract term.
4. Undersigned firm understands that any subcontractor must provide the contractor with an affidavit stating that the subcontractor does not employ, contract with, or subcontract with an unauthorized alien, and the contractor understands it shall maintain any such affidavits for the duration of the contract, and the contract with the subcontractor must be immediately terminated if the City has a good faith belief that the subcontractor knowingly violated Section 448.09 (1), *Florida Statutes*.
5. Undersigned firm understands that in the event the City has a good faith belief that the contractor has knowingly violated Section 448.09 (1), *Florida Statutes*, the City shall terminate the contract, and the contractor may not be awarded a public contract for a period of at least one (1) year after the date of termination. The contractor may be held liable for any additional costs incurred by the City as a result of termination of the contract.

Electrical and Mechanical Maintenance Inc.

COMPANY NAME

AUTHORIZED SIGNATURE

Paul Rademaker

NAME

Vice President

TITLE

8-25-25

DATE

**City of Ormond Beach
Request for Proposals (RFP)
UTILITIES MOTOR AND PUMP REPAIR SERVICES
(RFP No. 2025-40)**

RFP RESPONSE FORM

THIS RESPONSE IS SUBMITTED TO:

Purchasing Coordinator
City of Ormond Beach
22 S. Beach Street
Ormond Beach, Florida 32174

The undersigned SUBMITTER proposes and agrees, if this Submittal is accepted, to enter into a Contract with the CITY that reflects the items of this Request for Proposal (RFP) and to provide all services, as specified or indicated in the RFP Documents, in full accordance with the terms and conditions set forth in therein.

SUBMITTER accepts all of the terms and conditions of the General Conditions. SUBMITTER will sign the Contract) and submit the Contract security (when applicable) and other documents required by the Contract Documents within ten (10) days after the date of CITY's Notice of Award.

In submitting this information, SUBMITTER represents, as more fully set forth in the Agreement, that:

SUBMITTER has examined copies of all the RFP Documents and of the following Addenda:

Addendum Date

Addendum Number

Receipt of all of which is hereby acknowledged.

This Submittal is genuine and not made in the interest of or on behalf of any undisclosed person, firm or corporation and is not submitted in conformity with any agreement or rules of any group, association, organization or corporation; SUBMITTER has not directly or indirectly induced or solicited any other Submitter to submit a false or sham Submittal; SUBMITTER has not solicited or induced any person, firm or a corporation to refrain from bidding; and SUBMITTER has not sought by collusion to obtain for himself any advantage over any other Bidder or over the CITY.

THIS RESPONSE IS SUBMITTED BY:

COMPANY NAME: Electrical and Mechanical Maintenance Inc.

VENDOR/CONTRACTOR LICENSE NUMBER: Will obtain one if successful bidder

ADDRESS: 6115 31st Street East, Bradenton, FL. 34203

PHONE NO.: 941-351-5858

FAX NO.: _____

SUBMITTER'S NAME: Paul Rademaker

(Typed or Printed in Ink)

TITLE: Vice President

AUTHORIZED SIGNATURE: I, _____
hereby

(Original signature required in each document)

declare that I have read and fully understand the RFP Documents and, including the General Conditions and the Scope of Work, and that I am duly authorized to sign and submit this Submittal.

The CITY reserves the right to reject any and all Submittals, to waive informalities, and to accept any Submittal or parts thereof as the CITY, in its sole discretion, determines to be in the best interest of the CITY.

PROPOSER: PLEASE ENSURE THAT YOU HAVE SIGNED THE RFP RESPONSE FORM OF THIS REQUEST FOR PROPOSAL. OMISSION OF A SIGNATURE ON THAT PAGE MAY RESULT IN REJECTION OF YOUR PROPOSAL.

THIS PAGE MUST BE COMPLETED AND RETURNED WITH YOUR PROPOSAL

City of Ormond Beach
CONFLICT, NON-CONFLICT OF INTEREST STATEMENT
LITIGATION STATEMENT

1.

☒ To the best of our knowledge, the undersigned firm has no potential conflicts of interest due to any other clients or contracts for this project.

☐ The undersigned firm, by attachment to this form, submits information which may be a potential conflict of interest due to other clients or contracts for this project.

2.

☒ The undersigned firm has had no litigation on any project in the last five (5) years.

☐ The undersigned firm, by attachment to this form, submits a summary and disposition of individual cases of litigation during the past five (5) years.

Electrical and Mechanical Maintenance Inc.

COMPANY NAME

AUTHORIZED SIGNATURE

Paul Rademaker

SIGNER'S NAME (PRINT OR TYPE)

Vice President

TITLE

8-25-25

DATE

THIS PAGE MUST BE COMPLETED AND RETURNED WITH YOUR PROPOSAL

City of Ormond Beach
Request for Proposals (RFP)
UTILITIES MOTOR AND PUMP REPAIR SERVICES
(RFP No. 2025-40)
CITY OF ORMOND BEACH, FLORIDA
DRUG-FREE WORKPLACE CERTIFICATION

IDENTICAL OR "TIE" SUBMITTALS: Preference shall be given to businesses with drug-free workplace programs. Whenever two or more proposals which are equal in respect to price, quality, and service are received by the State or by any political subdivision for the procurement of commodities or contractual services, a bid received from a business that certifies that it has implemented a drug-free workplace program shall be given preference in the award process. Established procedures for processing tie bids will be followed if none of the tied vendors have a drug-free workplace program. In order to have a drug-free workplace program, a business shall:

- 1) Publish a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the workplace and specifying the actions that will be taken against employees for violations of such prohibition.
- 2) Inform employees about the dangers of drug abuse in the workplace, the business's policy of maintaining a drug-free workplace, any available drug counseling, rehabilitation, and employee assistance programs, and the penalties that may be imposed upon employees for drug abuse violation.
- 3) Give each employee that engages in providing the commodities or contractual services that are under bid a copy of the statement specified in subsection (1).
- 4) In the statement specified in subsection (1), notify the employees that, as a condition of working on the commodities or contractual services that are under bid, the employee will abide by the terms of the statement and will notify the employer of any conviction of, or plea of guilty or nolo contendere to, any violation of Chapter 893 or of any controlled substance law of the United States or any state, for a violation occurring in the workplace no later than five (5) calendar days after such conviction.
- 5) Impose sanctions on, or require the satisfactory participation in a drug abuse assistance or rehabilitation program if such is available in the employee's community, by any employee who is so convicted.
- 6) Make a good faith effort to continue to maintain a drug-free workplace through implementation of this section.

Electrical and Mechanical Maintenance Inc.

Company Name

Authorized Signature

Paul Rademaker

Print Name

Vice President

Title



AFFIDAVIT OF COMPLIANCE WITH SECTION 287.138, FLORIDA STATUTES

AFFIDAVIT OF COMPLIANCE WITH SECTION 287.138, FLORIDA STATUTES CONTRACTING WITH FOREIGN ENTITIES OF CONCERN

The undersigned ("Affiant"), on behalf of the entity listed below ("Entity"), hereby attests under penalty of perjury as follows:

1. Affiant is the Vice President - GM of Electrical and Mechanical Maintenance Inc.
(Title) (Business Name)
which does business in the State of Florida, hereinafter called the "Entity".
2. Entity is not owned by the government of a foreign country of concern, as defined in Section 287.138 (1) (c), Florida Statutes.
3. The government of a foreign country of concern does not have a controlling interest in Entity, as defined in Section 287.138 (1)(a), Florida Statutes.
4. Entity is not organized under the laws of, and does not have a principal place of business in, a foreign country of concern.
5. Entity is not owned or controlled by the government of a foreign country of concern.
6. For purposes of this affidavit, a foreign country of concern means the People's Republic of China, the Russian Federation, the Islamic Republic of Iran, the Democratic People's Republic of Korea, the Republic of Cuba, the Venezuelan regime of Nicolas Maduro, or the Syrian Arab Republic, including any agency of or any other entity of significant control of such foreign country of concern, as defined in Section 287.138(1)(c), Florida Statutes.

The undersigned is authorized to execute this affidavit on behalf of the Entity.

Date: August 25, 2025 Signed: John Miller

Entity: Electrical and Mechanical Maintenance Inc. Name: John Miller

Title: VP-GM

STATE OF: Florida COUNTY OF: Manatee

The foregoing instrument was acknowledged before me by means of ☒ physical presence or ☐ online notarization, this 25 day of August, 2025

by John Miller and who: ☒ Is personally known to me; or

☐ has produced _____ as identification.

Paul Rademaker

Notary Public, State of Florida at Large:

Printed Name/Seal of Notary, Commission and Expiration Date:

My commission expires: 05/20/2029

(seal)



PAUL RADEMAKER
Notary Public
State of Florida
Comm# HH641248
Expires 5/20/2029

This document must be completed and returned with your Submittal



**HUMAN TRAFFICKING AFFIDAVIT
(SECTION 787.06, FLORIDA STATUTES)**

STATE OF FLORIDA §
 §
COUNTY OF VOLUSIA §

The undersigned ("Affiant"), on behalf of the entity listed below ("Entity"), after being duly sworn, hereby attests as follows:

1. My name is John Miller. I am over the age of Twenty-one years old. I am the VP - GM of Electrical and Mechanical Maintenance ~~governmental~~ governmental entity which does
(Title) (Business Name)
business in the State of Florida, hereinafter called the "Entity."
2. I have personal knowledge of each and every statement of fact contained herein, and each and every statement of fact is true and correct.
3. Entity does not use coercion, as defined in Section 787.06, Florida Statutes, for labor or services.
4. The undersigned is an officer or representative of the entity and is authorized to execute this affidavit on behalf of the Entity.
5. Under penalties of perjury, I declare that I have read the foregoing Human Trafficking Affidavit and that the facts stated herein are true.

Further Affiant sayeth not.

Date: August 25, 2025

Signed: [Signature]
Print Name: John Miller
Title: VP - GM

SUBSCRIBED AND SWORN before me by means of ☒ physical presence or ☐ online notarization on the 25 day of August, 2025 by John Miller as VP - GM on behalf of Electrical and Mechanical Maintenance who is personally known to me or who has produced _____ as identification.

(Notary Seal)  **PAUL RADEMAKER**
Notary Public
State of Florida
Comm# HH641248
Expires 5/20/2029

Notary Public, State of Florida
Printed name, commission and expiration of commission term

This document must be completed and returned with your Submittal

UTILITIES MOTOR AND PUMP REPAIR SERVICES
RFP NO. 2025 – 40
PROPOSAL PRICING –Motor and Pump Repair

Proposer submits the following prices for the work described in this solicitation:

Item of Work	Per (Unit)	Unit Price
1. Trailer Truck Service to transport pump to and from repair facility (time must be reasonable compared to Google Maps estimate. No pay for breakdowns).	HR	\$ 100.00
2. Crane Truck Service (including operator) for removing and install pump or motor	HR	\$ 150.00
3. Standard Labor Rate (Mechanic) Monday – Friday, 8:00 am – 5:00 pm	HR	\$ 90.00
4. Non-Standard Labor Rate (Mechanic) After hours, weekend, and holidays	HR	\$ 125.00
5. Standard Labor Rate (Machinist) Monday – Friday, 8:00 am – 5:00 pm	HR	\$ 90.00
6. Non-Standard Labor Rate (Machinist) After hours, weekend, and holidays	HR	\$ 125.00
7. Tear Down and Inspection	HR	\$ 200.00
Parts Allowance: Cost plus markup %		<u>20 .00</u> %



City of Ormond Beach

22 South Beach Street
Ormond Beach, Florida 32174
Telephone (386) 676-3223

REQUEST FOR PROPOSALS

PROPOSER ACKNOWLEDGEMENT FORM

THIS FORM MUST BE COMPLETED AND RETURNED WITH YOUR PROPOSAL

RFP TITLE: **UTILITIES MOTOR AND PUMP REPAIR SERVICES**

RFP NUMBER: **2025-40**

RFP OPENING DATE & TIME: **September 10, 2025 at 2:00 pm**

RFP OPENING LOCATION: **City Hall Training Room at Ormond Beach City Hall**

PRE-PROPOSAL MEETING DATE & TIME: **None**

PRE-SUBMITTAL MEETING: **N/A**

Submittals Received After The Above Date And Time Will Not Be Accepted.

PROPOSER'S NAME: _____

PROPOSER'S MAILING ADDRESS: _____

CITY-STATE-ZIP: _____

F.E.I.N.: _____

PHONE NUMBER: _____

EMAIL: _____

If returning as a "No Submittal", please state reason (s) _____

I certify that this Proposal is made without prior understanding, agreement, or connection with any corporation, firm, or person submitting a Proposal for the same materials, services, supplies, or equipment, and is in all respects fair and made without collusion or fraud. I agree to abide by all conditions of this RFP and certify that I am authorized to sign this RFP for the Proposer. In submitting a RFP to the City of Ormond Beach, the Proposer offers and agrees that if the Proposal is accepted, the Proposer will convey, assign or transfer to the City of Ormond Beach all rights, title, and interest in and to all causes of action it may now or hereafter acquire under the Antitrust laws of the United States and the State of Florida for price fixing relating to the particular commodities or services purchased or acquired by the City of Ormond Beach. At the City's discretion, such assignment shall be made and become effective at the time the City tenders final payment to the Proposer.

X _____
AUTHORIZED SIGNATURE (MANUAL)

NAME (TYPED)

TITLE

DATED

GENERAL CONDITIONS

PUBLIC ENTITY CRIMES: A person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a proposal on a contract to provide any goods or services to a public entity, may not submit a proposal on a contract with a public entity for the construction or repair of a public building or public work, may not submit Proposals on leases or real property to a public entity, may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity, and may not transact business with any public entity in excess of the threshold amount provided in Section 287.017, for CATEGORY TWO for a period of 36 months from the date of being placed on the convicted vendor list.

DISCRIMINATION: Pursuant to Section 287.134(2)(a), Florida Statutes, an entity or affiliate who has been placed on the discriminatory vendor list may not submit a bid or proposal on a contract to provide any goods or services to a public entity, may not submit a bid or proposal on a contract with a public entity for the construction or repair of a public building or public work, may not submit bid or proposal on leases of real property to a public entity, may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity, and may not transact business with any public entity.

PUBLIC RECORDS/NON-CONFIDENTIALITY OF BIDS AND/OR PROPOSALS. The City of Ormond Beach cannot and does not warrant the confidentiality of any information submitted in response to this solicitation. Florida law provides that municipal records shall at all times be open for personal inspection by any person, Section 119.01, F.S., The Public Records Law. Information and materials received by the City of Ormond Beach in connection with all Proposers' response shall be deemed to be public records subject to public inspection upon award, recommendation for award, or 30 days after bid opening, whichever occurs first. Section 119.071, F.S.

DISTRIBUTION OF BIDS AND RFP'S: The City uses the services of DemandStar (www.demandstar.com) to distribute its bids and RFP's on-line on the Internet. If you have received a copy of this RFP from any source other than DemandStar, please be aware that you may not have received the latest version of the RFP or any related addendums.

SUBMISSION OF RESPONSES: All Submittals shall be delivered in a sealed envelope. The Request for Proposals (RFP) number, title, and opening date shall be clearly displayed on the outside of the sealed envelope (and on the outside of any express shipping package). The delivery of said submittal to the Purchasing Office on or before the specified opening date and time is solely and strictly the responsibility of the Submitter. Any submittal received by the Purchasing Office after the specified date and time will not be accepted. Submittals must be presented on forms provided by the City. No other forms will be accepted. Responses submitted by telephone, fax or email will not be

considered. No Submittal may be modified after opening. No Submittal may be withdrawn after opening for a period of ninety (90) days unless otherwise specified.

EXECUTION OF SUBMITTAL: Submittals must contain a manual signature of authorized representative in the space(s) provided. Submittals must be typed or printed in ink. Use of erasable ink is not permitted. All corrections made by Submitter to any Submittal entry must be initialed. The company name and Federal Employer Identification Number (F.E.I.N.) number shall appear in the space(s) provided.

RFP OPENING: Submittals shall be opened and the name of the submitters shall be read publicly. No discussion of the Submittals will occur at this time.

SUBMITTAL TABULATION: The RFP Tabulation will be posted on Demandstar (www.demandstar.com). Any submitter wishing to receive a paper copy of the tabulation is required to enclose a stamped, self-addressed envelope with their Submittal response.

CLARIFICATION/CORRECTION OF RFP ENTRY: The City of Ormond Beach reserves the right to allow for the clarification of questionable entries and for the correction of obvious mistakes.

INTERPRETATION: Any questions concerning conditions and specifications shall be directed to the Purchasing Coordinator rob.hart@ormondbeach.org. Those interpretations which may affect the eventual outcome of this Submittal will be furnished in writing to all prospective Submitters. No interpretation shall be considered binding unless provided in writing by the City of Ormond Beach.

PROCUREMENT COMMUNICATION PROTOCOL: To protect the integrity of the procurement process, respondents, suppliers, contractors, sub-contractors or person acting on behalf of any of the above are prohibited from all communications regarding the solicitation with City staff, City consultants, City legal counsel, City agents, or elected officials unless such communication is specifically authorized in the City's solicitation or addenda. Violation of this provision may be grounds for rejecting a response.

MINORITY POLICIES: The City of Ormond Beach, Florida, encourages the full participation of Disadvantaged and Women Business Enterprises (D&WBE) in the provision of goods and services.

RESPONSIBILITY DETERMINATION: Pursuant to the provisions of Florida Statutes Chapter 287.05701, the City does not request or consider a vendor's social, political, or ideological interests in making a responsibility determination.

LICENSES AND PERMITS: The Vendor/Contractor is responsible for obtaining all necessary permits and licenses to comply with all Federal, State, local laws, rules and regulations required to perform work in accordance with the specifications.

ADDITIONAL TERMS AND CONDITIONS: The City of Ormond Beach reserves the right to reject Submittals containing any additional terms or conditions not specifically requested in the original conditions and specifications.

TAXES: The City of Ormond Beach is exempt from Federal Excise Taxes and all sales taxes.

SILENCE OF SPECIFICATIONS: The apparent silence of any specification and any supplemental specifications as to any details or the omission from same of any detailed description concerning any point shall be regarded as meaning that only the best commercial practices are to prevail and that only materials of first quality and correct type, size, and design are to be used. All workmanship is to be first quality. All interpretations of the specifications shall be made upon the basis of this statement.

ASSIGNMENT: Any purchase order or contract issued pursuant to a Submittal and the monies which may become due hereunder are not assignable except with the prior written approval of the City Manager or City Commissioner, whichever authorized the purchase or Agreement.

LIABILITY: The Contractor shall hold and save the City of Ormond Beach, its officers, agents, and employees harmless against claims by third parties resulting from the Contractor's or supplier's breach of contract or negligence, including all attorney's fees and costs, and shall pay any and all damages, fees, and costs assessed on behalf of the City. The City expressly reserves all rights, privileges and benefits of sovereign immunity.

PATENTS AND ROYALTIES: The Contractor, without exception, shall indemnify and save harmless the City of Ormond Beach and its employees from liability of any kind, including cost and expenses for or on account of any copyrighted, patented, or unpatented invention, process, or article manufactured or used in the performance of the contract, including its use by the City of Ormond Beach. If the Contractor uses any design, device, or materials covered by letters, patent or copyright, it is mutually agreed and understood without exception that the Submittal prices shall include all royalties or cost arising from the use of such design, device, or materials in any way involved in the work.

NON-APPROPRIATION OF FUNDS: In the event sufficient budget funds are not available for a new fiscal period, the CITY shall notify the VENDOR/CONTRACTOR of such occurrence and the contract shall terminate on the last day of the current fiscal period, without any penalty or expense to the CITY of any kind whatsoever.

AWARDS: The CITY reserves the right, in its sole discretion, as the best interest of the CITY may require, to make award(s) by individual item, group of items, all or none, or a combination thereof; on a geographical basis and/or with one or more vendors, contractors, consultants or specialists; or to reject any and all Submittals or waive any minor irregularity or technicality in the Submittals received.

OTHER AGENCIES: All Bidder(s) awarded contracts from this bid or proposal may, permit any municipality or other government agency to participate in the contract under the same prices, terms, and conditions, if agreed to by both parties.

It is understood that at no time will any city, municipality, or other agency be obligated for placing an order for any other city, municipality, or agency: nor will any city, municipality, or agency be obligated for any bills incurred by any other city, municipality, or agency. Further, it is understood that each agency will issue its own purchase orders to the awarded bidder(s).

COMPLIANCE WITH FLORIDA PUBLIC RECORDS LAW:

Contractor expressly agrees that it shall comply with the public records law provided in Florida Statutes, Chapter 119, and specifically to:

- (a) Keep and maintain public records required by the City to perform the contracted service.
- (b) Upon request from the City Clerk, provide the City with a copy of the requested records or allow the records to be inspected or copied within a reasonable time at a cost that does not exceed the cost provided in Chapter 119, Florida Statutes, or as otherwise provided by law.
- (c) Ensure that public records that are exempt or confidential and exempt from public records disclosure requirements are not disclosed except as authorized by law for the duration of the contract term and following completion of the contract if the contractor does not transfer the records to the City.
- (d) Upon completion of the contract, transfer at no cost, to the City all public records in possession of the contractor or keep and maintain public records required by the City to perform the service. If the contractor transfers all public records to the City upon completion of the contract, the contractor shall destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. If the contractor keeps and maintains public records upon the completion of the contract, the contractor shall meet all applicable requirements for retaining public records. All records stored electronically must be provided to the City, upon request from the City Clerk, in a format that is compatible with the information technology systems of the City.
- (e) Failure of the Contractor to comply with Public Records Law as provided by Florida Statutes, Chapter 119, shall subject the Contractor to penalties under Chapter 119.10 and subject this Agreement to termination for cause by the City.

IF THE CONTRACTOR HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO THE CONTRACTOR'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS CONTRACT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT:

CITY CLERK
22 SOUTH BEACH STREET
ORMOND BEACH, FLORIDA 32174
(386)677-0311
CITYCLERK@ORMONDBEACH.ORG
or online at
<https://www.ormondbeach.org/prr>

Ref: Fla. Stat. §119.0701(2016)

THE CITY OF ORMOND BEACH RESERVES THE RIGHT TO REJECT ANY OR ALL PROPOSALS, AND TO WAIVE INFORMALITIES AS MAY BE DEEMED TO BE IN THE BEST INTEREST OF THE CITY.

TERMS AND CONDITIONS

- A. The City of Ormond Beach reserves the right without prejudice to reject any or all proposals, to request clarification of information submitted, and to request additional information of one or more proposers.
- B. The City reserves the right to award the contract to the next most qualified firm if the successful firm fails to execute a contract within two weeks after the award of the contract by the City Commission.
- C. In accordance with federal, State, and local regulations, the firm shall not discriminate under the contract against any person.
- D. The firm shall not assign or transfer any interest in the contract without prior approval of the City Commission.
- E. The City reserves the right to terminate the contract at any time due to the vendor's default under terms of agreement.
- F. Submission of a proposal indicates acceptance by the firm of the conditions contained in this Request for Proposals unless clearly and specifically noted in the proposal submitted and confirmed in the contract between the City of Ormond Beach and the firm selected.
- G. Submittals should include a copy of firm's insurance certificate, Conflict, Non-Conflict of Interest Statement/Litigation Statement, Drug Free Workplace Certificate and E-Verify Statement.

I. OBJECTIVE OF THE REQUEST FOR PROPOSALS

The City of Ormond Beach is a coastal community located in northeast Volusia County, Florida, occupying an area of approximately 38 square miles. The City Utility Service Area extends outside of the City limits into part of unincorporated Volusia County as well as providing service to portions of neighboring Flagler County. Customer data for 2024 included 23,788 active water accounts, of which 16,972 were located within the City limits. Records indicate there were 18,027 active sewer accounts, of which 17,451 were located within City limits. The City's fiscal year begins on October 1 and ends on September 30.

The Utilities Division of the City's Public Works Department is responsible for providing quality potable water, sanitary sewer and reclaimed water services to utility customers in a manner that balances social, environmental, and economic factors. The Utilities Division of the Public Works Department consists of five operating sections: Water Production, Water Reclamation (sometimes referred to as the Wastewater Treatment Facility), Potable Water Distribution, Wastewater Collection & Reclaimed Water Distribution, and Equipment Maintenance.

The Water Production Division is responsible for the safe and efficient operation of the City's Water Treatment Plant (WTP), 38 wells, 3 water storage tanks, and four water distribution booster stations. The WTP has a design capacity of 12.0 million gallons per day.

The Water Reclamation Facility (also referred to as the Wastewater Treatment Facility) is responsible for the safe and efficient treatment of wastewater, the supply of reclaimed water for irrigation, and the subsequent stabilization and disposal of solid wastes produced to ensure the protection of public health and the environment. The City's Water Reclamation Facility is designed to treat sewage at a rate of 8 million gallons per day. The City utilizes 95 sanitary sewer lift stations to transmit wastewater to the Wastewater Reclamation Facility. Meanwhile, the reclaimed water system has a permitted capacity of 10 million gallons per day and utilizes three (3) reclaimed water storage tanks and associated pump stations.

It is the intent of the City of Ormond Beach, Florida to award a contract(s) to the successful proposer(s) of this request for proposals to provide **UTILITIES MOTOR AND PUMP REPAIR SERVICES** on an "as needed" basis.

II. SCOPE OF SERVICES

The work shall be performed on an "as needed basis" for the Utilities Division of the Public Works Department. Awarded firms will be responsible for:

1. Pickup of equipment requested for evaluation and/or repair from affected City of Ormond Beach facility within 72 hours of request.
2. After assessment of equipment, development of a quote for the work necessary to repair to include pricing in accordance with the agreement and timeline to complete the work
3. Execution of work on the equipment, once a Purchase Order referencing the quote has been issued
4. Timely completion of the work
5. Return of repaired equipment within 48 hours of completion of work
6. General responsiveness to requests for evaluation/repair, phone calls and emails

Service under this award will include a full range of pump and electric motor repair services. These services will include but not be limited to inspection, evaluation and repair of vertical turbine, split case centrifugal pumps, centrifugal fans/blowers, lift station pumps, inspection, evaluation and repair of 3-phase electric motors, professional pump and electric motor reports, and other services as needed. Firms selected shall be capable of providing services including, but not limited to, the following:

PUMP REPAIR SERVICES:

Shaft Repair

Shaft Replacement and Bearing Replacement Seal Repair

Seal Replacement

Wear Ring Replacement Impeller Repair Impeller Replacement

Apply Protective Coatings Volute Repair

Volute Replacement Casing Repair Casing Replacement Dynamic Balancing Clean Pump Assembly of Pump

Performance Testing Pump Curves

Provide Detailed Shop Reports, and Recommendations

ELECTRIC MOTOR REPAIR SERVICES:

Repair Shaft

Replace Bearings

Rewind Motor

Dip and Bake Motor

Balance Motor

Motor Diagnostic

MOTOR TESTING SERVICES:

Megging
HiPot Testing
Surge Testing
Voltage Drop Testing
Core Loss Testing
Provide Detailed Shop Reports and Recommendations

III. TERM OF AGREEMENT

The initial term of this agreement shall be for a period of three (3) years and will be automatically renewed for two additional one (1) year periods thereafter unless either party provides at least ninety (90) days prior written notice to the other party of their intent not to renew the agreement. All terms and conditions shall remain firm for the initial three (3) year period and any optional renewal period of this contract based on contractor's acceptance, level of performance and approved funding.

IV. PROPOSAL PROCESS

The firm or individual(s) interested in this contract should include a response to each of the following items in their written proposal:

- A. Title Page: Title page marked, "**UTILITIES MOTOR AND PUMP REPAIR SERVICES**", the firm's name; the name, address and telephone number of a contact person; and the date of the proposal.
- B. Table of Contents: Include a clear identification of the material included in the proposal by page number.
- C. Standard General Requirements: Include Proposer's name and principal address; contact person's name and title; telephone and fax number; FEIN; number of years organization has been in business; number of years your firm has been in business under your present business name; number of years your firm has been in business in work specific to this RFP; names and titles of all officers, partners or individuals doing business under trade name; statement of whether your firm has ever failed to complete work awarded to you; list all claims, arbitrations, administrative hearings and lawsuits brought by or against the Proposer or its predecessor organization(s) during the last five (5) years; list and describe all criminal proceedings or hearings concerning business related offenses in which the Proposer, its principals or officers or predecessor organization(s) were defendants; state whether the Proposer, its principals, officers or predecessor organization(s) have been CONVICTED of a Public Entity Crime, debarred or suspended from bidding by any government entity.

- D. Transmittal Letter: A signed letter of transmittal briefly stating the proposer's understanding of the work to be done, the commitment to perform the work within the time period, a statement why the firm believed itself to be best qualified to perform the engagement and a statement that the proposal is a firm and irrevocable offer for the engagement period. The transmittal letter shall have an original signature of an authorized official of the firm who has been designated to submit the proposal on behalf of the firm.
- E. Technical Qualifications of Firm: Provide a description and overview of firm, including the size, range of activities, licenses, certifications etc. Detail expertise in, and experience with troubleshooting and repair of pumps and electric motors such as lift station pump/motors, well pump/motors, transfer pump/motors, and high service pump/motors (5 HP to 300 HP and up to 5000 GPM) of similar size and materials. (Limit response to two pages maximum) Identify any subcontractors(s) that will be involved if work not performed in house, including address and a description of qualifications. (Limit response to one page maximum per subcontractor)
- F. Technical Qualifications of the Project Team: Identify the primary individuals (Project Team) who will be responsible for supervising, managing and executing the work for this Contract. List all certifications appropriate to the work. (Limit response to one page per person)
- G. References: Using the "List of References" sheet supplied herewith, provide list of six (6) utility clients for whom work has been performed within the past 5 years. Be sure to include:
- Entity/Client
 - Location
 - Year Completed
 - Client contact name, Phone and Email
 - Types of equipment serviced
- H. Responsiveness: Describe your approach to timely completion of work and provide general turnaround times.
- I. Pricing: Provide not to exceed pricing using the Proposal Pricing Form.
- J. Location: Provide shop location(s) where the bulk of work will occur and indicate which member of the Project Team primarily works from each. Provide information on alternate or backup facilities, if available. Points shall be awarded as follows: Within 25 miles of Ormond City Hall (15 points), Within 50 miles of Ormond Beach City Hall (10 points), Within 100 miles of Ormond Beach City Hall (5 points), Beyond 100 miles of Ormond Beach City Hall (0 points)

V. PROPOSAL SUBMITTAL

Please check the contents of your RFP package carefully to ensure that you have in your possession all the necessary documents, as referenced within this RFP, including any addenda. If you are missing any items, please contact the City's Purchasing Coordinator at 386-676-3223, or by e-mail at: rob.hart@ormondbeach.org.

Submission of a proposal pursuant to this RFP shall constitute acknowledgement and acceptance of the terms and conditions set forth herein. Portions of this RFP and the contents of the proposal submitted by the successful proposer may become contractual obligations if an Agreement is awarded. Failure of the successful proposer to accept these obligations may result in cancellation of the award of contract.

The City reserves the right to withdraw this RFP at any time without prior notice. All proposals submitted in response to this RFP become the property of the City of Ormond Beach.

Deadline for Submission: To be considered, proposals must be received no later than 2:00 p.m., September 10, 2025.

Inquiries: Technical questions may arise as firms are preparing their proposals. The City will accept written inquiries regarding this RFP until September 3rd at 4:00 PM. Questions received after that time will not be responded to. Answers to questions that warrant attention of all the potential proposers will be distributed in the form of an addendum. Please direct written inquiries to:

Rob Hart
City of Ormond Beach
22 South Beach Street, Room 102
Ormond Beach, Florida 32174
Telephone: (386) 676-3223
FAX: (386) 676-3374
rob.hart@ormondbeach.org

Signature Requirements: Proposals must be signed by a duly authorized official(s) of the proposing firm. Consortiums, joint ventures, or teams submitting proposals, although permitted and encouraged, will not be considered responsive unless it is established that all contractual responsibility rests solely with one firm or legal entity which shall not be a subsidiary or affiliate with limited resources. Each proposal shall indicate the entity responsible for execution on behalf of the proposal team.

Proposal Delivery: You must submit one (1) unbound original plus one (1) electronic copy on compact disk (CD) or flash drive of the proposal no later than the date and time specified above. Submit proposals to: Rob Hart, Purchasing Coordinator, at City Hall down stairs in Room 102, 22 South Beach Street, Ormond Beach, FL 32174. The RFP title and number shall be plainly marked on the outside of the delivery envelope or

package. It is solely the responsibility of the submitter to ensure that the Proposal is delivered on or before the specified date and time. Late proposals will not be accepted.

Addenda and Supplements to the Request for Proposals (RFP): In the event that it becomes necessary to revise any part of this RFP, or if additional information is necessary to enable the proposing firm to make an adequate interpretation of the provisions of this RFP, a supplement to the RFP will be provided to each firm that has requested a copy of this document.

Rejection Rights: The City of Ormond Beach reserves the right, at any time, to modify, waive or otherwise vary the terms and conditions of this RFP including, but not limited to, the deadlines for submission and submission requirements. The City further reserves the right to reject any or all submittals, to cancel or withdraw this RFP at any time and to negotiate with any party prior to or after submittal of proposals. Selection is also dependent upon the negotiation of a mutually acceptable contract with the successful proposers.

Cost of Proposal Preparation: No reimbursement will be made by the City of Ormond Beach for any costs incurred in the preparation of the proposal or presentation.

Proposals to be in Effect: Each proposal shall state that it is valid for a period of not less than 90 days from date of receipt.

VI. EVALUATION PROCESS AND CRITERIA

The City of Ormond Beach will conduct an evaluation of all proposals, submitted by the deadline, to determine compliance with proposal requirements and mandatory document submissions. The committee will consist of three individuals from the City's public works department. The committee will evaluate proposals and select the Proposer that meets the best interests of the City, and will make a recommendation of Award of Contract to the City Commission.

The City reserves the following rights:

- Modify, extend, or cancel this RFP at any time to obtain additional proposals or for any other reason the City determines to be in its best interest;
- Issue a new RFP with terms and conditions that are the same, similar or substantially different as those set forth in this or a previous RFP in order to obtain additional proposals or for any other reason the City determines to be in its best interest;
- Conduct pre-award discussion and/or pre-award negotiations with any or all responsive and responsible proposer(s) who submit proposals determined to be reasonably acceptable of being selected for award; and, conduct personal interviews or require presentations of any or all proposer(s) prior to selection.

- Request that proposer(s) furnish additional information as the City may reasonably require.
- Accept or reject qualifications or proposals in part or whole, and/or waive any defect or deficiency in any proposal, if in the City's sole judgment, the defect or deficiency is not material in response to this RFP;
- Limit and/or determine the actual contract services to be included in a contract.
- Engage outside experts to assist staff in evaluating the merits and viability of each proposer.
- Obtain information for use in evaluating submittals from any source.
- Verify the information received in the proposal. If a proposer knowingly and willfully submits false information or data, the City of Ormond Beach reserves the right to reject that proposal. If it is determined that an Agreement was awarded as a result of false statements or other data submitted in response to this RFP, the City of Ormond Beach reserves the right to terminate the Agreement.

The City shall be the sole judge of the proposer's qualifications.

Evaluation Criteria:

For the purposes of further evaluation, the responsive proposals will be evaluated on, but shall not be limited to, consideration of the following criteria:

EVALUATION CRITERIA	MAXIMUM POSSIBLE POINTS
Technical Qualifications	20
Technical Qualifications of Project Team	20
References	20
Responsiveness	10
Pricing	10
Location	15
Completeness of Proposal	5
TOTAL	100

VII. PRICING AND REFERENCE SHEETS

The following forms are provided to assist firms with preparing proposals:

UTILITIES MOTOR AND PUMP REPAIR SERVICES**RFP NO. 2025 – 40****LIST OF REFERENCES**

1. Entity/Client		
Location		Year Completed:
Client Contact Name		
Email		Phone:
Types of equipment serviced		

2. Entity/Client		
Location		Year Completed:
Client Contact Name		
Email		Phone:
Types of equipment serviced		

3. Entity/Client		
Location		Year Completed:
Client Contact Name		
Email		Phone:
Types of equipment serviced		

UTILITIES MOTOR AND PUMP REPAIR SERVICES
RFP NO. 2025 – 40
LIST OF REFERENCES

4. Entity/Client		
Location		Year Completed:
Client Contact Name		
Email		Phone:
Types of equipment serviced		

5. Entity/Client		
Location		Year Completed:
Client Contact Name		
Email		Phone:
Types of equipment serviced		

6. Entity/Client		
Location		Year Completed:
Client Contact Name		
Email		Phone:
Types of equipment serviced		

UTILITIES MOTOR AND PUMP REPAIR SERVICES
RFP NO. 2025 – 40
PROPOSAL PRICING –Motor and Pump Repair

Proposer submits the following prices for the work described in this solicitation:

Item of Work	Per (Unit)	Unit Price
1. Trailer Truck Service to transport pump to and from repair facility (time must be reasonable compared to Google Maps estimate. No pay for breakdowns).	HR	\$
2. Crane Truck Service (including operator) for removing and install pump or motor	HR	\$
3. Standard Labor Rate (Mechanic) Monday – Friday, 8:00 am – 5:00 pm	HR	\$
4. Non-Standard Labor Rate (Mechanic) After hours, weekend, and holidays	HR	\$
5. Standard Labor Rate (Machinist) Monday – Friday, 8:00 am – 5:00 pm	HR	\$
6. Non-Standard Labor Rate (Machinist) After hours, weekend, and holidays	HR	\$
7. Tear Down and Inspection	HR	\$
Parts Allowance: Cost plus markup %		____ . ____%

REGISTRATION AND INSURANCE REQUIREMENTS FOR VENDOR/CONTRACTOR WORKING ON CITY PROJECTS

REGISTRATION REQUIREMENTS FOR VENDOR/CONTRACTOR WORKING ON CITY PROJECTS

Registration Requirements

VENDORS doing business within the City Limits must be registered with the City.

Requirements for registering a business are as follows:

Copy of City Business Tax Receipt (where your business is located).

Certificate of Insurance showing General Liability and Workers' Comp (or State Workers' Comp Exemption form).

Application Fee: \$25.00 For more information, contact the City's Business Tax Receipt official at 386-676-3233 or btonline@ormondbeach.org You can apply online here: <https://ormondbeachfl-energovweb.tylerhost.net/apps/selfservice#/home>

State Certified/Registered Contractors

All registered State contractors must be registered with Volusia County. Volusia County Contractor Licensing, 123 W. Indiana Ave., Rm 203, Deland, FL 32720 (386) 736-5957
contractorlicensing@volusia.org
<https://connectlivepermits.org/citizenportal/app/landing>

State certified contractors have the option of registering with Volusia County, or providing information directly to the business tax receipt official, to include copy of State license, certificate of insurance and copy of local business tax receipt. This information is provided with the permit application.

If you have any questions regarding the above requirements, please contact the business tax receipt official at (386) 676-3233 or btonline@ormondbeach.org

EXHIBIT A
Risk Management and Insurance Requirements

A. Payment and Performance Bonds

1. Except as otherwise provided herein, the Contractor shall, prior to beginning performance, deliver to the City, and the City shall record in the public records of Volusia County, Florida, the Contractor's Payment and Performance Bond in an amount equal to the full amount of the Contract.
2.
 - (a) Payment and Performance Bonds shall not be required for any contract except those which are for the construction of a public building, for the prosecution and completion of a public work (as described in Section 180.06, **Florida Statutes**, as amended from time to time) or for repairs upon a public building or public work (as described in Section 180.06, **Florida Statutes**, as amended from time to time).
 - (b) With respect to those Contracts for which Payment and Performance Bonds are otherwise required:
 - i. Unless the City Manager, or his designee, determines such Bond to be necessary to protect the interests of the City, no Contractor shall be required to provide a Payment and Performance Bond for any Contract which is for \$25,000.00 or less.
 - ii. Upon the request of the contractor, good cause shown by the Contractor, and a determination that the public health, safety and welfare will be sufficiently protected, the City Commission may exempt the contractor from the requirement of providing a Payment and Performance Bond for any Contract which is for more than \$25,000.00 but is less than \$200,000.00.
3. The Payment and Performance Bond shall list the Contractor as Principal and be issued by a surety insurer authorized to do business in Florida as a surety and listed as an acceptable surety in the Federal Register.
4. The Payment and Performance Bond shall be executed pursuant to Section 255.05, **Florida Statutes**, and be in a form substantially similar to the form set forth in Section 255.05(3), **Florida Statutes**.
5. The Payment and Performance Bond shall specifically provide coverage for delay damages due to a default by the Contractor.
6. The Payment and Performance Bond shall not make the Contract part of the Bond agreement.

7. In lieu of the Payment and Performance Bond, the Contractor may file with the Finance Director of the City, in an amount equal to the full amount of the Contract, cash, a money order, a certified check, a cashier's check, an irrevocable letter of credit, or a security of a type listed in Part II, Chapter 625, **Florida Statutes**.
8. In the event the surety on any Payment and Performance Bond furnished by the Contractor is declared bankrupt or becomes insolvent, or its right to do business in the State of Florida is terminated, the Contractor shall, within five (5) working days thereafter, substitute another Payment and Performance Bond and surety acceptable to the City.
9. The Contractor is totally and solely responsible for keeping its surety informed as to the Base Contract Price as bid, significant changes in the Project Scope, and the overall progress and completion of the Project for the entire life of the Contract.
10. The payment and performance bond requirements stated herein above shall not be applicable to service-related contracts unless otherwise determined by the City Manager in order to protect the health, safety and welfare of the general public.

B. Contractual Provisions Relative to Risk Management

All contracts for any public works to be performed, and service-related contracts, for or on behalf of the City shall include at a minimum, the following, or substantially similar, provisions:

1. Hold Harmless and Indemnity

The Contractor agrees to assume liability for and indemnify, hold harmless, and defend the City, its commissioners, mayor, officers, employees, agents, and attorneys of, from, and against all liability and expense, including reasonable attorney's fees, in connection with any and all claims, demands, damages, actions, causes of action, and suits in equity of whatever kind or nature, including claims for personal injury, property damage, equitable relief, or loss of use, to the extent caused by the negligence, recklessness, or intentionally wrongful conduct of the Contractor, its agents, officers, contractors, subcontractors, employees, or anyone else employed or utilized by the Contractor in the performance of this Contract. The Contractor's liability hereunder shall include all attorney's fees and costs incurred by the City in the enforcement of this provision.

2. Payment on Behalf of City

The Contractor shall pay all costs of the City's legal defense, as may be selected by the City, for all claims described in the Hold Harmless

paragraph. Such payment on behalf of the City shall be in addition to any and all other legal remedies available to the City and shall not be considered to be the City's exclusive remedy.

3. Loss Control/Safety

Precaution shall be exercised at all times by the Contractor for the protection of all persons, including employees and property. The Contractor shall comply with all applicable laws, regulations and ordinances related to safety and health, shall make special efforts to detect hazardous conditions, and shall take prompt action when loss control/safety measures are reasonably necessary. The City may order work to be stopped if conditions exist that present an immediate danger to persons or property. The Contractor acknowledges that such work stoppage will not shift responsibility for any damages from the Contractor to the City.

4. Service Bond

For Service-related contracts only, the City may require the Contractor to secure a service bond with a minimum \$25,000 coverage limit for the period of the service agreement. The service bond covers dishonest acts of the contractor's employees against the City. A copy of the bond shall be provided to the City when the agreement commences. Service-related contracts include and are not limited to businesses providing janitorial, pest control, general repair, security, carpet cleaning, locksmith, temporary employment, painting, moving services or other contracts as determined in the discretion of the Risk Manager as necessary to minimize loss.

C. Contractor's Insurance

1. General

The Contractor, including service-related contractors, shall purchase and maintain for the entire life of the Project, including any and all approved time extensions, until its final acceptance by the City, such insurance as will protect the Contractor from claims under Workers' Compensation, disability benefit laws or other similar employee benefit laws; from claims for damages because of bodily injury, occupational sickness or disease, or death of Contractor's employees; from claims insured by usual or unusual injury liability coverage; from claims or injury to or destruction of tangible property and from claims insured by usual Commercial General Liability coverage. This includes loss of use resulting therefrom, any or all of which may arise out of the Contractor's operations under the Contract Documents, whether such operations be by the Contractor, by any Subcontractor, or by anyone directly or indirectly employed by any of them or for whose acts any of them may be legally liable. The Contractor's deductibles/self-insured retentions shall be disclosed to the City and may be disapproved by the City, and may be reduced or eliminated at the sole discretion of the City. The Contractor is responsible for the amount of any deductible or self-insured retention.

2. Types of Insurance and Limits of Liability

The insurance required herein shall be written for not less than any limits of liability specified and incorporated as part of the Contract Documents or as required by law, whichever is greater, and shall include and not limited to the following:

- (a)** Workers' Compensation Insurance in statutory limits for the State of Florida with Coverage B - Employer's Liability limits of not less than:

\$100,000 Each Accident Bodily Injury by Accident
\$100,000 Each Employee Bodily Injury by Disease
\$500,000 Policy Limit Bodily Injury by Disease

Certificate of Exemptions. If the contractor has a State-issued Certificate of Exemption, the contractor may provide a copy in place of the requirement for coverage. However, if the contractor subcontracts or retains any other person or entity to perform under the contract, that person or entity must provide proof of workers' compensation insurance as required by law or provide a Certificate of Exemption.

It is the intent of the City that any individual who either contracts directly with the city or performs any work on behalf of any such contractor be covered by workers' compensation insurance or have a valid exemption from said coverage.

(If applicable to the Project, the policy must include benefits under the United States Longshoremen's and Harbor Workers' Act and the Jones Act coverage--all maritime coverage.)

- (b)** Commercial General Liability Insurance shall be written on a coverage form as broad as Insurance Services Office (ISO) Form CG 00 01 11 85, or its successor form, including but not limited to the following coverage (any deviation shall be noted on the Certificates of Insurance):

- a. Premises, Operations, Products and Completed Operations
- b. Owners' & Contractors' Protective
- c. Products & Completed Operation
- d. Explosion, Collapse & Underground Conditions
- e. Blanket Contractual Liability
- f. Personal Injury Liability
- g. Broad Form Property Damage Endorsement, including Completed Operations
- h. Independent Contractors
- i. Watercraft--Owned and Non-Owned (if applicable, endorsement must be included in General Liability policy or a separate Protection & Indemnity Policy must be written)

- j. Pollution Liability (if applicable)
- k. Asbestos Abatement (if applicable)
- l. Fire Damage Liability

Certain coverage outlined above may not be required if they do not relate to the Project, as may be determined at the sole discretion of the City.

Commercial General Liability Coverage shall be written on an occurrence basis and the limits shall be no less and not limited to the following amounts:

Limits (not less than)

\$1 Million Each Occurrence

\$2 Million General Aggregate

\$1 Million Aggregate Products & Completed Operations

NOTE: Commercial General Liability Coverage must be purchased on either a project basis (separate policy per contract) or an endorsement allocating an aggregate limit per location or specified project.

- (c) Automobile Liability Insurance is required if an Automobile(s) is used in the performance of the contract. ISO Symbol 1 (Any Auto), or alternatively a combination of Symbol 2 (Owned Autos), Symbol 8 (Hired Autos), and Symbol 9 (Non-Owned Autos), and limits shall be no less than:

\$1 Million

Combined Single Limit for Bodily Injury
and Property Damage

- (d) Excess Liability**

For contracts \$250,000 or greater an Excess Liability Policy of at least but not limited to \$1,000,000 in addition to the scheduled underlying policies for Commercial General Liability, Automobile Liability and Employers' Liability, the Contractor shall also provide an Excess Liability Policy with a maximum self-insured retention not to exceed \$25,0000 per occurrence.

- (e) Builder's Risk**

Contractor shall purchase Builder's Risk Insurance for any contracts that are deemed to be vertical construction on an All-Risk policy, and shall also include coverage for wind, hail, and named storm. Limits of coverage shall be at least and not limited to the value of the project.

(f) Professional Liability, Malpractice and/or Errors and Omissions

The Contractor shall purchase and maintain professional liability, malpractice, or errors or omissions insurance with minimum limits of \$1,000,000 per occurrence. If a claims made form of coverage is provided, the retroactive date of coverage shall be no later than the inception date of claims made coverage, unless the prior policy was extended indefinitely to cover prior acts. Coverage shall be extended beyond the policy year either by a supplemental extended reporting period (ERP) of as great a duration as is available, and with no less coverage and with reinstated aggregate limits, or by requiring that any new policy provides a retroactive date no later than the inception date of claims made coverage.

D. Requirements for Certificates of Insurance

1. With the execution of the Contract Documents, the Contractor, including service related contractors, shall provide certificates of such insurance acceptable to the City. These certificates and insurance policies shall contain an endorsement that the coverage under the policies will not be canceled, non-renewed or materially changed until at least thirty (30) days' prior written notice of such cancellation, non-renewal or change (except for nonpayment of premium, which shall be ten (10) days) and a copy of the cancellation endorsement signed by an authorized representative of the insurer, be given to the City. The contractor shall be required to replace any expired or canceled policies in like amount and coverage to the satisfaction of the City. The Certificate of Insurance shall be the ACORD FORM 25-S (7/90), or its successor form, and shall be made a part of the Contract Documents.
2. New certificates of insurance shall be provided to the City at least fifteen (15) days prior to coverage renewals.
3. If requested by the City, the contractor shall immediately furnish complete copies of the Contractor's insurance policies, forms and endorsements.
4. For Commercial General Liability coverage the Contractor shall, at the option of the City, provide an indication of the amount of claims payments or reserves chargeable to the aggregate amount of liability coverage. If the Commercial General Liability form of coverage includes an annual aggregate limitation on the amount of insurance provided, a separate project aggregate limit may be required by the City for the given contract.
5. If the Contractor fails to obtain and maintain for the life of the Project the insurance required hereby or to replace any such expired or canceled policy, the City may obtain and maintain such insurance with such company as it deems satisfactory. Any amounts expended by the City in payment of premiums for such insurance shall be deducted by the City from the amount due the Contractor for the work covered by the Contract.

E. Policies of Insurance

- 1.** Except as otherwise provided in this Exhibit, all insurance policies shall be issued by insurers licensed to do business in the State of Florida on an admitted basis or which is an eligible surplus lines insurer in the State of Florida, and any such insuring company is required to have a minimum financial rating of (A-), in the latest edition of "Best's Key Rating Guide", published by A. M. Best Co., Inc., or some similarly nationally recognized rating authority, including Standard and Poors and Demotech.
- 2.** For Workers' Compensation coverage only, self-insurance programs are acceptable with a minimum A- rated reinsurance carrier; written confirmation is required.
- 3.** All policies of insurance or certificates thereof referred to in this Exhibit shall be deposited with the City Clerk.
- 4.** The City shall be named an Additional Insured on General Liability including products and completed operations and Automobile Liability policies of insurance and certificates thereof.

**City of Ormond Beach
Request for Proposals (RFP)
UTILITIES MOTOR AND PUMP REPAIR SERVICES
(RFP No. 2025-40)**

VERIFICATION OF EMPLOYMENT STATUS USING E-VERIFY SYSTEM

1. Undersigned firm warrants it **IS** currently registered with the U.S. Department of Homeland Security's E-Verify system, **and** is compliant with the requirements of Sections 448.09 and 448.095, *Florida Statutes*.
2. Undersigned firm warrants it **has not** had any contracts terminated as a result of violations of Sections 448.09 or 448.095, *Florida Statutes*, that prohibit it from contracting with a public agency.
3. Undersigned firm warrants that if it enters into an agreement with a subcontractor, an express provision shall be included in all of its subcontracts requiring subcontractors, who perform work or provide services pursuant to the contract, to use the E-Verify system to verify employment eligibility of all new employees hired by the subcontractor during the contract term.
4. Undersigned firm understands that any subcontractor must provide the contractor with an affidavit stating that the subcontractor does not employ, contract with, or subcontract with an unauthorized alien, and the contractor understands it shall maintain any such affidavits for the duration of the contract, and the contract with the subcontractor must be immediately terminated if the City has a good faith belief that the subcontractor knowingly violated Section 448.09 (1), *Florida Statutes*.
5. Undersigned firm understands that in the event the City has a good faith belief that the contractor has knowingly violated Section 448.09 (1), *Florida Statutes*, the City shall terminate the contract, and the contractor may not be awarded a public contract for a period of at least one (1) year after the date of termination. The contractor may be held liable for any additional costs incurred by the City as a result of termination of the contract.

COMPANY NAME

AUTHORIZED SIGNATURE

NAME

TITLE

DATE

**City of Ormond Beach
Request for Proposals (RFP)
UTILITIES MOTOR AND PUMP REPAIR SERVICES
(RFP No. 2025-40)**

RFP RESPONSE FORM

THIS RESPONSE IS SUBMITTED TO:

Purchasing Coordinator
City of Ormond Beach
22 S. Beach Street
Ormond Beach, Florida 32174

The undersigned SUBMITTER proposes and agrees, if this Submittal is accepted, to enter into a Contract with the CITY that reflects the items of this Request for Proposal (RFP) and to provide all services, as specified or indicated in the RFP Documents, in full accordance with the terms and conditions set forth in therein.

SUBMITTER accepts all of the terms and conditions of the General Conditions. SUBMITTER will sign the Contract) and submit the Contract security (when applicable) and other documents required by the Contract Documents within ten (10) days after the date of CITY's Notice of Award.

In submitting this information, SUBMITTER represents, as more fully set forth in the Agreement, that:

SUBMITTER has examined copies of all the RFP Documents and of the following Addenda:

Addendum Date

Addendum Number

Receipt of all of which is hereby acknowledged.

This Submittal is genuine and not made in the interest of or on behalf of any undisclosed person, firm or corporation and is not submitted in conformity with any agreement or rules of any group, association, organization or corporation; SUBMITTER has not directly or indirectly induced or solicited any other Submitter to submit a false or sham Submittal; SUBMITTER has not solicited or induced any person, firm or a corporation to refrain from bidding; and SUBMITTER has not sought by collusion to obtain for himself any advantage over any other Bidder or over the CITY.

THIS RESPONSE IS SUBMITTED BY:

COMPANY NAME: _____

VENDOR/CONTRACTOR LICENSE NUMBER: _____

ADDRESS: _____

PHONE NO.: _____ FAX NO.: _____

SUBMITTER'S NAME: _____

(Typed or Printed in Ink)

TITLE: _____

AUTHORIZED SIGNATURE: I, _____
hereby

(Original signature required in each document)

declare that I have read and fully understand the RFP Documents and, including the General Conditions and the Scope of Work, and that I am duly authorized to sign and submit this Submittal.

The CITY reserves the right to reject any and all Submittals, to waive informalities, and to accept any Submittal or parts thereof as the CITY, in its sole discretion, determines to be in the best interest of the CITY.

PROPOSER: PLEASE ENSURE THAT YOU HAVE SIGNED THE RFP RESPONSE FORM OF THIS REQUEST FOR PROPOSAL. OMISSION OF A SIGNATURE ON THAT PAGE MAY RESULT IN REJECTION OF YOUR PROPOSAL.

THIS PAGE MUST BE COMPLETED AND RETURNED WITH YOUR PROPOSAL

City of Ormond Beach
CONFLICT, NON-CONFLICT OF INTEREST STATEMENT
LITIGATION STATEMENT

1.

- [] To the best of our knowledge, the undersigned firm has no potential conflicts of interest due to any other clients or contracts for this project.
- [] The undersigned firm, by attachment to this form, submits information which may be a potential conflict of interest due to other clients or contracts for this project.

2.

- [] The undersigned firm has had no litigation on any project in the last five (5) years.
- [] The undersigned firm, by attachment to this form, submits a summary and disposition of individual cases of litigation during the past five (5) years.

COMPANY NAME

AUTHORIZED SIGNATURE

SIGNER'S NAME (PRINT OR TYPE)

TITLE

DATE

THIS PAGE MUST BE COMPLETED AND RETURNED WITH YOUR PROPOSAL

City of Ormond Beach
Request for Proposals (RFP)
UTILITIES MOTOR AND PUMP REPAIR SERVICES
(RFP No. 2025-40)
CITY OF ORMOND BEACH, FLORIDA
DRUG-FREE WORKPLACE CERTIFICATION

IDENTICAL OR "TIE" SUBMITTALS: Preference shall be given to businesses with drug-free workplace programs. Whenever two or more proposals which are equal in respect to price, quality, and service are received by the State or by any political subdivision for the procurement of commodities or contractual services, a bid received from a business that certifies that it has implemented a drug-free workplace program shall be given preference in the award process. Established procedures for processing tie bids will be followed if none of the tied vendors have a drug-free workplace program. In order to have a drug-free workplace program, a business shall:

- 1) Publish a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the workplace and specifying the actions that will be taken against employees for violations of such prohibition.
- 2) Inform employees about the dangers of drug abuse in the workplace, the business's policy of maintaining a drug-free workplace, any available drug counseling, rehabilitation, and employee assistance programs, and the penalties that may be imposed upon employees for drug abuse violation.
- 3) Give each employee that engages in providing the commodities or contractual services that are under bid a copy of the statement specified in subsection (1).
- 4) In the statement specified in subsection (1), notify the employees that, as a condition of working on the commodities or contractual services that are under bid, the employee will abide by the terms of the statement and will notify the employer of any conviction of, or plea of guilty or nolo contendere to, any violation of Chapter 893 or of any controlled substance law of the United States or any state, for a violation occurring in the workplace no later than five (5) calendar days after such conviction.
- 5) Impose sanctions on, or require the satisfactory participation in a drug abuse assistance or rehabilitation program if such is available in the employee's community, by any employee who is so convicted.
- 6) Make a good faith effort to continue to maintain a drug-free workplace through implementation of this section.

Company Name

Authorized Signature

Print Name

Title



AFFIDAVIT OF COMPLIANCE WITH SECTION 287.138, FLORIDA STATUTES

AFFIDAVIT OF COMPLIANCE WITH SECTION 287.138, FLORIDA STATUTES CONTRACTING WITH FOREIGN ENTITIES OF CONCERN

The undersigned ("Affiant"), on behalf of the entity listed below ("Entity"), hereby attests under penalty of perjury as follows:

1. Affiant is the _____ of _____
(Title) (Business Name)
which does business in the State of Florida, hereinafter called the "Entity".
2. Entity is not owned by the government of a foreign country of concern, as defined in Section 287.138 (1) (c), Florida Statutes.
3. The government of a foreign country of concern does not have a controlling interest in Entity, as defined in Section 287.138 (1)(a), Florida Statutes.
4. Entity is not organized under the laws of, and does not have a principal place of business in, a foreign country of concern.
5. Entity is not owned or controlled by the government of a foreign country of concern.
6. For purposes of this affidavit, a foreign country of concern means the People's Republic of China, the Russian Federation, the Islamic Republic of Iran, the Democratic People's Republic of Korea, the Republic of Cuba, the Venezuelan regime of Nicolas Maduro, or the Syrian Arab Republic, including any agency of or any other entity of significant control of such foreign country of concern, as defined in Section 287.138(1)(c), Florida Statutes.

The undersigned is authorized to execute this affidavit on behalf of the Entity.

Date: _____, 20____ Signed: _____

Entity: _____ Name: _____

Title: _____

STATE OF: _____ COUNTY OF: _____

The foregoing instrument was acknowledged before me by means of ☐physical presence or ☐online notarization, this _____ day of _____, 20____, by _____ and who: ☐ Is personally known to me; or ☐ has produced _____ as identification.

Notary Public, State of Florida at Large:

(seal)

Printed Name/Seal of Notary, Commission and Expiration Date:

My commission expires: _____

This document must be completed and returned with your Submittal

REQUEST FOR PROPOSAL #2025-40
UTILITIES MOTOR AND PUMP REPAIR SERVICES
SEPTEMBER 10, 2025



HERMAN A. GARCIA
FLORIDA ARMATURE WORKS, INC.
2460 SMITH ST.
KISSIMMEE, FL 34744
407.846.1745

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City of Ormond Beach

22 South Beach Street
Ormond Beach, Florida 32174
Telephone (386) 676-3223

REQUEST FOR PROPOSALS

PROPOSER ACKNOWLEDGEMENT FORM

THIS FORM MUST BE COMPLETED AND RETURNED WITH YOUR PROPOSAL

RFP TITLE: **UTILITIES MOTOR AND PUMP REPAIR SERVICES**
RFP NUMBER: **2025-40**
RFP OPENING DATE & TIME: **September 10, 2025 at 2:00 pm**
RFP OPENING LOCATION: **City Hall Training Room at Ormond Beach City Hall**
PRE-PROPOSAL MEETING DATE & TIME: **None**
PRE-SUBMITTAL MEETING: **N/A**

Submittals Received After The Above Date And Time Will Not Be Accepted.

PROPOSER'S NAME: Florida Armature Works, Inc.

PROPOSER'S MAILING ADDRESS: 2460 Smith St.

CITY-STATE-ZIP: Kissimmee, FL 34744

F.E.I.N.: 59-3263174

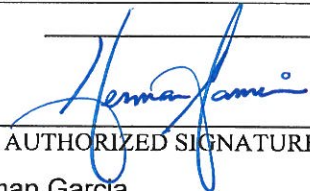
PHONE NUMBER: 407.846.1745

EMAIL: Herman@flarmworks.com

If returning as a "No Submittal", please state reason (s) _____

I certify that this Proposal is made without prior understanding, agreement, or connection with any corporation, firm, or person submitting a Proposal for the same materials, services, supplies, or equipment, and is in all respects fair and made without collusion or fraud. I agree to abide by all conditions of this RFP and certify that I am authorized to sign this RFP for the Proposer. In submitting a RFP to the City of Ormond Beach, the Proposer offers and agrees that if the Proposal is accepted, the Proposer will convey, assign or transfer to the City of Ormond Beach all rights, title, and interest in and to all causes of action it may now or hereafter acquire under the Antitrust laws of the United States and the State of Florida for price fixing relating to the particular commodities or services purchased or acquired by the City of Ormond Beach. At the City's discretion, such assignment shall be made and become effective at the time the City tenders final payment to the Proposer.

X


AUTHORIZED SIGNATURE (MANUAL)

Herman Garcia

NAME (TYPED)

Vice President

TITLE

09/09/2025

DATED

GENERAL CONDITIONS

PUBLIC ENTITY CRIMES: A person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a proposal on a contract to provide any goods or services to a public entity, may not submit a proposal on a contract with a public entity for the construction or repair of a public building or public work, may not submit Proposals on leases or real property to a public entity, may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity, and may not transact business with any public entity in excess of the threshold amount provided in Section 287.017, for CATEGORY TWO for a period of 36 months from the date of being placed on the convicted vendor list.

DISCRIMINATION: Pursuant to Section 287.134(2)(a), Florida Statutes, an entity or affiliate who has been placed on the discriminatory vendor list may not submit a bid or proposal on a contract to provide any goods or services to a public entity, may not submit a bid or proposal on a contract with a public entity for the construction or repair of a public building or public work, may not submit bid or proposal on leases of real property to a public entity, may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity, and may not transact business with any public entity.

PUBLIC RECORDS/NON-CONFIDENTIALITY OF BIDS AND/OR PROPOSALS.

The City of Ormond Beach cannot and does not warrant the confidentiality of any information submitted in response to this solicitation. Florida law provides that municipal records shall at all times be open for personal inspection by any person, Section 119.01, F.S., The Public Records Law. Information and materials received by the City of Ormond Beach in connection with all Proposers' response shall be deemed to be public records subject to public inspection upon award, recommendation for award, or 30 days after bid opening, whichever occurs first. Section 119.071, F.S.

DISTRIBUTION OF BIDS AND RFP'S: The City uses the services of DemandStar (www.demandstar.com) to distribute its bids and RFP's on-line on the Internet. If you have received a copy of this RFP from any source other than DemandStar, please be aware that you may not have received the latest version of the RFP or any related addendums.

SUBMISSION OF RESPONSES: All Submittals shall be delivered in a sealed envelope. The Request for Proposals (RFP) number, title, and opening date shall be clearly displayed on the outside of the sealed envelope (and on the outside of any express shipping package). The delivery of said submittal to the Purchasing Office on or before the specified opening date and time is solely and strictly the responsibility of the Submitter. Any submittal received by the Purchasing Office after the specified date and time will not be accepted. Submittals must be presented on forms provided by the City. No other forms will be accepted. Responses submitted by telephone, fax or email will not be

considered. No Submittal may be modified after opening. No Submittal may be withdrawn after opening for a period of ninety (90) days unless otherwise specified.

EXECUTION OF SUBMITTAL: Submittals must contain a manual signature of authorized representative in the space(s) provided. Submittals must be typed or printed in ink. Use of erasable ink is not permitted. All corrections made by Submitter to any Submittal entry must be initialed. The company name and Federal Employer Identification Number (F.E.I.N.) number shall appear in the space(s) provided.

RFP OPENING: Submittals shall be opened and the name of the submitters shall be read publicly. No discussion of the Submittals will occur at this time.

SUBMITTAL TABULATION: The RFP Tabulation will be posted on Demandstar (www.demandstar.com). Any submitter wishing to receive a paper copy of the tabulation is required to enclose a stamped, self-addressed envelope with their Submittal response.

CLARIFICATION/CORRECTION OF RFP ENTRY: The City of Ormond Beach reserves the right to allow for the clarification of questionable entries and for the correction of obvious mistakes.

INTERPRETATION: Any questions concerning conditions and specifications shall be directed to the Purchasing Coordinator rob.hart@ormondbeach.org. Those interpretations which may affect the eventual outcome of this Submittal will be furnished in writing to all prospective Submitters. No interpretation shall be considered binding unless provided in writing by the City of Ormond Beach.

PROCUREMENT COMMUNICATION PROTOCOL: To protect the integrity of the procurement process, respondents, suppliers, contractors, sub-contractors or person acting on behalf of any of the above are prohibited from all communications regarding the solicitation with City staff, City consultants, City legal counsel, City agents, or elected officials unless such communication is specifically authorized in the City's solicitation or addenda. Violation of this provision may be grounds for rejecting a response.

MINORITY POLICIES: The City of Ormond Beach, Florida, encourages the full participation of Disadvantaged and Women Business Enterprises (D&WBE) in the provision of goods and services.

RESPONSIBILITY DETERMINATION: Pursuant to the provisions of Florida Statutes Chapter 287.05701, the City does not request or consider a vendor's social, political, or ideological interests in making a responsibility determination.

LICENSES AND PERMITS: The Vendor/Contractor is responsible for obtaining all necessary permits and licenses to comply with all Federal, State, local laws, rules and regulations required to perform work in accordance with the specifications.

ADDITIONAL TERMS AND CONDITIONS: The City of Ormond Beach reserves the right to reject Submittals containing any additional terms or conditions not specifically requested in the original conditions and specifications.

TAXES: The City of Ormond Beach is exempt from Federal Excise Taxes and all sales taxes.

SILENCE OF SPECIFICATIONS: The apparent silence of any specification and any supplemental specifications as to any details or the omission from same of any detailed description concerning any point shall be regarded as meaning that only the best commercial practices are to prevail and that only materials of first quality and correct type, size, and design are to be used. All workmanship is to be first quality. All interpretations of the specifications shall be made upon the basis of this statement.

ASSIGNMENT: Any purchase order or contract issued pursuant to a Submittal and the monies which may become due hereunder are not assignable except with the prior written approval of the City Manager or City Commissioner, whichever authorized the purchase or Agreement.

LIABILITY: The Contractor shall hold and save the City of Ormond Beach, its officers, agents, and employees harmless against claims by third parties resulting from the Contractor's or supplier's breach of contract or negligence, including all attorney's fees and costs, and shall pay any and all damages, fees, and costs assessed on behalf of the City. The City expressly reserves all rights, privileges and benefits of sovereign immunity.

PATENTS AND ROYALTIES: The Contractor, without exception, shall indemnify and save harmless the City of Ormond Beach and its employees from liability of any kind, including cost and expenses for or on account of any copyrighted, patented, or unpatented invention, process, or article manufactured or used in the performance of the contract, including its use by the City of Ormond Beach. If the Contractor uses any design, device, or materials covered by letters, patent or copyright, it is mutually agreed and understood without exception that the Submittal prices shall include all royalties or cost arising from the use of such design, device, or materials in any way involved in the work.

NON-APPROPRIATION OF FUNDS: In the event sufficient budget funds are not available for a new fiscal period, the CITY shall notify the VENDOR/CONTRACTOR of such occurrence and the contract shall terminate on the last day of the current fiscal period, without any penalty or expense to the CITY of any kind whatsoever.

AWARDS: The CITY reserves the right, in its sole discretion, as the best interest of the CITY may require, to make award(s) by individual item, group of items, all or none, or a combination thereof; on a geographical basis and/or with one or more vendors, contractors, consultants or specialists; or to reject any and all Submittals or waive any minor irregularity or technicality in the Submittals received.

OTHER AGENCIES: All Bidder(s) awarded contracts from this bid or proposal may, permit any municipality or other government agency to participate in the contract under the same prices, terms, and conditions, if agreed to by both parties.

It is understood that at no time will any city, municipality, or other agency be obligated for placing an order for any other city, municipality, or agency: nor will any city, municipality, or agency be obligated for any bills incurred by any other city, municipality, or agency. Further, it is understood that each agency will issue its own purchase orders to the awarded bidder(s).

COMPLIANCE WITH FLORIDA PUBLIC RECORDS LAW:

Contractor expressly agrees that it shall comply with the public records law provided in Florida Statutes, Chapter 119, and specifically to:

- (a) Keep and maintain public records required by the City to perform the contracted service.
- (b) Upon request from the City Clerk, provide the City with a copy of the requested records or allow the records to be inspected or copied within a reasonable time at a cost that does not exceed the cost provided in Chapter 119, Florida Statutes, or as otherwise provided by law.
- (c) Ensure that public records that are exempt or confidential and exempt from public records disclosure requirements are not disclosed except as authorized by law for the duration of the contract term and following completion of the contract if the contractor does not transfer the records to the City.
- (d) Upon completion of the contract, transfer at no cost, to the City all public records in possession of the contractor or keep and maintain public records required by the City to perform the service. If the contractor transfers all public records to the City upon completion of the contract, the contractor shall destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. If the contractor keeps and maintains public records upon the completion of the contract, the contractor shall meet all applicable requirements for retaining public records. All records stored electronically must be provided to the City, upon request from the City Clerk, in a format that is compatible with the information technology systems of the City.
- (e) Failure of the Contractor to comply with Public Records Law as provided by Florida Statutes, Chapter 119, shall subject the Contractor to penalties under Chapter 119.10 and subject this Agreement to termination for cause by the City.

IF THE CONTRACTOR HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO THE CONTRACTOR'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS CONTRACT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT:

CITY CLERK
22 SOUTH BEACH STREET
ORMOND BEACH, FLORIDA 32174
(386)677-0311
CITYCLERK@ORMONDBEACH.ORG
or online at
<https://www.ormondbeach.org/prr>

Ref: Fla. Stat. §119.0701(2016)

THE CITY OF ORMOND BEACH RESERVES THE RIGHT TO REJECT ANY OR ALL PROPOSALS, AND TO WAIVE INFORMALITIES AS MAY BE DEEMED TO BE IN THE BEST INTEREST OF THE CITY.

TERMS AND CONDITIONS

- A. The City of Ormond Beach reserves the right without prejudice to reject any or all proposals, to request clarification of information submitted, and to request additional information of one or more proposers.
- B. The City reserves the right to award the contract to the next most qualified firm if the successful firm fails to execute a contract within two weeks after the award of the contract by the City Commission.
- C. In accordance with federal, State, and local regulations, the firm shall not discriminate under the contract against any person.
- D. The firm shall not assign or transfer any interest in the contract without prior approval of the City Commission.
- E. The City reserves the right to terminate the contract at any time due to the vendor's default under terms of agreement.
- F. Submission of a proposal indicates acceptance by the firm of the conditions contained in this Request for Proposals unless clearly and specifically noted in the proposal submitted and confirmed in the contract between the City of Ormond Beach and the firm selected.
- G. Submittals should include a copy of firm's insurance certificate, Conflict, Non-Conflict of Interest Statement/Litigation Statement, Drug Free Workplace Certificate and E-Verify Statement.

I. OBJECTIVE OF THE REQUEST FOR PROPOSALS

The City of Ormond Beach is a coastal community located in northeast Volusia County, Florida, occupying an area of approximately 38 square miles. The City Utility Service Area extends outside of the City limits into part of unincorporated Volusia County as well as providing service to portions of neighboring Flagler County. Customer data for 2024 included 23,788 active water accounts, of which 16,972 were located within the City limits. Records indicate there were 18,027 active sewer accounts, of which 17,451 were located within City limits. The City's fiscal year begins on October 1 and ends on September 30.

The Utilities Division of the City's Public Works Department is responsible for providing quality potable water, sanitary sewer and reclaimed water services to utility customers in a manner that balances social, environmental, and economic factors. The Utilities Division of the Public Works Department consists of five operating sections: Water Production, Water Reclamation (sometimes referred to as the Wastewater Treatment Facility), Potable Water Distribution, Wastewater Collection & Reclaimed Water Distribution, and Equipment Maintenance.

The Water Production Division is responsible for the safe and efficient operation of the City's Water Treatment Plant (WTP), 38 wells, 3 water storage tanks, and four water distribution booster stations. The WTP has a design capacity of 12.0 million gallons per day.

The Water Reclamation Facility (also referred to as the Wastewater Treatment Facility) is responsible for the safe and efficient treatment of wastewater, the supply of reclaimed water for irrigation, and the subsequent stabilization and disposal of solid wastes produced to ensure the protection of public health and the environment. The City's Water Reclamation Facility is designed to treat sewage at a rate of 8 million gallons per day. The City utilizes 95 sanitary sewer lift stations to transmit wastewater to the Wastewater Reclamation Facility. Meanwhile, the reclaimed water system has a permitted capacity of 10 million gallons per day and utilizes three (3) reclaimed water storage tanks and associated pump stations.

It is the intent of the City of Ormond Beach, Florida to award a contract(s) to the successful proposer(s) of this request for proposals to provide **UTILITIES MOTOR AND PUMP REPAIR SERVICES** on an "as needed" basis.

II. SCOPE OF SERVICES

The work shall be performed on an "as needed basis" for the Utilities Division of the Public Works Department. Awarded firms will be responsible for:

1. Pickup of equipment requested for evaluation and/or repair from affected City of Ormond Beach facility within 72 hours of request.
2. After assessment of equipment, development of a quote for the work necessary to repair to include pricing in accordance with the agreement and timeline to complete the work
3. Execution of work on the equipment, once a Purchase Order referencing the quote has been issued
4. Timely completion of the work
5. Return of repaired equipment within 48 hours of completion of work
6. General responsiveness to requests for evaluation/repair, phone calls and emails

Service under this award will include a full range of pump and electric motor repair services. These services will include but not be limited to inspection, evaluation and repair of vertical turbine, split case centrifugal pumps, centrifugal fans/blowers, lift station pumps, inspection, evaluation and repair of 3-phase electric motors, professional pump and electric motor reports, and other services as needed. Firms selected shall be capable of providing services including, but not limited to, the following:

PUMP REPAIR SERVICES:

Shaft Repair

Shaft Replacement and Bearing Replacement Seal Repair

Seal Replacement

Wear Ring Replacement Impeller Repair Impeller Replacement

Apply Protective Coatings Volute Repair

Volute Replacement Casing Repair Casing Replacement Dynamic Balancing Clean Pump Assembly of Pump

Performance Testing Pump Curves

Provide Detailed Shop Reports, and Recommendations

ELECTRIC MOTOR REPAIR SERVICES:

Repair Shaft

Replace Bearings

Rewind Motor

Dip and Bake Motor

Balance Motor

Motor Diagnostic

MOTOR TESTING SERVICES:

Megging
HiPot Testing
Surge Testing
Voltage Drop Testing
Core Loss Testing
Provide Detailed Shop Reports and Recommendations

III. TERM OF AGREEMENT

The initial term of this agreement shall be for a period of three (3) years and will be automatically renewed for two additional one (1) year periods thereafter unless either party provides at least ninety (90) days prior written notice to the other party of their intent not to renew the agreement. All terms and conditions shall remain firm for the initial three (3) year period and any optional renewal period of this contract based on contractor's acceptance, level of performance and approved funding.

IV. PROPOSAL PROCESS

The firm or individual(s) interested in this contract should include a response to each of the following items in their written proposal:

- A. Title Page: Title page marked, "**UTILITIES MOTOR AND PUMP REPAIR SERVICES**", the firm's name; the name, address and telephone number of a contact person; and the date of the proposal.
- B. Table of Contents: Include a clear identification of the material included in the proposal by page number.
- C. Standard General Requirements: Include Proposer's name and principal address; contact person's name and title; telephone and fax number; FEIN; number of years organization has been in business; number of years your firm has been in business under your present business name; number of years your firm has been in business in work specific to this RFP; names and titles of all officers, partners or individuals doing business under trade name; statement of whether your firm has ever failed to complete work awarded to you; list all claims, arbitrations, administrative hearings and lawsuits brought by or against the Proposer or its predecessor organization(s) during the last five (5) years; list and describe all criminal proceedings or hearings concerning business related offenses in which the Proposer, its principals or officers or predecessor organization(s) were defendants; state whether the Proposer, its principals, officers or predecessor organization(s) have been CONVICTED of a Public Entity Crime, debarred or suspended from bidding by any government entity.

- D. Transmittal Letter: A signed letter of transmittal briefly stating the proposer's understanding of the work to be done, the commitment to perform the work within the time period, a statement why the firm believed itself to be best qualified to perform the engagement and a statement that the proposal is a firm and irrevocable offer for the engagement period. The transmittal letter shall have an original signature of an authorized official of the firm who has been designated to submit the proposal on behalf of the firm.
- E. Technical Qualifications of Firm: Provide a description and overview of firm, including the size, range of activities, licenses, certifications etc. Detail expertise in, and experience with troubleshooting and repair of pumps and electric motors such as lift station pump/motors, well pump/motors, transfer pump/motors, and high service pump/motors (5 HP to 300 HP and up to 5000 GPM) of similar size and materials. (Limit response to two pages maximum) Identify any subcontractors(s) that will be involved if work not performed in house, including address and a description of qualifications. (Limit response to one page maximum per subcontractor)
- F. Technical Qualifications of the Project Team: Identify the primary individuals (Project Team) who will be responsible for supervising, managing and executing the work for this Contract. List all certifications appropriate to the work. (Limit response to one page per person)
- G. References: Using the "List of References" sheet supplied herewith, provide list of six (6) utility clients for whom work has been performed within the past 5 years. Be sure to include:
- Entity/Client
 - Location
 - Year Completed
 - Client contact name, Phone and Email
 - Types of equipment serviced
- H. Responsiveness: Describe your approach to timely completion of work and provide general turnaround times.
- I. Pricing: Provide not to exceed pricing using the Proposal Pricing Form.
- J. Location: Provide shop location(s) where the bulk of work will occur and indicate which member of the Project Team primarily works from each. Provide information on alternate or backup facilities, if available. Points shall be awarded as follows: Within 25 miles of Ormond City Hall (15 points), Within 50 miles of Ormond Beach City Hall (10 points), Within 100 miles of Ormond Beach City Hall (5 points), Beyond 100 miles of Ormond Beach City Hall (0 points)

V. PROPOSAL SUBMITTAL

Please check the contents of your RFP package carefully to ensure that you have in your possession all the necessary documents, as referenced within this RFP, including any addenda. If you are missing any items, please contact the City's Purchasing Coordinator at 386-676-3223, or by e-mail at: rob.hart@ormondbeach.org.

Submission of a proposal pursuant to this RFP shall constitute acknowledgement and acceptance of the terms and conditions set forth herein. Portions of this RFP and the contents of the proposal submitted by the successful proposer may become contractual obligations if an Agreement is awarded. Failure of the successful proposer to accept these obligations may result in cancellation of the award of contract.

The City reserves the right to withdraw this RFP at any time without prior notice. All proposals submitted in response to this RFP become the property of the City of Ormond Beach.

Deadline for Submission: To be considered, proposals must be received no later than 2:00 p.m., September 10, 2025.

Inquiries: Technical questions may arise as firms are preparing their proposals. The City will accept written inquiries regarding this RFP until September 3rd at 4:00 PM. Questions received after that time will not be responded to. Answers to questions that warrant attention of all the potential proposers will be distributed in the form of an addendum. Please direct written inquiries to:

Rob Hart
City of Ormond Beach
22 South Beach Street, Room 102
Ormond Beach, Florida 32174
Telephone: (386) 676-3223
FAX: (386) 676-3374
rob.hart@ormondbeach.org

Signature Requirements: Proposals must be signed by a duly authorized official(s) of the proposing firm. Consortiums, joint ventures, or teams submitting proposals, although permitted and encouraged, will not be considered responsive unless it is established that all contractual responsibility rests solely with one firm or legal entity which shall not be a subsidiary or affiliate with limited resources. Each proposal shall indicate the entity responsible for execution on behalf of the proposal team.

Proposal Delivery: You must submit one (1) unbound original plus one (1) electronic copy on compact disk (CD) or flash drive of the proposal no later than the date and time specified above. Submit proposals to: Rob Hart, Purchasing Coordinator, at City Hall down stairs in Room 102, 22 South Beach Street, Ormond Beach, FL 32174. The RFP title and number shall be plainly marked on the outside of the delivery envelope or

package. It is solely the responsibility of the submitter to ensure that the Proposal is delivered on or before the specified date and time. Late proposals will not be accepted.

Addenda and Supplements to the Request for Proposals (RFP): In the event that it becomes necessary to revise any part of this RFP, or if additional information is necessary to enable the proposing firm to make an adequate interpretation of the provisions of this RFP, a supplement to the RFP will be provided to each firm that has requested a copy of this document.

Rejection Rights: The City of Ormond Beach reserves the right, at any time, to modify, waive or otherwise vary the terms and conditions of this RFP including, but not limited to, the deadlines for submission and submission requirements. The City further reserves the right to reject any or all submittals, to cancel or withdraw this RFP at any time and to negotiate with any party prior to or after submittal of proposals. Selection is also dependent upon the negotiation of a mutually acceptable contract with the successful proposers.

Cost of Proposal Preparation: No reimbursement will be made by the City of Ormond Beach for any costs incurred in the preparation of the proposal or presentation.

Proposals to be in Effect: Each proposal shall state that it is valid for a period of not less than 90 days from date of receipt.

VI. EVALUATION PROCESS AND CRITERIA

The City of Ormond Beach will conduct an evaluation of all proposals, submitted by the deadline, to determine compliance with proposal requirements and mandatory document submissions. The committee will consist of three individuals from the City's public works department. The committee will evaluate proposals and select the Proposer that meets the best interests of the City, and will make a recommendation of Award of Contract to the City Commission.

The City reserves the following rights:

- Modify, extend, or cancel this RFP at any time to obtain additional proposals or for any other reason the City determines to be in its best interest;
- Issue a new RFP with terms and conditions that are the same, similar or substantially different as those set forth in this or a previous RFP in order to obtain additional proposals or for any other reason the City determines to be in its best interest;
- Conduct pre-award discussion and/or pre-award negotiations with any or all responsive and responsible proposer(s) who submit proposals determined to be reasonably acceptable of being selected for award; and, conduct personal interviews or require presentations of any or all proposer(s) prior to selection.

- Request that proposer(s) furnish additional information as the City may reasonably require.
- Accept or reject qualifications or proposals in part or whole, and/or waive any defect or deficiency in any proposal, if in the City's sole judgment, the defect or deficiency is not material in response to this RFP;
- Limit and/or determine the actual contract services to be included in a contract.
- Engage outside experts to assist staff in evaluating the merits and viability of each proposer.
- Obtain information for use in evaluating submittals from any source.
- Verify the information received in the proposal. If a proposer knowingly and willfully submits false information or data, the City of Ormond Beach reserves the right to reject that proposal. If it is determined that an Agreement was awarded as a result of false statements or other data submitted in response to this RFP, the City of Ormond Beach reserves the right to terminate the Agreement.

The City shall be the sole judge of the proposer's qualifications.

Evaluation Criteria:

For the purposes of further evaluation, the responsive proposals will be evaluated on, but shall not be limited to, consideration of the following criteria:

EVALUATION CRITERIA	MAXIMUM POSSIBLE POINTS
Technical Qualifications	20
Technical Qualifications of Project Team	20
References	20
Responsiveness	10
Pricing	10
Location	15
Completeness of Proposal	5
TOTAL	100

VII. PRICING AND REFERENCE SHEETS

The following forms are provided to assist firms with preparing proposals:

UTILITIES MOTOR AND PUMP REPAIR SERVICES
RFP NO. 2025 – 40
LIST OF REFERENCES

1. Entity/Client	New Smyrna Utilities		
Location	Port Orange, FL	Year Completed:	Ongoing
Client Contact Name	Matt Johnson		
Email	mjohnson@nsbufl.com	Phone:	386.424.3182
Types of equipment serviced			
Repair all brands of submersible pumps (ABS, Flygts, Hydr-Matic, Barnes, etc.) Vertical and Horizontal motors, horizontal split case pumps and vertical turbines			

2. Entity/Client	City of Ocala		
Location	Ocala, FL	Year Completed:	Ongoing
Client Contact Name	Luis Acosta		
Email	lacosta@ocalafl.org	Phone:	352.629.8456
Types of equipment serviced			
Electric Motor Repair, Split Case and Vertical Turbine Pumps			

3. Entity/Client	Toho Water Authority		
Location	Kissimmee, FL	Year Completed:	Ongoing
Client Contact Name	Matthew Radaskiewicz		
Email	mradaski@tohowater.com	Phone:	
Types of equipment serviced			
Repaired all Vertical and Horizontal Motors, Submersible Pumps (over 350 lift stations), Vertical turbines and horizontal split case pumps.			

UTILITIES MOTOR AND PUMP REPAIR SERVICES
RFP NO. 2025 – 40
LIST OF REFERENCES

4. Entity/Client	Indian River Utilities		
Location	Vero Beach, FL	Year Completed:	Ongoing
Client Contact Name	Kevin Gibson		
Email	kgibson@IRCgov.com	Phone:	772.770.5244
Types of equipment serviced			
Repairs for all Electric Motors, Submersible Pumps, Split Case Pumps and Vertical Turbines			

5. Entity/Client	Hernando County Utilities		
Location	Brooksville, FL	Year Completed:	Ongoing
Client Contact Name	Larry Cooper		
Email	Lcooper@co.hernando.fl.us	Phone:	352.754.4773
Types of equipment serviced			
Repair of Electric Motors and Submersible Pumps			

6. Entity/Client	Town of Jupiter Utilites		
Location	Jupiter, FL	Year Completed:	Ongoing
Client Contact Name	Christopher Mckenzie		
Email	chrism@jupiter.fl.us	Phone:	561 741 2605
Types of equipment serviced			
Repairs for Electrical Motors, Split Case Pumps and Vertical Turbines			

UTILITIES MOTOR AND PUMP REPAIR SERVICES**RFP NO. 2025 – 40****PROPOSAL PRICING –Motor and Pump Repair**

Proposer submits the following prices for the work described in this solicitation:

Item of Work	Per (Unit)	Unit Price
1. Trailer Truck Service to transport pump to and from repair facility (time must be reasonable compared to Google Maps estimate. No pay for breakdowns).	HR	\$ \$0.00
2. Crane Truck Service (including operator) for removing and install pump or motor	HR	\$ \$175.00
3. Standard Labor Rate (Mechanic) Monday – Friday, 8:00 am – 5:00 pm	HR	\$ \$45.00
4. Non-Standard Labor Rate (Mechanic) After hours, weekend, and holidays	HR	\$ \$55.00
5. Standard Labor Rate (Machinist) Monday – Friday, 8:00 am – 5:00 pm	HR	\$ \$55.00
6. Non-Standard Labor Rate (Machinist) After hours, weekend, and holidays	HR	\$ \$65.00
7. Tear Down and Inspection	HR	\$
Parts Allowance: Cost plus markup %		15 .__%

REGISTRATION AND INSURANCE REQUIREMENTS FOR VENDOR/CONTRACTOR WORKING ON CITY PROJECTS

REGISTRATION REQUIREMENTS FOR VENDOR/CONTRACTOR WORKING ON CITY PROJECTS

Registration Requirements

VENDORS doing business within the City Limits must be registered with the City.

Requirements for registering a business are as follows:

Copy of City Business Tax Receipt (where your business is located).

Certificate of Insurance showing General Liability and Workers' Comp (or State Workers' Comp Exemption form).

Application Fee: \$25.00 For more information, contact the City's Business Tax Receipt official at 386-676-3233 or btonline@ormondbeach.org You can apply online here: <https://ormondbeachfl-energovweb.tylerhost.net/apps/selfservice#/home>

State Certified/Registered Contractors

All registered State contractors must be registered with Volusia County. Volusia County Contractor Licensing, 123 W. Indiana Ave., Rm 203, Deland, FL 32720 (386) 736-5957 contractorlicensing@volusia.org
<https://connectlivepermits.org/citizenportal/app/landing>

State certified contractors have the option of registering with Volusia County, or providing information directly to the business tax receipt official, to include copy of State license, certificate of insurance and copy of local business tax receipt. This information is provided with the permit application.

If you have any questions regarding the above requirements, please contact the business tax receipt official at (386) 676-3233 or btonline@ormondbeach.org

EXHIBIT A
Risk Management and Insurance Requirements

A. Payment and Performance Bonds

1. Except as otherwise provided herein, the Contractor shall, prior to beginning performance, deliver to the City, and the City shall record in the public records of Volusia County, Florida, the Contractor's Payment and Performance Bond in an amount equal to the full amount of the Contract.
2.
 - (a) Payment and Performance Bonds shall not be required for any contract except those which are for the construction of a public building, for the prosecution and completion of a public work (as described in Section 180.06, **Florida Statutes**, as amended from time to time) or for repairs upon a public building or public work (as described in Section 180.06, **Florida Statutes**, as amended from time to time).
 - (b) With respect to those Contracts for which Payment and Performance Bonds are otherwise required:
 - i. Unless the City Manager, or his designee, determines such Bond to be necessary to protect the interests of the City, no Contractor shall be required to provide a Payment and Performance Bond for any Contract which is for \$25,000.00 or less.
 - ii. Upon the request of the contractor, good cause shown by the Contractor, and a determination that the public health, safety and welfare will be sufficiently protected, the City Commission may exempt the contractor from the requirement of providing a Payment and Performance Bond for any Contract which is for more than \$25,000.00 but is less than \$200,000.00.
3. The Payment and Performance Bond shall list the Contractor as Principal and be issued by a surety insurer authorized to do business in Florida as a surety and listed as an acceptable surety in the Federal Register.
4. The Payment and Performance Bond shall be executed pursuant to Section 255.05, **Florida Statutes**, and be in a form substantially similar to the form set forth in Section 255.05(3), **Florida Statutes**.
5. The Payment and Performance Bond shall specifically provide coverage for delay damages due to a default by the Contractor.
6. The Payment and Performance Bond shall not make the Contract part of the Bond agreement.

7. In lieu of the Payment and Performance Bond, the Contractor may file with the Finance Director of the City, in an amount equal to the full amount of the Contract, cash, a money order, a certified check, a cashier's check, an irrevocable letter of credit, or a security of a type listed in Part II, Chapter 625, **Florida Statutes**.
8. In the event the surety on any Payment and Performance Bond furnished by the Contractor is declared bankrupt or becomes insolvent, or its right to do business in the State of Florida is terminated, the Contractor shall, within five (5) working days thereafter, substitute another Payment and Performance Bond and surety acceptable to the City.
9. The Contractor is totally and solely responsible for keeping its surety informed as to the Base Contract Price as bid, significant changes in the Project Scope, and the overall progress and completion of the Project for the entire life of the Contract.
10. The payment and performance bond requirements stated herein above shall not be applicable to service-related contracts unless otherwise determined by the City Manager in order to protect the health, safety and welfare of the general public.

B. Contractual Provisions Relative to Risk Management

All contracts for any public works to be performed, and service-related contracts, for or on behalf of the City shall include at a minimum, the following, or substantially similar, provisions:

1. Hold Harmless and Indemnity

The Contractor agrees to assume liability for and indemnify, hold harmless, and defend the City, its commissioners, mayor, officers, employees, agents, and attorneys of, from, and against all liability and expense, including reasonable attorney's fees, in connection with any and all claims, demands, damages, actions, causes of action, and suits in equity of whatever kind or nature, including claims for personal injury, property damage, equitable relief, or loss of use, to the extent caused by the negligence, recklessness, or intentionally wrongful conduct of the Contractor, its agents, officers, contractors, subcontractors, employees, or anyone else employed or utilized by the Contractor in the performance of this Contract. The Contractor's liability hereunder shall include all attorney's fees and costs incurred by the City in the enforcement of this provision.

2. Payment on Behalf of City

The Contractor shall pay all costs of the City's legal defense, as may be selected by the City, for all claims described in the Hold Harmless

paragraph. Such payment on behalf of the City shall be in addition to any and all other legal remedies available to the City and shall not be considered to be the City's exclusive remedy.

3. Loss Control/Safety

Precaution shall be exercised at all times by the Contractor for the protection of all persons, including employees and property. The Contractor shall comply with all applicable laws, regulations and ordinances related to safety and health, shall make special efforts to detect hazardous conditions, and shall take prompt action when loss control/safety measures are reasonably necessary. The City may order work to be stopped if conditions exist that present an immediate danger to persons or property. The Contractor acknowledges that such work stoppage will not shift responsibility for any damages from the Contractor to the City.

4. Service Bond

For Service-related contracts only, the City may require the Contractor to secure a service bond with a minimum \$25,000 coverage limit for the period of the service agreement. The service bond covers dishonest acts of the contractor's employees against the City. A copy of the bond shall be provided to the City when the agreement commences. Service-related contracts include and are not limited to businesses providing janitorial, pest control, general repair, security, carpet cleaning, locksmith, temporary employment, painting, moving services or other contracts as determined in the discretion of the Risk Manager as necessary to minimize loss.

C. Contractor's Insurance

1. General

The Contractor, including service-related contractors, shall purchase and maintain for the entire life of the Project, including any and all approved time extensions, until its final acceptance by the City, such insurance as will protect the Contractor from claims under Workers' Compensation, disability benefit laws or other similar employee benefit laws; from claims for damages because of bodily injury, occupational sickness or disease, or death of Contractor's employees; from claims insured by usual or unusual injury liability coverage; from claims or injury to or destruction of tangible property and from claims insured by usual Commercial General Liability coverage. This includes loss of use resulting therefrom, any or all of which may arise out of the Contractor's operations under the Contract Documents, whether such operations be by the Contractor, by any Subcontractor, or by anyone directly or indirectly employed by any of them or for whose acts any of them may be legally liable. The Contractor's deductibles/self-insured retentions shall be disclosed to the City and may be disapproved by the City, and may be reduced or eliminated at the sole discretion of the City. The Contractor is responsible for the amount of any deductible or self-insured retention.

2. Types of Insurance and Limits of Liability

The insurance required herein shall be written for not less than any limits of liability specified and incorporated as part of the Contract Documents or as required by law, whichever is greater, and shall include and not limited to the following:

- (a) Workers' Compensation Insurance in statutory limits for the State of Florida with Coverage B - Employer's Liability limits of not less than:

\$100,000 Each Accident Bodily Injury by Accident
\$100,000 Each Employee Bodily Injury by Disease
\$500,000 Policy Limit Bodily Injury by Disease

Certificate of Exemptions. If the contractor has a State-issued Certificate of Exemption, the contractor may provide a copy in place of the requirement for coverage. However, if the contractor subcontracts or retains any other person or entity to perform under the contract, that person or entity must provide proof of workers' compensation insurance as required by law or provide a Certificate of Exemption.

It is the intent of the City that any individual who either contracts directly with the city or performs any work on behalf of any such contractor be covered by workers' compensation insurance or have a valid exemption from said coverage.

(If applicable to the Project, the policy must include benefits under the United States Longshoremen's and Harbor Workers' Act and the Jones Act coverage--all maritime coverage.)

- (b) Commercial General Liability Insurance shall be written on a coverage form as broad as Insurance Services Office (ISO) Form CG 00 01 11 85, or its successor form, including but not limited to the following coverage (any deviation shall be noted on the Certificates of Insurance):

- a. Premises, Operations, Products and Completed Operations
- b. Owners' & Contractors' Protective
- c. Products & Completed Operation
- d. Explosion, Collapse & Underground Conditions
- e. Blanket Contractual Liability
- f. Personal Injury Liability
- g. Broad Form Property Damage Endorsement, including Completed Operations
- h. Independent Contractors
- i. Watercraft--Owned and Non-Owned (if applicable, endorsement must be included in General Liability policy or a separate Protection & Indemnity Policy must be written)

- j. Pollution Liability (if applicable)
- k. Asbestos Abatement (if applicable)
- l. Fire Damage Liability

Certain coverage outlined above may not be required if they do not relate to the Project, as may be determined at the sole discretion of the City.

Commercial General Liability Coverage shall be written on an occurrence basis and the limits shall be no less and not limited to the following amounts:

Limits (not less than)

\$1 Million Each Occurrence

\$2 Million General Aggregate

\$1 Million Aggregate Products & Completed Operations

NOTE: Commercial General Liability Coverage must be purchased on either a project basis (separate policy per contract) or an endorsement allocating an aggregate limit per location or specified project.

- (c) Automobile Liability Insurance is required if an Automobile(s) is used in the performance of the contract. ISO Symbol 1 (Any Auto), or alternatively a combination of Symbol 2 (Owned Autos), Symbol 8 (Hired Autos), and Symbol 9 (Non-Owned Autos), and limits shall be no less than:

\$1 Million

Combined Single Limit for Bodily Injury and Property Damage

- (d) Excess Liability

For contracts \$250,000 or greater an Excess Liability Policy of at least but not limited to \$1,000,000 in addition to the scheduled underlying policies for Commercial General Liability, Automobile Liability and Employers' Liability, the Contractor shall also provide an Excess Liability Policy with a maximum self-insured retention not to exceed \$25,000 per occurrence.

- (e) Builder's Risk

Contractor shall purchase Builder's Risk Insurance for any contracts that are deemed to be vertical construction on an All-Risk policy, and shall also include coverage for wind, hail, and named storm. Limits of coverage shall be at least and not limited to the value of the project.

(f) Professional Liability, Malpractice and/or Errors and Omissions

The Contractor shall purchase and maintain professional liability, malpractice, or errors or omissions insurance with minimum limits of \$1,000,000 per occurrence. If a claims made form of coverage is provided, the retroactive date of coverage shall be no later than the inception date of claims made coverage, unless the prior policy was extended indefinitely to cover prior acts. Coverage shall be extended beyond the policy year either by a supplemental extended reporting period (ERP) of as great a duration as is available, and with no less coverage and with reinstated aggregate limits, or by requiring that any new policy provides a retroactive date no later than the inception date of claims made coverage.

D. Requirements for Certificates of Insurance

1. With the execution of the Contract Documents, the Contractor, including service related contractors, shall provide certificates of such insurance acceptable to the City. These certificates and insurance policies shall contain an endorsement that the coverage under the policies will not be canceled, non-renewed or materially changed until at least thirty (30) days' prior written notice of such cancellation, non-renewal or change (except for nonpayment of premium, which shall be ten (10) days) and a copy of the cancellation endorsement signed by an authorized representative of the insurer, be given to the City. The contractor shall be required to replace any expired or canceled policies in like amount and coverage to the satisfaction of the City. The Certificate of Insurance shall be the ACORD FORM 25-S (7/90), or its successor form, and shall be made a part of the Contract Documents.
2. New certificates of insurance shall be provided to the City at least fifteen (15) days prior to coverage renewals.
3. If requested by the City, the contractor shall immediately furnish complete copies of the Contractor's insurance policies, forms and endorsements.
4. For Commercial General Liability coverage the Contractor shall, at the option of the City, provide an indication of the amount of claims payments or reserves chargeable to the aggregate amount of liability coverage. If the Commercial General Liability form of coverage includes an annual aggregate limitation on the amount of insurance provided, a separate project aggregate limit may be required by the City for the given contract.
5. If the Contractor fails to obtain and maintain for the life of the Project the insurance required hereby or to replace any such expired or canceled policy, the City may obtain and maintain such insurance with such company as it deems satisfactory. Any amounts expended by the City in payment of premiums for such insurance shall be deducted by the City from the amount due the Contractor for the work covered by the Contract.

E. Policies of Insurance

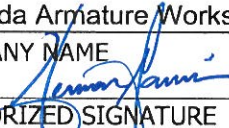
1. Except as otherwise provided in this Exhibit, all insurance policies shall be issued by insurers licensed to do business in the State of Florida on an admitted basis or which is an eligible surplus lines insurer in the State of Florida, and any such insuring company is required to have a minimum financial rating of (A-), in the latest edition of "Best's Key Rating Guide", published by A. M. Best Co., Inc., or some similarly nationally recognized rating authority, including Standard and Poors and Demotech.
2. For Workers' Compensation coverage only, self-insurance programs are acceptable with a minimum A- rated reinsurance carrier; written confirmation is required.
3. All policies of insurance or certificates thereof referred to in this Exhibit shall be deposited with the City Clerk.
4. The City shall be named an Additional Insured on General Liability including products and completed operations and Automobile Liability policies of insurance and certificates thereof.

City of Ormond Beach
Request for Proposals (RFP)
UTILITIES MOTOR AND PUMP REPAIR SERVICES
(RFP No. 2025-40)

VERIFICATION OF EMPLOYMENT STATUS USING E-VERIFY SYSTEM

1. Undersigned firm warrants it **IS** currently registered with the U.S. Department of Homeland Security's E-Verify system, **and** is compliant with the requirements of Sections 448.09 and 448.095, *Florida Statutes*.
2. Undersigned firm warrants it **has not** had any contracts terminated as a result of violations of Sections 448.09 or 448.095, *Florida Statutes*, that prohibit it from contracting with a public agency.
3. Undersigned firm warrants that if it enters into an agreement with a subcontractor, an express provision shall be included in all of its subcontracts requiring subcontractors, who perform work or provide services pursuant to the contract, to use the E-Verify system to verify employment eligibility of all new employees hired by the subcontractor during the contract term.
4. Undersigned firm understands that any subcontractor must provide the contractor with an affidavit stating that the subcontractor does not employ, contract with, or subcontract with an unauthorized alien, and the contractor understands it shall maintain any such affidavits for the duration of the contract, and the contract with the subcontractor must be immediately terminated if the City has a good faith belief that the subcontractor knowingly violated Section 448.09 (1), *Florida Statutes*.
5. Undersigned firm understands that in the event the City has a good faith belief that the contractor has knowingly violated Section 448.09 (1), *Florida Statutes*, the City shall terminate the contract, and the contractor may not be awarded a public contract for a period of at least one (1) year after the date of termination. The contractor may be held liable for any additional costs incurred by the City as a result of termination of the contract.

Florida Armature Works, Inc.

COMPANY NAME


AUTHORIZED SIGNATURE
Herman Garcia

NAME
Vice President

TITLE
09/09/2025

DATE

**City of Ormond Beach
Request for Proposals (RFP)
UTILITIES MOTOR AND PUMP REPAIR SERVICES
(RFP No. 2025-40)**

RFP RESPONSE FORM

THIS RESPONSE IS SUBMITTED TO:

Purchasing Coordinator
City of Ormond Beach
22 S. Beach Street
Ormond Beach, Florida 32174

The undersigned SUBMITTER proposes and agrees, if this Submittal is accepted, to enter into a Contract with the CITY that reflects the items of this Request for Proposal (RFP) and to provide all services, as specified or indicated in the RFP Documents, in full accordance with the terms and conditions set forth therein.

SUBMITTER accepts all of the terms and conditions of the General Conditions. SUBMITTER will sign the Contract) and submit the Contract security (when applicable) and other documents required by the Contract Documents within ten (10) days after the date of CITY's Notice of Award.

In submitting this information, SUBMITTER represents, as more fully set forth in the Agreement, that:

SUBMITTER has examined copies of all the RFP Documents and of the following Addenda:

Addendum Date
N/A

Addendum Number
N/A

Receipt of all of which is hereby acknowledged.

This Submittal is genuine and not made in the interest of or on behalf of any undisclosed person, firm or corporation and is not submitted in conformity with any agreement or rules of any group, association, organization or corporation; SUBMITTER has not directly or indirectly induced or solicited any other Submitter to submit a false or sham Submittal; SUBMITTER has not solicited or induced any person, firm or a corporation to refrain from bidding; and SUBMITTER has not sought by collusion to obtain for himself any advantage over any other Bidder or over the CITY.

THIS RESPONSE IS SUBMITTED BY:

COMPANY NAME: Florida Armature Works, Inc.

VENDOR/CONTRACTOR LICENSE NUMBER: _____

ADDRESS: 2460 Smith St.

Kissimmee, FL 34744

PHONE NO.: 407.846.1745

FAX NO.: 407.846.6129

SUBMITTER'S NAME: Herman Garcia

(Typed or Printed in Ink)

TITLE: Vice President

AUTHORIZED SIGNATURE: I, _____
hereby

(Original signature required in each document)

declare that I have read and fully understand the RFP Documents and, including the General Conditions and the Scope of Work, and that I am duly authorized to sign and submit this Submittal.

The CITY reserves the right to reject any and all Submittals, to waive informalities, and to accept any Submittal or parts thereof as the CITY, in its sole discretion, determines to be in the best interest of the CITY.

PROPOSER: PLEASE ENSURE THAT YOU HAVE SIGNED THE RFP RESPONSE FORM OF THIS REQUEST FOR PROPOSAL. OMISSION OF A SIGNATURE ON THAT PAGE MAY RESULT IN REJECTION OF YOUR PROPOSAL.

THIS PAGE MUST BE COMPLETED AND RETURNED WITH YOUR PROPOSAL

City of Ormond Beach
CONFLICT, NON-CONFLICT OF INTEREST STATEMENT
LITIGATION STATEMENT

1.

☒ To the best of our knowledge, the undersigned firm has no potential conflicts of interest due to any other clients or contracts for this project.

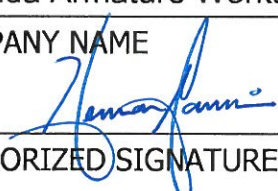
☐ The undersigned firm, by attachment to this form, submits information which may be a potential conflict of interest due to other clients or contracts for this project.

2.

☒ The undersigned firm has had no litigation on any project in the last five (5) years.

☐ The undersigned firm, by attachment to this form, submits a summary and disposition of individual cases of litigation during the past five (5) years.

Florida Armature Works, Inc.

COMPANY NAME


AUTHORIZED SIGNATURE
Herman Garcia

SIGNER'S NAME (PRINT OR TYPE)
Vice President

TITLE
09/09/2055

DATE

THIS PAGE MUST BE COMPLETED AND RETURNED WITH YOUR PROPOSAL

City of Ormond Beach
Request for Proposals (RFP)
UTILITIES MOTOR AND PUMP REPAIR SERVICES
(RFP No. 2025-40)
CITY OF ORMOND BEACH, FLORIDA
DRUG-FREE WORKPLACE CERTIFICATION

IDENTICAL OR "TIE" SUBMITTALS: Preference shall be given to businesses with drug-free workplace programs. Whenever two or more proposals which are equal in respect to price, quality, and service are received by the State or by any political subdivision for the procurement of commodities or contractual services, a bid received from a business that certifies that it has implemented a drug-free workplace program shall be given preference in the award process. Established procedures for processing tie bids will be followed if none of the tied vendors have a drug-free workplace program. In order to have a drug-free workplace program, a business shall:

- 1) Publish a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the workplace and specifying the actions that will be taken against employees for violations of such prohibition.
- 2) Inform employees about the dangers of drug abuse in the workplace, the business's policy of maintaining a drug-free workplace, any available drug counseling, rehabilitation, and employee assistance programs, and the penalties that may be imposed upon employees for drug abuse violation.
- 3) Give each employee that engages in providing the commodities or contractual services that are under bid a copy of the statement specified in subsection (1).
- 4) In the statement specified in subsection (1), notify the employees that, as a condition of working on the commodities or contractual services that are under bid, the employee will abide by the terms of the statement and will notify the employer of any conviction of, or plea of guilty or nolo contendere to, any violation of Chapter 893 or of any controlled substance law of the United States or any state, for a violation occurring in the workplace no later than five (5) calendar days after such conviction.
- 5) Impose sanctions on, or require the satisfactory participation in a drug abuse assistance or rehabilitation program if such is available in the employee's community, by any employee who is so convicted.
- 6) Make a good faith effort to continue to maintain a drug-free workplace through implementation of this section.

N/A

Company Name

Authorized Signature

Print Name

Title



AFFIDAVIT OF COMPLIANCE WITH SECTION 287.138, FLORIDA STATUTES

**AFFIDAVIT OF COMPLIANCE WITH SECTION 287.138, FLORIDA STATUTES
CONTRACTING WITH FOREIGN ENTITIES OF CONCERN**

The undersigned ("Affiant"), on behalf of the entity listed below ("Entity"), hereby attests under penalty of perjury as follows:

1. Affiant is the Vice President of Florida Armature Works, Inc.
(Title) (Business Name)
which does business in the State of Florida, hereinafter called the "Entity".
2. Entity is not owned by the government of a foreign country of concern, as defined in Section 287.138 (1) (c), Florida Statutes.
3. The government of a foreign country of concern does not have a controlling interest in Entity, as defined in Section 287.138 (1)(a), Florida Statutes.
4. Entity is not organized under the laws of, and does not have a principal place of business in, a foreign country of concern.
5. Entity is not owned or controlled by the government of a foreign country of concern.
6. For purposes of this affidavit, a foreign country of concern means the People's Republic of China, the Russian Federation, the Islamic Republic of Iran, the Democratic People's Republic of Korea, the Republic of Cuba, the Venezuelan regime of Nicolas Maduro, or the Syrian Arab Republic, including any agency of or any other entity of significant control of such foreign country of concern, as defined in Section 287.138(1)(c), Florida Statutes.

The undersigned is authorized to execute this affidavit on behalf of the Entity.

Date: September 8th, 2025 Signed: Herman Garcia

Entity: Florida Armature Works, Inc. Name: Herman Garcia

Title: Vice President

STATE OF: Florida COUNTY OF: Orange

The foregoing instrument was acknowledged before me by means of ☐ physical presence or ☐ online notarization, this 8th day of September, 2025

by Herman Garcia and who: ☒ is personally known to me; or

☐ has produced _____ as identification.

Danielle Fernandez

Notary Public, State of Florida at Large:

(seal)

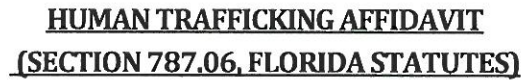
Printed Name/Seal of Notary, Commission and Expiration Date:

My commission expires: April 19, 2027



Danielle Fernandez
Comm.: HH 348257
Expires: April 19, 2027
Notary Public - State of Florida

This document must be completed and returned with your Submittal



Page 329 of 1147

C. Standard General Requirements

Florida Armature Works, Inc
2460 Smith St.
Kissimmee, FL 34744
Phone: 407.846.1745
Fax: 407.846.6129

FEIN – 59-3263174

Florida Armature Works, Inc. is a family owned and operated electric motor and pump repair center located in Kissimmee, FL. Since being established in 1993. Run by President German Garcia, Vice President, Leslie Barnett, and Vice President Herman Garcia, Florida Armature Works repairs multiple types of equipment including Floway turbine pumps, to Flygt submersible pumps, to U.S. Motor or Leeson, we have never shy away from a project that was within our capability. Over the years Florida Armature Works has completed over 10 Different Contracts, and to this day, we have completed them all, without falter. In our 32 years of business, thankfully, we haven't had any lawsuits or arbitrations against our company.

2460 Smith Street
Kissimmee, FL 34744

**FLORIDA
ARMATURE
WORKS, INC.**

Phone: (407) 846-1745
Fax: (407) 846-6129

Letter of Transmittal

September 10th, 2025

City of Ormond Beach
22 South Beach Street
Ormond Beach, Florida 32174

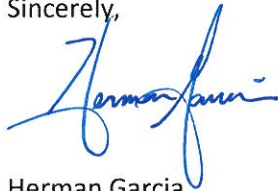
Subject: Utilities Motor and Pump Repair Services

To Whom It May Concern:

We are writing you with the proposal titled "Utilities Motor and Pump Repair Services." The purpose of writing this proposal is to inform the City of Ormond Beach of our qualifications as a firm and its employees, experience in working with municipalities like yourselves, and the expectations you will receive if you decide to work with Florida Armature Works. This Proposal is made without collusion with any other person or entity submitting a proposal pursuant to this RFP.

All decision makers, including myself, have reviewed the proposal and understand what's expected from the awarded bidder. Along with reviewing the proposal we have put together our best effort in gathering all the documentation needed to submit the proposal. We believe our quality as well as turnaround time is best suited for this type of contract as we have already proven ourselves with a larger contract in that past that lasted several years. We hope you will take our proposal into consideration, as our offer is firm for the entire period of this contract.

Sincerely,



Herman Garcia
Vice President

E. Technical Qualifications of Firm:

Florida Armature Works, Inc. is a family owned and operated electric motor and pump repair center located in Kissimmee, FL. Since being established in 1993, we have committed ourselves to our customers by providing quality workmanship and efficient customer service. Our highly skilled technicians have over 100 years of combined experience in the electrical apparatus repair industry. In the past 25 years we have grown from a two man shop repairing pool motors and smaller industrial motors, to 11 full time employees with the capability of working on Motors as large as 800 Horse power. We previously held a contract that serviced over 430 lift stations as well as 10 combined Waste Water Treatment Plants and Water Treatment Plants. Currently, we hold five contracts with various municipalities, from locations far south as Jupiter, FL to far west as Hernando County, FL.

Since the beginning, Florida Armature Works has worked on vast machinery that pumps water or generates power. From Floway turbine pumps, to Flygt submersible pumps, to U.S. Motor or Leeson, we have never shied away from a project that was within our capability. Over the years we have seen an increase in the repairs for submersible pumps, which we would say is our expertise. By having an onsite machine shop this allows us to either repair damaged parts or machine a brand new part to the manufactures specifications. Being able to work on these items in-house, has allowed us to pass the savings onto our customers through lower repair costs. Florida Armature Works does have access to majority of the OEM parts, but we leave it to the discretion of the customer if they want to spend the extra money which can lead to a longer lead time due to availability.

Being a member of EASA (Electrical Apparatus Service Association) allows us to use EASA's many resources such as, direct technical consulting/support, the industry repair standard, education, technical resources, software, management and sales training, industry research, networking and more. This has allowed us to elevate our performance and success. We have recently been added as a Service Warranty Repair Center for the Leeson Motor brand but this does not limit us to the brands of motors we can work on. Listed below are the current brands that we work with on a consistent basis:

<u>Submersible Pumps</u>	<u>Electric Motors</u>	<u>Turbines/Split Case</u>
Flygt	U.S. Motor	Floway Weir
ABS	Leeson	Byron Jackson
Hydro-matic	Baldor	Aurora
EMU	Teco Westinghouse	Deming
Barnes	Marathon	Flotronex
KSB	A.O. Smith	Goulds
Meyers	G.E.	Cornell

Florida Armature Works is located on a ½ acre in Kissimmee, FL in which we occupy two adjacent 5000sqft buildings. In one building all repairs, rewinding and testing are done, while the other holds our fully equipped machine shop, welding and storage. Expansions are currently underway to add a 3 ton bridge crane in our second building for the assembly of longer items as well as to open more space for repairs. We are approximately 4 miles East of Toho Water Authority's pick up location. Work completed by Florida Armature works allows monies spent and taxes paid to be left in the Osceola county area. The capacity of this contract can help with job growth, particular adding new jobs to the Osceola county market. All team members report to our location where all of our repairs are completed, as well as key employees are no more than 15 minutes away in case of emergencies.

Florida Armature Works has a handful of trusted vendors that supply the majority of our replacement parts as well as our fabricating pieces that we use for repairs. These vendors keep common stock items for our needs and typically have them within 1-2 business days shipping notice. Like any Motor Repair Facility, specialty items or back order items are at the discretion of the manufacturer and may take up to several weeks.

List of Equipment:

- Yale Forklift – 6000lbs
- 60 Ton Vertical Press, 55 Ton Ramco Vertical Press
- 100KW/480 Volt Test Panel, 40KW/480 Volts Test Panel
- Namseon Hi-Tech 18 x 60 Lathe, Acra 36 x 120 Lathe (2015)
- Enco 13 x 36 Lathe, Jet 10 24 Lathe, LeBlond 16 x 30 Lathe
- Ex-Cell-O Milling Machine, Ramco Band Saw, Power Matic
- Dyna-Bal D-15 Balance Machine (2015) – 1500lbs capacity
- Lexseco 1801 Core Loss Tester
- (2) 1.5 Ton Cleveland Tramrail Bridge Crane
- Ace Armature Coil Maker, Baker ST103E Surge Tester
- 5 x 4 x 4 Varnish Tank
- 4 x 4 x 4 Steelman Bank Oven, 6 x 6 x 5 Bake Oven
- 48 x 52 x 60 PCP Burn Out Oven, 36 x 42 x 32 PCP Burn Out Oven
- 7.5 Ton Florida Handling System Bridge Crane, 60 ton Portable Hydraulic Puller
- 5 Ton J. Herbert Bridge Crane
- Ford F 450 2004 with a 5K Auto Crane, Dodge Ram 2016 4500 with 5k Auto Crane

F. Technical Qualifications of Project Team:

Being in the Industry for over 40 years, the owner of Florida Armature Works was able to work with many experienced mechanics, winders and machinists. Through those years he developed a camaraderie with these employees which allowed Florida Armature Works to hire them as the company grew. With his ability to teach others, the owner was able hire other service type mechanics and teach them the trait of Electric Motor Repair. Below are our key employees who will be handling the services of Toho Water Authority contract.

German Garcia – Owner

Not only is he the owner, but with his 45 years of experience, he is able to teach new employees the proper steps in the electric motor repair process. During our busy time, he is able to fill in the gap when other core team members are absent as well as delegate tasks to the appropriate team members to complete. Through his 45 year career, he has learned the techniques and teachings of a machinist, he worked for a large manufacturers (Magnetek) rewinding motors, and has managed a crew of 8 employees at a previous motor shop. With his experience, he decided to venture out on his own in 1993 and to this day has grown a two man shop, to 11 full time employees.

Justyne Sansoucy – Mechanic / Submersible Pumps

Started off working in Texas for a motor Manufacturer, working the assembly line. He came on board in March of 2016 in which he mentored under the owner for one year. In that time, he picked up the dismantling and assembling of Submersible pumps quickly and was on his own after 18 months. Through the years he also gained experience through service calls in which he would pull motors with our boom truck as well as laser align them back when installing. His main focus is Submersible pumps and close coupled pumps.

Darrell Lunnon – Shop Foreman / Mechanic

Darrell came to us from a competing motor shop in 2014. In the course of his previous employment, he met our owner and created a good camaraderie in which they always kept in touch. His daily duties consist of quality control, assigning jobs to mechanics, helping with work overflow as well as handling all the paperwork needed for repairs. His experience is one that is on par with the owners, ranging from 4000 Horse power motors to 5 Horse power magnetic drive Motors.

Edy Carcases – Winder

Edy learned how to rewind motors through a family business located in San Juan, Puerto Rico, in the late 80's. Edy has been with Florida Armature works for a combined 18 plus years. He started with the company in 1998 but left for 2 years from 2002-2004 in which he returned back to Florida Armature Works late 2004. His specialty lies in the rewinding process of electric motor repair. From recording electric data through winding coils, to hot spot testing stators for any deficiencies, Edy is going to be involved in the repair process no matter what. Edy is a very dependable employee who has helped our company succeed during the hurricane seasons.

Gary Tordi – Machinist

Gary has been a machinist for 25 plus years. Before coming to Florida Armature he received an opportunity to work for a competing Electric Motor Repair shop where he continued to fine tune his trade as a machinist. He specializes in measuring, examining, and testing completed units in order to detect defects and ensure conformance to specifications, using precision instruments such as micrometers. Whether it's building a shaft sleeve from scratch or rebuilding a shaft by metalizing and trimming it down to factory specifications, his abilities as a machinist are endless.

H. Responsiveness:

Florida Armature Works prides itself in three things; quality workmanship, completion in a timely manner and affordable repair cost. Our process is very simple, once we have received a job for repair, we assign it to one of our team members in which they dismantle the project. From there, our shop foreman and the mechanic will go over what items needed to be repaired and/or replaced. From this inspection, we can give an accurate number of hours on how long it will take to repair the job and what parts need to be replaced. Once the job is quoted, typically within 48 hours of being received, we await on the customer for the Purchase Order for approval. If the customer decides to repair the job, we then will work on completing the item for return, typically 7-10 business days. This is subject to parts being available but we do keep inventory of common used bearings, seals, cable and misc. parts. Please note, once a job is quoted after inspection there is a zero chance for a price increase unless it has exceeded the 30 day quote window from our distributors.

UTILITIES MOTOR AND PUMP REPAIR SERVICES**RFP NO. 2025 – 40****PROPOSAL PRICING –Motor and Pump Repair**

Proposer submits the following prices for the work described in this solicitation:

Item of Work	Per (Unit)	Unit Price
1. Trailer Truck Service to transport pump to and from repair facility (time must be reasonable compared to Google Maps estimate. No pay for breakdowns).	HR	\$ \$0.00
2. Crane Truck Service (including operator) for removing and install pump or motor	HR	\$ \$175.00
3. Standard Labor Rate (Mechanic) Monday – Friday, 8:00 am – 5:00 pm	HR	\$ \$45.00
4. Non-Standard Labor Rate (Mechanic) After hours, weekend, and holidays	HR	\$ \$55.00
5. Standard Labor Rate (Machinist) Monday – Friday, 8:00 am – 5:00 pm	HR	\$ \$55.00
6. Non-Standard Labor Rate (Machinist) After hours, weekend, and holidays	HR	\$ \$65.00
7. Tear Down and Inspection	HR	\$
Parts Allowance: Cost plus markup %		<u>15</u> .__%

J. Location:

Florida Armature Works is located in Kissimmee, Fl. We are 3 miles from Florida's Turnpike which allows us to pick up and deliver north or south fairly quickly and connects us to multiple highways in which we can head east or west. We are approximately 81 miles south of Ormond Beach. All team members report to our location where all of our repairs are completed. Key Members in the previous section live in the county of Osceola where our shop is located and have access to the building in case of emergencies. Our hours of operation are noted as 7:30-4pm, M-F, but a team member is always here before 7 as well as after 4pm.



City of Ormond Beach

22 South Beach Street
Ormond Beach, Florida 32174
Telephone (386) 676-3223

REQUEST FOR PROPOSALS

PROPOSER ACKNOWLEDGEMENT FORM

THIS FORM MUST BE COMPLETED AND RETURNED WITH YOUR PROPOSAL

RFP TITLE: UTILITIES MOTOR AND PUMP REPAIR SERVICES

RFP NUMBER: 2025-40

RFP OPENING DATE & TIME: September 10, 2025 at 2:00 pm

RFP OPENING LOCATION: City Hall Training Room at Ormond Beach City Hall

PRE-PROPOSAL MEETING DATE & TIME: None

PRE-SUBMITTAL MEETING: N/A

Submittals Received After The Above Date And Time Will Not Be Accepted.

PROPOSER'S NAME: Electrical and Mechanical Maintenance Inc.

PROPOSER'S MAILING ADDRESS: 6115 31st Street East

CITY-STATE-ZIP: Bradenton, FL. 34203

F.E.I.N.: 93-4787107

PHONE NUMBER: 941-351-5858

EMAIL: prademaker@electrical-mechanical.com

If returning as a "No Submittal", please state reason (s)

I certify that this Proposal is made without prior understanding, agreement, or connection with any corporation, firm, or person submitting a Proposal for the same materials, services, supplies, or equipment, and is in all respects fair and made without collusion or fraud. I agree to abide by all conditions of this RFP and certify that I am authorized to sign this RFP for the Proposer. In submitting a RFP to the City of Ormond Beach, the Proposer offers and agrees that if the Proposal is accepted, the Proposer will convey, assign or transfer to the City of Ormond Beach all rights, title, and interest in and to all causes of action it may now or hereafter acquire under the Antitrust laws of the United States and the State of Florida for price fixing relating to the particular commodities or services purchased or acquired by the City of Ormond Beach. At the City's discretion, such assignment shall be made and become effective at the time the City tenders final payment to the Proposer.

X

AUTHORIZED SIGNATURE (MANUAL)

Paul Rademaker

NAME (TYPED)

Vice President

TITLE

8-25-25

DATED

GENERAL CONDITIONS

PUBLIC ENTITY CRIMES: A person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a proposal on a contract to provide any goods or services to a public entity, may not submit a proposal on a contract with a public entity for the construction or repair of a public building or public work, may not submit Proposals on leases or real property to a public entity, may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity, and may not transact business with any public entity in excess of the threshold amount provided in Section 287.017, for CATEGORY TWO for a period of 36 months from the date of being placed on the convicted vendor list.

DISCRIMINATION: Pursuant to Section 287.134(2)(a), Florida Statutes, an entity or affiliate who has been placed on the discriminatory vendor list may not submit a bid or proposal on a contract to provide any goods or services to a public entity, may not submit a bid or proposal on a contract with a public entity for the construction or repair of a public building or public work, may not submit bid or proposal on leases of real property to a public entity, may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity, and may not transact business with any public entity.

PUBLIC RECORDS/NON-CONFIDENTIALITY OF BIDS AND/OR PROPOSALS.

The City of Ormond Beach cannot and does not warrant the confidentiality of any information submitted in response to this solicitation. Florida law provides that municipal records shall at all times be open for personal inspection by any person, Section 119.01, F.S., The Public Records Law. Information and materials received by the City of Ormond Beach in connection with all Proposers' response shall be deemed to be public records subject to public inspection upon award, recommendation for award, or 30 days after bid opening, whichever occurs first. Section 119.071, F.S.

DISTRIBUTION OF BIDS AND RFP'S: The City uses the services of DemandStar (www.demandstar.com) to distribute its bids and RFP's on-line on the Internet. If you have received a copy of this RFP from any source other than DemandStar, please be aware that you may not have received the latest version of the RFP or any related addendums.

SUBMISSION OF RESPONSES: All Submittals shall be delivered in a sealed envelope. The Request for Proposals (RFP) number, title, and opening date shall be clearly displayed on the outside of the sealed envelope (and on the outside of any express shipping package). The delivery of said submittal to the Purchasing Office on or before the specified opening date and time is solely and strictly the responsibility of the Submitter. Any submittal received by the Purchasing Office after the specified date and time will not be accepted. Submittals must be presented on forms provided by the City. No other forms will be accepted. Responses submitted by telephone, fax or email will not be

considered. No Submittal may be modified after opening. No Submittal may be withdrawn after opening for a period of ninety (90) days unless otherwise specified.

EXECUTION OF SUBMITTAL: Submittals must contain a manual signature of authorized representative in the space(s) provided. Submittals must be typed or printed in ink. Use of erasable ink is not permitted. All corrections made by Submitter to any Submittal entry must be initialed. The company name and Federal Employer Identification Number (F.E.I.N.) number shall appear in the space(s) provided.

RFP OPENING: Submittals shall be opened and the name of the submitters shall be read publicly. No discussion of the Submittals will occur at this time.

SUBMITTAL TABULATION: The RFP Tabulation will be posted on Demandstar (www.demandstar.com). Any submitter wishing to receive a paper copy of the tabulation is required to enclose a stamped, self-addressed envelope with their Submittal response.

CLARIFICATION/CORRECTION OF RFP ENTRY: The City of Ormond Beach reserves the right to allow for the clarification of questionable entries and for the correction of obvious mistakes.

INTERPRETATION: Any questions concerning conditions and specifications shall be directed to the Purchasing Coordinator rob.hart@ormondbeach.org. Those interpretations which may affect the eventual outcome of this Submittal will be furnished in writing to all prospective Submitters. No interpretation shall be considered binding unless provided in writing by the City of Ormond Beach.

PROCUREMENT COMMUNICATION PROTOCOL: To protect the integrity of the procurement process, respondents, suppliers, contractors, sub-contractors or person acting on behalf of any of the above are prohibited from all communications regarding the solicitation with City staff, City consultants, City legal counsel, City agents, or elected officials unless such communication is specifically authorized in the City's solicitation or addenda. Violation of this provision may be grounds for rejecting a response.

MINORITY POLICIES: The City of Ormond Beach, Florida, encourages the full participation of Disadvantaged and Women Business Enterprises (D&WBE) in the provision of goods and services.

RESPONSIBILITY DETERMINATION: Pursuant to the provisions of Florida Statutes Chapter 287.05701, the City does not request or consider a vendor's social, political, or ideological interests in making a responsibility determination.

LICENSES AND PERMITS: The Vendor/Contractor is responsible for obtaining all necessary permits and licenses to comply with all Federal, State, local laws, rules and regulations required to perform work in accordance with the specifications.

ADDITIONAL TERMS AND CONDITIONS: The City of Ormond Beach reserves the right to reject Submittals containing any additional terms or conditions not specifically requested in the original conditions and specifications.

TAXES: The City of Ormond Beach is exempt from Federal Excise Taxes and all sales taxes.

SILENCE OF SPECIFICATIONS: The apparent silence of any specification and any supplemental specifications as to any details or the omission from same of any detailed description concerning any point shall be regarded as meaning that only the best commercial practices are to prevail and that only materials of first quality and correct type, size, and design are to be used. All workmanship is to be first quality. All interpretations of the specifications shall be made upon the basis of this statement.

ASSIGNMENT: Any purchase order or contract issued pursuant to a Submittal and the monies which may become due hereunder are not assignable except with the prior written approval of the City Manager or City Commissioner, whichever authorized the purchase or Agreement.

LIABILITY: The Contractor shall hold and save the City of Ormond Beach, its officers, agents, and employees harmless against claims by third parties resulting from the Contractor's or supplier's breach of contract or negligence, including all attorney's fees and costs, and shall pay any and all damages, fees, and costs assessed on behalf of the City. The City expressly reserves all rights, privileges and benefits of sovereign immunity.

PATENTS AND ROYALTIES: The Contractor, without exception, shall indemnify and save harmless the City of Ormond Beach and its employees from liability of any kind, including cost and expenses for or on account of any copyrighted, patented, or unpatented invention, process, or article manufactured or used in the performance of the contract, including its use by the City of Ormond Beach. If the Contractor uses any design, device, or materials covered by letters, patent or copyright, it is mutually agreed and understood without exception that the Submittal prices shall include all royalties or cost arising from the use of such design, device, or materials in any way involved in the work.

NON-APPROPRIATION OF FUNDS: In the event sufficient budget funds are not available for a new fiscal period, the CITY shall notify the VENDOR/CONTRACTOR of such occurrence and the contract shall terminate on the last day of the current fiscal period, without any penalty or expense to the CITY of any kind whatsoever.

AWARDS: The CITY reserves the right, in its sole discretion, as the best interest of the CITY may require, to make award(s) by individual item, group of items, all or none, or a combination thereof; on a geographical basis and/or with one or more vendors, contractors, consultants or specialists; or to reject any and all Submittals or waive any minor irregularity or technicality in the Submittals received.

OTHER AGENCIES: All Bidder(s) awarded contracts from this bid or proposal may, permit any municipality or other government agency to participate in the contract under the same prices, terms, and conditions, if agreed to by both parties.

It is understood that at no time will any city, municipality, or other agency be obligated for placing an order for any other city, municipality, or agency: nor will any city, municipality, or agency be obligated for any bills incurred by any other city, municipality, or agency. Further, it is understood that each agency will issue its own purchase orders to the awarded bidder(s).

COMPLIANCE WITH FLORIDA PUBLIC RECORDS LAW:

Contractor expressly agrees that it shall comply with the public records law provided in Florida Statutes, Chapter 119, and specifically to:

- (a) Keep and maintain public records required by the City to perform the contracted service.
- (b) Upon request from the City Clerk, provide the City with a copy of the requested records or allow the records to be inspected or copied within a reasonable time at a cost that does not exceed the cost provided in Chapter 119, Florida Statutes, or as otherwise provided by law.
- (c) Ensure that public records that are exempt or confidential and exempt from public records disclosure requirements are not disclosed except as authorized by law for the duration of the contract term and following completion of the contract if the contractor does not transfer the records to the City.
- (d) Upon completion of the contract, transfer at no cost, to the City all public records in possession of the contractor or keep and maintain public records required by the City to perform the service. If the contractor transfers all public records to the City upon completion of the contract, the contractor shall destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. If the contractor keeps and maintains public records upon the completion of the contract, the contractor shall meet all applicable requirements for retaining public records. All records stored electronically must be provided to the City, upon request from the City Clerk, in a format that is compatible with the information technology systems of the City.
- (e) Failure of the Contractor to comply with Public Records Law as provided by Florida Statutes, Chapter 119, shall subject the Contractor to penalties under Chapter 119.10 and subject this Agreement to termination for cause by the City.

IF THE CONTRACTOR HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO THE CONTRACTOR'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS CONTRACT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT:

CITY CLERK
22 SOUTH BEACH STREET
ORMOND BEACH, FLORIDA 32174
(386)677-0311
CITYCLERK@ORMONDBEACH.ORG
or online at
<https://www.ormondbeach.org/prr>

Ref: Fla. Stat. §119.0701(2016)

THE CITY OF ORMOND BEACH RESERVES THE RIGHT TO REJECT ANY OR ALL PROPOSALS, AND TO WAIVE INFORMALITIES AS MAY BE DEEMED TO BE IN THE BEST INTEREST OF THE CITY.

TERMS AND CONDITIONS

- A. The City of Ormond Beach reserves the right without prejudice to reject any or all proposals, to request clarification of information submitted, and to request additional information of one or more proposers.
- B. The City reserves the right to award the contract to the next most qualified firm if the successful firm fails to execute a contract within two weeks after the award of the contract by the City Commission.
- C. In accordance with federal, State, and local regulations, the firm shall not discriminate under the contract against any person.
- D. The firm shall not assign or transfer any interest in the contract without prior approval of the City Commission.
- E. The City reserves the right to terminate the contract at any time due to the vendor's default under terms of agreement.
- F. Submission of a proposal indicates acceptance by the firm of the conditions contained in this Request for Proposals unless clearly and specifically noted in the proposal submitted and confirmed in the contract between the City of Ormond Beach and the firm selected.
- G. Submittals should include a copy of firm's insurance certificate, Conflict, Non-Conflict of Interest Statement/Litigation Statement, Drug Free Workplace Certificate and E-Verify Statement.

I. OBJECTIVE OF THE REQUEST FOR PROPOSALS

The City of Ormond Beach is a coastal community located in northeast Volusia County, Florida, occupying an area of approximately 38 square miles. The City Utility Service Area extends outside of the City limits into part of unincorporated Volusia County as well as providing service to portions of neighboring Flagler County. Customer data for 2024 included 23,788 active water accounts, of which 16,972 were located within the City limits. Records indicate there were 18,027 active sewer accounts, of which 17,451 were located within City limits. The City's fiscal year begins on October 1 and ends on September 30.

The Utilities Division of the City's Public Works Department is responsible for providing quality potable water, sanitary sewer and reclaimed water services to utility customers in a manner that balances social, environmental, and economic factors. The Utilities Division of the Public Works Department consists of five operating sections: Water Production, Water Reclamation (sometimes referred to as the Wastewater Treatment Facility), Potable Water Distribution, Wastewater Collection & Reclaimed Water Distribution, and Equipment Maintenance.

The Water Production Division is responsible for the safe and efficient operation of the City's Water Treatment Plant (WTP), 38 wells, 3 water storage tanks, and four water distribution booster stations. The WTP has a design capacity of 12.0 million gallons per day.

The Water Reclamation Facility (also referred to as the Wastewater Treatment Facility) is responsible for the safe and efficient treatment of wastewater, the supply of reclaimed water for irrigation, and the subsequent stabilization and disposal of solid wastes produced to ensure the protection of public health and the environment. The City's Water Reclamation Facility is designed to treat sewage at a rate of 8 million gallons per day. The City utilizes 95 sanitary sewer lift stations to transmit wastewater to the Wastewater Reclamation Facility. Meanwhile, the reclaimed water system has a permitted capacity of 10 million gallons per day and utilizes three (3) reclaimed water storage tanks and associated pump stations.

It is the intent of the City of Ormond Beach, Florida to award a contract(s) to the successful proposer(s) of this request for proposals to provide **UTILITIES MOTOR AND PUMP REPAIR SERVICES** on an "as needed" basis.

II. SCOPE OF SERVICES

The work shall be performed on an "as needed basis" for the Utilities Division of the Public Works Department. Awarded firms will be responsible for:

1. Pickup of equipment requested for evaluation and/or repair from affected City of Ormond Beach facility within 72 hours of request.
2. After assessment of equipment, development of a quote for the work necessary to repair to include pricing in accordance with the agreement and timeline to complete the work
3. Execution of work on the equipment, once a Purchase Order referencing the quote has been issued
4. Timely completion of the work
5. Return of repaired equipment within 48 hours of completion of work
6. General responsiveness to requests for evaluation/repair, phone calls and emails

Service under this award will include a full range of pump and electric motor repair services. These services will include but not be limited to inspection, evaluation and repair of vertical turbine, split case centrifugal pumps, centrifugal fans/blowers, lift station pumps, inspection, evaluation and repair of 3-phase electric motors, professional pump and electric motor reports, and other services as needed. Firms selected shall be capable of providing services including, but not limited to, the following:

PUMP REPAIR SERVICES:

Shaft Repair

Shaft Replacement and Bearing Replacement Seal Repair

Seal Replacement

Wear Ring Replacement Impeller Repair Impeller Replacement

Apply Protective Coatings Volute Repair

Volute Replacement Casing Repair Casing Replacement Dynamic Balancing Clean Pump Assembly of Pump

Performance Testing Pump Curves

Provide Detailed Shop Reports, and Recommendations

ELECTRIC MOTOR REPAIR SERVICES:

Repair Shaft

Replace Bearings

Rewind Motor

Dip and Bake Motor

Balance Motor

Motor Diagnostic

MOTOR TESTING SERVICES:

Megging
HiPot Testing
Surge Testing
Voltage Drop Testing
Core Loss Testing
Provide Detailed Shop Reports and Recommendations

III. TERM OF AGREEMENT

The initial term of this agreement shall be for a period of three (3) years and will be automatically renewed for two additional one (1) year periods thereafter unless either party provides at least ninety (90) days prior written notice to the other party of their intent not to renew the agreement. All terms and conditions shall remain firm for the initial three (3) year period and any optional renewal period of this contract based on contractor's acceptance, level of performance and approved funding.

IV. PROPOSAL PROCESS

The firm or individual(s) interested in this contract should include a response to each of the following items in their written proposal:

- A. Title Page: Title page marked, "**UTILITIES MOTOR AND PUMP REPAIR SERVICES**", the firm's name; the name, address and telephone number of a contact person; and the date of the proposal.
- B. Table of Contents: Include a clear identification of the material included in the proposal by page number.
- C. Standard General Requirements: Include Proposer's name and principal address; contact person's name and title; telephone and fax number; FEIN; number of years organization has been in business; number of years your firm has been in business under your present business name; number of years your firm has been in business in work specific to this RFP; names and titles of all officers, partners or individuals doing business under trade name; statement of whether your firm has ever failed to complete work awarded to you; list all claims, arbitrations, administrative hearings and lawsuits brought by or against the Proposer or its predecessor organization(s) during the last five (5) years; list and describe all criminal proceedings or hearings concerning business related offenses in which the Proposer, its principals or officers or predecessor organization(s) were defendants; state whether the Proposer, its principals, officers or predecessor organization(s) have been CONVICTED of a Public Entity Crime, debarred or suspended from bidding by any government entity.

- D. Transmittal Letter: A signed letter of transmittal briefly stating the proposer's understanding of the work to be done, the commitment to perform the work within the time period, a statement why the firm believed itself to be best qualified to perform the engagement and a statement that the proposal is a firm and irrevocable offer for the engagement period. The transmittal letter shall have an original signature of an authorized official of the firm who has been designated to submit the proposal on behalf of the firm.
- E. Technical Qualifications of Firm: Provide a description and overview of firm, including the size, range of activities, licenses, certifications etc. Detail expertise in, and experience with troubleshooting and repair of pumps and electric motors such as lift station pump/motors, well pump/motors, transfer pump/motors, and high service pump/motors (5 HP to 300 HP and up to 5000 GPM) of similar size and materials. (Limit response to two pages maximum) Identify any subcontractors(s) that will be involved if work not performed in house, including address and a description of qualifications. (Limit response to one page maximum per subcontractor)
- F. Technical Qualifications of the Project Team: Identify the primary individuals (Project Team) who will be responsible for supervising, managing and executing the work for this Contract. List all certifications appropriate to the work. (Limit response to one page per person)
- G. References: Using the "List of References" sheet supplied herewith, provide list of six (6) utility clients for whom work has been performed within the past 5 years. Be sure to include:
- Entity/Client
 - Location
 - Year Completed
 - Client contact name, Phone and Email
 - Types of equipment serviced
- H. Responsiveness: Describe your approach to timely completion of work and provide general turnaround times.
- I. Pricing: Provide not to exceed pricing using the Proposal Pricing Form.
- J. Location: Provide shop location(s) where the bulk of work will occur and indicate which member of the Project Team primarily works from each. Provide information on alternate or backup facilities, if available. Points shall be awarded as follows: Within 25 miles of Ormond City Hall (15 points), Within 50 miles of Ormond Beach City Hall (10 points), Within 100 miles of Ormond Beach City Hall (5 points), Beyond 100 miles of Ormond Beach City Hall (0 points)

V. PROPOSAL SUBMITTAL

Please check the contents of your RFP package carefully to ensure that you have in your possession all the necessary documents, as referenced within this RFP, including any addenda. If you are missing any items, please contact the City's Purchasing Coordinator at 386-676-3223, or by e-mail at: rob.hart@ormondbeach.org.

Submission of a proposal pursuant to this RFP shall constitute acknowledgement and acceptance of the terms and conditions set forth herein. Portions of this RFP and the contents of the proposal submitted by the successful proposer may become contractual obligations if an Agreement is awarded. Failure of the successful proposer to accept these obligations may result in cancellation of the award of contract.

The City reserves the right to withdraw this RFP at any time without prior notice. All proposals submitted in response to this RFP become the property of the City of Ormond Beach.

Deadline for Submission: To be considered, proposals must be received no later than 2:00 p.m., September 10, 2025.

Inquiries: Technical questions may arise as firms are preparing their proposals. The City will accept written inquiries regarding this RFP until September 3rd at 4:00 PM. Questions received after that time will not be responded to. Answers to questions that warrant attention of all the potential proposers will be distributed in the form of an addendum. Please direct written inquiries to:

Rob Hart
City of Ormond Beach
22 South Beach Street, Room 102
Ormond Beach, Florida 32174
Telephone: (386) 676-3223
FAX: (386) 676-3374
rob.hart@ormondbeach.org

Signature Requirements: Proposals must be signed by a duly authorized official(s) of the proposing firm. Consortiums, joint ventures, or teams submitting proposals, although permitted and encouraged, will not be considered responsive unless it is established that all contractual responsibility rests solely with one firm or legal entity which shall not be a subsidiary or affiliate with limited resources. Each proposal shall indicate the entity responsible for execution on behalf of the proposal team.

Proposal Delivery: You must submit one (1) unbound original plus one (1) electronic copy on compact disk (CD) or flash drive of the proposal no later than the date and time specified above. Submit proposals to: Rob Hart, Purchasing Coordinator, at City Hall down stairs in Room 102, 22 South Beach Street, Ormond Beach, FL 32174. The RFP title and number shall be plainly marked on the outside of the delivery envelope or

package. It is solely the responsibility of the submitter to ensure that the Proposal is delivered on or before the specified date and time. Late proposals will not be accepted.

Addenda and Supplements to the Request for Proposals (RFP): In the event that it becomes necessary to revise any part of this RFP, or if additional information is necessary to enable the proposing firm to make an adequate interpretation of the provisions of this RFP, a supplement to the RFP will be provided to each firm that has requested a copy of this document.

Rejection Rights: The City of Ormond Beach reserves the right, at any time, to modify, waive or otherwise vary the terms and conditions of this RFP including, but not limited to, the deadlines for submission and submission requirements. The City further reserves the right to reject any or all submittals, to cancel or withdraw this RFP at any time and to negotiate with any party prior to or after submittal of proposals. Selection is also dependent upon the negotiation of a mutually acceptable contract with the successful proposers.

Cost of Proposal Preparation: No reimbursement will be made by the City of Ormond Beach for any costs incurred in the preparation of the proposal or presentation.

Proposals to be in Effect: Each proposal shall state that it is valid for a period of not less than 90 days from date of receipt.

VI. EVALUATION PROCESS AND CRITERIA

The City of Ormond Beach will conduct an evaluation of all proposals, submitted by the deadline, to determine compliance with proposal requirements and mandatory document submissions. The committee will consist of three individuals from the City's public works department. The committee will evaluate proposals and select the Proposer that meets the best interests of the City, and will make a recommendation of Award of Contract to the City Commission.

The City reserves the following rights:

- Modify, extend, or cancel this RFP at any time to obtain additional proposals or for any other reason the City determines to be in its best interest;
- Issue a new RFP with terms and conditions that are the same, similar or substantially different as those set forth in this or a previous RFP in order to obtain additional proposals or for any other reason the City determines to be in its best interest;
- Conduct pre-award discussion and/or pre-award negotiations with any or all responsive and responsible proposer(s) who submit proposals determined to be reasonably acceptable of being selected for award; and, conduct personal interviews or require presentations of any or all proposer(s) prior to selection.

- Request that proposer(s) furnish additional information as the City may reasonably require.
- Accept or reject qualifications or proposals in part or whole, and/or waive any defect or deficiency in any proposal, if in the City's sole judgment, the defect or deficiency is not material in response to this RFP;
- Limit and/or determine the actual contract services to be included in a contract.
- Engage outside experts to assist staff in evaluating the merits and viability of each proposer.
- Obtain information for use in evaluating submittals from any source.
- Verify the information received in the proposal. If a proposer knowingly and willfully submits false information or data, the City of Ormond Beach reserves the right to reject that proposal. If it is determined that an Agreement was awarded as a result of false statements or other data submitted in response to this RFP, the City of Ormond Beach reserves the right to terminate the Agreement.

The City shall be the sole judge of the proposer's qualifications.

Evaluation Criteria:

For the purposes of further evaluation, the responsive proposals will be evaluated on, but shall not be limited to, consideration of the following criteria:

EVALUATION CRITERIA	MAXIMUM POSSIBLE POINTS
Technical Qualifications	20
Technical Qualifications of Project Team	20
References	20
Responsiveness	10
Pricing	10
Location	15
Completeness of Proposal	5
TOTAL	100

VII. PRICING AND REFERENCE SHEETS

The following forms are provided to assist firms with preparing proposals:

UTILITIES MOTOR AND PUMP REPAIR SERVICES**RFP NO. 2025 – 40****LIST OF REFERENCES**

1. Entity/Client US Water Services Corp.	
Location Throughout Florida and 22 other states	Year Completed: ongoing
Client Contact Name Eddie Schemenauer	
Email Edward Schemenauer <eschemenauer@uswatercorp.net>	Phone: 727-389-9399
Types of equipment serviced	
We rebuild all their motors/pumps/blowers/gearboxes. We sell them new rotating equipment as well as new VFD's.	

2. Entity/Client Manatee County Utilities	
Location All three WRF plants, WTP, and some LS Pumps	Year Completed: ongoing
Client Contact Name Rick Svec	
Email rick.svec@mymanatee.org	Phone: 941-812-6388
Types of equipment serviced	
We rebuild all their motors/pumps/blowers/gearboxes. We sell them new rotating equipment as well as the Artesis PdM controllers	

3. Entity/Client City of Bradenton	
Location All WRF and WTP and LS pumps	Year Completed: ongoing
Client Contact Name Don DeMonia	
Email donald.demonia@bradentonfl.gov	Phone: 941-290-9392
Types of equipment serviced	
We rebuild all their motors/pumps/blowers/gearboxes. We sell them new rotating equipment as well as new controls.	

UTILITIES MOTOR AND PUMP REPAIR SERVICES
RFP NO. 2025 – 40
LIST OF REFERENCES

4. Entity/Client City of Arcadia		
Location WRF and all lift stations	Year Completed: ongoing	
Client Contact Name Dominick Wolcheck		
Email Dominick Wolcheck <dwolcheck@arcadia-fl.gov>	Phone: 863-231-8113	
Types of equipment serviced		
We rebuild all their motors/pumps/blowers/gearboxes. We sell them new rotating equipment as controls and panels.		

5. Entity/Client City of Daytona Beach		
Location WRF	Year Completed: ongoing	
Client Contact Name Mike Riley		
Email rileymichael@codb.us	Phone: 386-473-3010	
Types of equipment serviced		
We have rebuilt some motors and pumps as well as sell them a large pump station for over \$400,000.00.		

6. Entity/Client City of Riviera Beach		
Location WRF/WTP/Wells	Year Completed: ongoing	
Client Contact Name Mike Miller		
Email mmiller@uswatercorp.net	Phone: 727-808-6249	
Types of equipment serviced		
We are currently rebuilding every motor and pump in their WTP and Well Fields. We are selling them all their rotating equipment as well as all their VFD's.		

UTILITIES MOTOR AND PUMP REPAIR SERVICES
RFP NO. 2025 – 40
PROPOSAL PRICING –Motor and Pump Repair

Proposer submits the following prices for the work described in this solicitation:

Item of Work	Per (Unit)	Unit Price
1. Trailer Truck Service to transport pump to and from repair facility (time must be reasonable compared to Google Maps estimate. No pay for breakdowns).	HR	\$ 100.00
2. Crane Truck Service (including operator) for removing and install pump or motor	HR	\$ 150.00
3. Standard Labor Rate (Mechanic) Monday – Friday, 8:00 am – 5:00 pm	HR	\$ 90.00
4. Non-Standard Labor Rate (Mechanic) After hours, weekend, and holidays	HR	\$ 125.00
5. Standard Labor Rate (Machinist) Monday – Friday, 8:00 am – 5:00 pm	HR	\$ 90.00
6. Non-Standard Labor Rate (Machinist) After hours, weekend, and holidays	HR	\$ 125.00
7. Tear Down and Inspection	HR	\$ 200.00
Parts Allowance: Cost plus markup %		<u>20 .00</u> %

REGISTRATION AND INSURANCE REQUIREMENTS FOR VENDOR/CONTRACTOR WORKING ON CITY PROJECTS

REGISTRATION REQUIREMENTS FOR VENDOR/CONTRACTOR WORKING ON CITY PROJECTS

Registration Requirements

VENDORS doing business within the City Limits must be registered with the City.

Requirements for registering a business are as follows:

Copy of City Business Tax Receipt (where your business is located).

Certificate of Insurance showing General Liability and Workers' Comp (or State Workers' Comp Exemption form).

Application Fee: \$25.00 For more information, contact the City's Business Tax Receipt official at 386-676-3233 or btonline@ormondbeach.org You can apply online here: <https://ormondbeachfl-energovweb.tylerhost.net/apps/selfservice#/home>

State Certified/Registered Contractors

All registered State contractors must be registered with Volusia County. Volusia County Contractor Licensing, 123 W. Indiana Ave., Rm 203, Deland, FL 32720 (386) 736-5957
contractorlicensing@volusia.org
<https://connectlivepermits.org/citizenportal/app/landing>

State certified contractors have the option of registering with Volusia County, or providing information directly to the business tax receipt official, to include copy of State license, certificate of insurance and copy of local business tax receipt. This information is provided with the permit application.

If you have any questions regarding the above requirements, please contact the business tax receipt official at (386) 676-3233 or btonline@ormondbeach.org

EXHIBIT A
Risk Management and Insurance Requirements

A. Payment and Performance Bonds

1. Except as otherwise provided herein, the Contractor shall, prior to beginning performance, deliver to the City, and the City shall record in the public records of Volusia County, Florida, the Contractor's Payment and Performance Bond in an amount equal to the full amount of the Contract.
2.
 - (a) Payment and Performance Bonds shall not be required for any contract except those which are for the construction of a public building, for the prosecution and completion of a public work (as described in Section 180.06, **Florida Statutes**, as amended from time to time) or for repairs upon a public building or public work (as described in Section 180.06, **Florida Statutes**, as amended from time to time).
 - (b) With respect to those Contracts for which Payment and Performance Bonds are otherwise required:
 - i. Unless the City Manager, or his designee, determines such Bond to be necessary to protect the interests of the City, no Contractor shall be required to provide a Payment and Performance Bond for any Contract which is for \$25,000.00 or less.
 - ii. Upon the request of the contractor, good cause shown by the Contractor, and a determination that the public health, safety and welfare will be sufficiently protected, the City Commission may exempt the contractor from the requirement of providing a Payment and Performance Bond for any Contract which is for more than \$25,000.00 but is less than \$200,000.00.
3. The Payment and Performance Bond shall list the Contractor as Principal and be issued by a surety insurer authorized to do business in Florida as a surety and listed as an acceptable surety in the Federal Register.
4. The Payment and Performance Bond shall be executed pursuant to Section 255.05, **Florida Statutes**, and be in a form substantially similar to the form set forth in Section 255.05(3), **Florida Statutes**.
5. The Payment and Performance Bond shall specifically provide coverage for delay damages due to a default by the Contractor.
6. The Payment and Performance Bond shall not make the Contract part of the Bond agreement.

7. In lieu of the Payment and Performance Bond, the Contractor may file with the Finance Director of the City, in an amount equal to the full amount of the Contract, cash, a money order, a certified check, a cashier's check, an irrevocable letter of credit, or a security of a type listed in Part II, Chapter 625, **Florida Statutes**.
8. In the event the surety on any Payment and Performance Bond furnished by the Contractor is declared bankrupt or becomes insolvent, or its right to do business in the State of Florida is terminated, the Contractor shall, within five (5) working days thereafter, substitute another Payment and Performance Bond and surety acceptable to the City.
9. The Contractor is totally and solely responsible for keeping its surety informed as to the Base Contract Price as bid, significant changes in the Project Scope, and the overall progress and completion of the Project for the entire life of the Contract.
10. The payment and performance bond requirements stated herein above shall not be applicable to service-related contracts unless otherwise determined by the City Manager in order to protect the health, safety and welfare of the general public.

B. Contractual Provisions Relative to Risk Management

All contracts for any public works to be performed, and service-related contracts, for or on behalf of the City shall include at a minimum, the following, or substantially similar, provisions:

1. Hold Harmless and Indemnity

The Contractor agrees to assume liability for and indemnify, hold harmless, and defend the City, its commissioners, mayor, officers, employees, agents, and attorneys of, from, and against all liability and expense, including reasonable attorney's fees, in connection with any and all claims, demands, damages, actions, causes of action, and suits in equity of whatever kind or nature, including claims for personal injury, property damage, equitable relief, or loss of use, to the extent caused by the negligence, recklessness, or intentionally wrongful conduct of the Contractor, its agents, officers, contractors, subcontractors, employees, or anyone else employed or utilized by the Contractor in the performance of this Contract. The Contractor's liability hereunder shall include all attorney's fees and costs incurred by the City in the enforcement of this provision.

2. Payment on Behalf of City

The Contractor shall pay all costs of the City's legal defense, as may be selected by the City, for all claims described in the Hold Harmless

paragraph. Such payment on behalf of the City shall be in addition to any and all other legal remedies available to the City and shall not be considered to be the City's exclusive remedy.

3. Loss Control/Safety

Precaution shall be exercised at all times by the Contractor for the protection of all persons, including employees and property. The Contractor shall comply with all applicable laws, regulations and ordinances related to safety and health, shall make special efforts to detect hazardous conditions, and shall take prompt action when loss control/safety measures are reasonably necessary. The City may order work to be stopped if conditions exist that present an immediate danger to persons or property. The Contractor acknowledges that such work stoppage will not shift responsibility for any damages from the Contractor to the City.

4. Service Bond

For Service-related contracts only, the City may require the Contractor to secure a service bond with a minimum \$25,000 coverage limit for the period of the service agreement. The service bond covers dishonest acts of the contractor's employees against the City. A copy of the bond shall be provided to the City when the agreement commences. Service-related contracts include and are not limited to businesses providing janitorial, pest control, general repair, security, carpet cleaning, locksmith, temporary employment, painting, moving services or other contracts as determined in the discretion of the Risk Manager as necessary to minimize loss.

C. Contractor's Insurance

1. General

The Contractor, including service-related contractors, shall purchase and maintain for the entire life of the Project, including any and all approved time extensions, until its final acceptance by the City, such insurance as will protect the Contractor from claims under Workers' Compensation, disability benefit laws or other similar employee benefit laws; from claims for damages because of bodily injury, occupational sickness or disease, or death of Contractor's employees; from claims insured by usual or unusual injury liability coverage; from claims or injury to or destruction of tangible property and from claims insured by usual Commercial General Liability coverage. This includes loss of use resulting therefrom, any or all of which may arise out of the Contractor's operations under the Contract Documents, whether such operations be by the Contractor, by any Subcontractor, or by anyone directly or indirectly employed by any of them or for whose acts any of them may be legally liable. The Contractor's deductibles/self-insured retentions shall be disclosed to the City and may be disapproved by the City, and may be reduced or eliminated at the sole discretion of the City. The Contractor is responsible for the amount of any deductible or self-insured retention.

2. Types of Insurance and Limits of Liability

The insurance required herein shall be written for not less than any limits of liability specified and incorporated as part of the Contract Documents or as required by law, whichever is greater, and shall include and not limited to the following:

- (a)** Workers' Compensation Insurance in statutory limits for the State of Florida with Coverage B - Employer's Liability limits of not less than:

\$100,000 Each Accident Bodily Injury by Accident
\$100,000 Each Employee Bodily Injury by Disease
\$500,000 Policy Limit Bodily Injury by Disease

Certificate of Exemptions. If the contractor has a State-issued Certificate of Exemption, the contractor may provide a copy in place of the requirement for coverage. However, if the contractor subcontracts or retains any other person or entity to perform under the contract, that person or entity must provide proof of workers' compensation insurance as required by law or provide a Certificate of Exemption.

It is the intent of the City that any individual who either contracts directly with the city or performs any work on behalf of any such contractor be covered by workers' compensation insurance or have a valid exemption from said coverage.

(If applicable to the Project, the policy must include benefits under the United States Longshoremen's and Harbor Workers' Act and the Jones Act coverage--all maritime coverage.)

- (b)** Commercial General Liability Insurance shall be written on a coverage form as broad as Insurance Services Office (ISO) Form CG 00 01 11 85, or its successor form, including but not limited to the following coverage (any deviation shall be noted on the Certificates of Insurance):

- a. Premises, Operations, Products and Completed Operations
- b. Owners' & Contractors' Protective
- c. Products & Completed Operation
- d. Explosion, Collapse & Underground Conditions
- e. Blanket Contractual Liability
- f. Personal Injury Liability
- g. Broad Form Property Damage Endorsement, including Completed Operations
- h. Independent Contractors
- i. Watercraft--Owned and Non-Owned (if applicable, endorsement must be included in General Liability policy or a separate Protection & Indemnity Policy must be written)

- j. Pollution Liability (if applicable)
- k. Asbestos Abatement (if applicable)
- l. Fire Damage Liability

Certain coverage outlined above may not be required if they do not relate to the Project, as may be determined at the sole discretion of the City.

Commercial General Liability Coverage shall be written on an occurrence basis and the limits shall be no less and not limited to the following amounts:

Limits (not less than)

\$1 Million Each Occurrence
 \$2 Million General Aggregate
 \$1 Million Aggregate Products & Completed Operations

NOTE: Commercial General Liability Coverage must be purchased on either a project basis (separate policy per contract) or an endorsement allocating an aggregate limit per location or specified project.

- (c) Automobile Liability Insurance is required if an Automobile(s) is used in the performance of the contract. ISO Symbol 1 (Any Auto), or alternatively a combination of Symbol 2 (Owned Autos), Symbol 8 (Hired Autos), and Symbol 9 (Non-Owned Autos), and limits shall be no less than:

\$1 Million Combined Single Limit for Bodily Injury and Property Damage

- (d) Excess Liability

For contracts \$250,000 or greater an Excess Liability Policy of at least but not limited to \$1,000,000 in addition to the scheduled underlying policies for Commercial General Liability, Automobile Liability and Employers' Liability, the Contractor shall also provide an Excess Liability Policy with a maximum self-insured retention not to exceed \$25,0000 per occurrence.

- (e) Builder's Risk

Contractor shall purchase Builder's Risk Insurance for any contracts that are deemed to be vertical construction on an All-Risk policy, and shall also include coverage for wind, hail, and named storm. Limits of coverage shall be at least and not limited to the value of the project.

(f) Professional Liability, Malpractice and/or Errors and Omissions

The Contractor shall purchase and maintain professional liability, malpractice, or errors or omissions insurance with minimum limits of \$1,000,000 per occurrence. If a claims made form of coverage is provided, the retroactive date of coverage shall be no later than the inception date of claims made coverage, unless the prior policy was extended indefinitely to cover prior acts. Coverage shall be extended beyond the policy year either by a supplemental extended reporting period (ERP) of as great a duration as is available, and with no less coverage and with reinstated aggregate limits, or by requiring that any new policy provides a retroactive date no later than the inception date of claims made coverage.

D. Requirements for Certificates of Insurance

1. With the execution of the Contract Documents, the Contractor, including service related contractors, shall provide certificates of such insurance acceptable to the City. These certificates and insurance policies shall contain an endorsement that the coverage under the policies will not be canceled, non-renewed or materially changed until at least thirty (30) days' prior written notice of such cancellation, non-renewal or change (except for nonpayment of premium, which shall be ten (10) days) and a copy of the cancellation endorsement signed by an authorized representative of the insurer, be given to the City. The contractor shall be required to replace any expired or canceled policies in like amount and coverage to the satisfaction of the City. The Certificate of Insurance shall be the ACORD FORM 25-S (7/90), or its successor form, and shall be made a part of the Contract Documents.
2. New certificates of insurance shall be provided to the City at least fifteen (15) days prior to coverage renewals.
3. If requested by the City, the contractor shall immediately furnish complete copies of the Contractor's insurance policies, forms and endorsements.
4. For Commercial General Liability coverage the Contractor shall, at the option of the City, provide an indication of the amount of claims payments or reserves chargeable to the aggregate amount of liability coverage. If the Commercial General Liability form of coverage includes an annual aggregate limitation on the amount of insurance provided, a separate project aggregate limit may be required by the City for the given contract.
5. If the Contractor fails to obtain and maintain for the life of the Project the insurance required hereby or to replace any such expired or canceled policy, the City may obtain and maintain such insurance with such company as it deems satisfactory. Any amounts expended by the City in payment of premiums for such insurance shall be deducted by the City from the amount due the Contractor for the work covered by the Contract.

E. Policies of Insurance

- 1.** Except as otherwise provided in this Exhibit, all insurance policies shall be issued by insurers licensed to do business in the State of Florida on an admitted basis or which is an eligible surplus lines insurer in the State of Florida, and any such insuring company is required to have a minimum financial rating of (A-), in the latest edition of "Best's Key Rating Guide", published by A. M. Best Co., Inc., or some similarly nationally recognized rating authority, including Standard and Poors and Demotech.
- 2.** For Workers' Compensation coverage only, self-insurance programs are acceptable with a minimum A- rated reinsurance carrier; written confirmation is required.
- 3.** All policies of insurance or certificates thereof referred to in this Exhibit shall be deposited with the City Clerk.
- 4.** The City shall be named an Additional Insured on General Liability including products and completed operations and Automobile Liability policies of insurance and certificates thereof.

**City of Ormond Beach
Request for Proposals (RFP)
UTILITIES MOTOR AND PUMP REPAIR SERVICES
(RFP No. 2025-40)**

VERIFICATION OF EMPLOYMENT STATUS USING E-VERIFY SYSTEM

1. Undersigned firm warrants it **IS** currently registered with the U.S. Department of Homeland Security's E-Verify system, **and** is compliant with the requirements of Sections 448.09 and 448.095, *Florida Statutes*.
2. Undersigned firm warrants it **has not** had any contracts terminated as a result of violations of Sections 448.09 or 448.095, *Florida Statutes*, that prohibit it from contracting with a public agency.
3. Undersigned firm warrants that if it enters into an agreement with a subcontractor, an express provision shall be included in all of its subcontracts requiring subcontractors, who perform work or provide services pursuant to the contract, to use the E-Verify system to verify employment eligibility of all new employees hired by the subcontractor during the contract term.
4. Undersigned firm understands that any subcontractor must provide the contractor with an affidavit stating that the subcontractor does not employ, contract with, or subcontract with an unauthorized alien, and the contractor understands it shall maintain any such affidavits for the duration of the contract, and the contract with the subcontractor must be immediately terminated if the City has a good faith belief that the subcontractor knowingly violated Section 448.09 (1), *Florida Statutes*.
5. Undersigned firm understands that in the event the City has a good faith belief that the contractor has knowingly violated Section 448.09 (1), *Florida Statutes*, the City shall terminate the contract, and the contractor may not be awarded a public contract for a period of at least one (1) year after the date of termination. The contractor may be held liable for any additional costs incurred by the City as a result of termination of the contract.

Electrical and Mechanical Maintenance Inc.

COMPANY NAME


AUTHORIZED SIGNATURE
Paul Rademaker

NAME
Vice President

TITLE
8-25-25

DATE

**City of Ormond Beach
Request for Proposals (RFP)
UTILITIES MOTOR AND PUMP REPAIR SERVICES
(RFP No. 2025-40)**

RFP RESPONSE FORM

THIS RESPONSE IS SUBMITTED TO:

Purchasing Coordinator
City of Ormond Beach
22 S. Beach Street
Ormond Beach, Florida 32174

The undersigned SUBMITTER proposes and agrees, if this Submittal is accepted, to enter into a Contract with the CITY that reflects the items of this Request for Proposal (RFP) and to provide all services, as specified or indicated in the RFP Documents, in full accordance with the terms and conditions set forth in therein.

SUBMITTER accepts all of the terms and conditions of the General Conditions. SUBMITTER will sign the Contract) and submit the Contract security (when applicable) and other documents required by the Contract Documents within ten (10) days after the date of CITY's Notice of Award.

In submitting this information, SUBMITTER represents, as more fully set forth in the Agreement, that:

SUBMITTER has examined copies of all the RFP Documents and of the following Addenda:

Addendum Date

Addendum Number

Receipt of all of which is hereby acknowledged.

This Submittal is genuine and not made in the interest of or on behalf of any undisclosed person, firm or corporation and is not submitted in conformity with any agreement or rules of any group, association, organization or corporation; SUBMITTER has not directly or indirectly induced or solicited any other Submitter to submit a false or sham Submittal; SUBMITTER has not solicited or induced any person, firm or a corporation to refrain from bidding; and SUBMITTER has not sought by collusion to obtain for himself any advantage over any other Bidder or over the CITY.

THIS RESPONSE IS SUBMITTED BY:

COMPANY NAME: Electrical and Mechanical Maintenance Inc.

VENDOR/CONTRACTOR LICENSE NUMBER: Will obtain one if successful bidder

ADDRESS: 6115 31st Street East, Bradenton, FL. 34203

PHONE NO.: 941-351-5858

FAX NO.: _____

SUBMITTER'S NAME: Paul Rademaker

(Typed or Printed in Ink)

TITLE: Vice President

AUTHORIZED SIGNATURE: I, _____
hereby



(Original signature required in each document)

declare that I have read and fully understand the RFP Documents and, including the General Conditions and the Scope of Work, and that I am duly authorized to sign and submit this Submittal.

The CITY reserves the right to reject any and all Submittals, to waive informalities, and to accept any Submittal or parts thereof as the CITY, in its sole discretion, determines to be in the best interest of the CITY.

PROPOSER: PLEASE ENSURE THAT YOU HAVE SIGNED THE RFP RESPONSE FORM OF THIS REQUEST FOR PROPOSAL. OMISSION OF A SIGNATURE ON THAT PAGE MAY RESULT IN REJECTION OF YOUR PROPOSAL.

THIS PAGE MUST BE COMPLETED AND RETURNED WITH YOUR PROPOSAL

City of Ormond Beach
CONFLICT, NON-CONFLICT OF INTEREST STATEMENT
LITIGATION STATEMENT

1.

☒ [X] To the best of our knowledge, the undersigned firm has no potential conflicts of interest due to any other clients or contracts for this project.

☐ [] The undersigned firm, by attachment to this form, submits information which may be a potential conflict of interest due to other clients or contracts for this project.

2.

☒ [X] The undersigned firm has had no litigation on any project in the last five (5) years.

☐ [] The undersigned firm, by attachment to this form, submits a summary and disposition of individual cases of litigation during the past five (5) years.

Electrical and Mechanical Maintenance Inc.

COMPANY NAME

AUTHORIZED SIGNATURE

Paul Rademaker

SIGNER'S NAME (PRINT OR TYPE)

Vice President

TITLE

8-25-25

DATE

THIS PAGE MUST BE COMPLETED AND RETURNED WITH YOUR PROPOSAL

City of Ormond Beach
Request for Proposals (RFP)
UTILITIES MOTOR AND PUMP REPAIR SERVICES
(RFP No. 2025-40)
CITY OF ORMOND BEACH, FLORIDA
DRUG-FREE WORKPLACE CERTIFICATION

IDENTICAL OR "TIE" SUBMITTALS: Preference shall be given to businesses with drug-free workplace programs. Whenever two or more proposals which are equal in respect to price, quality, and service are received by the State or by any political subdivision for the procurement of commodities or contractual services, a bid received from a business that certifies that it has implemented a drug-free workplace program shall be given preference in the award process. Established procedures for processing tie bids will be followed if none of the tied vendors have a drug-free workplace program. In order to have a drug-free workplace program, a business shall:

- 1) Publish a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the workplace and specifying the actions that will be taken against employees for violations of such prohibition.
- 2) Inform employees about the dangers of drug abuse in the workplace, the business's policy of maintaining a drug-free workplace, any available drug counseling, rehabilitation, and employee assistance programs, and the penalties that may be imposed upon employees for drug abuse violation.
- 3) Give each employee that engages in providing the commodities or contractual services that are under bid a copy of the statement specified in subsection (1).
- 4) In the statement specified in subsection (1), notify the employees that, as a condition of working on the commodities or contractual services that are under bid, the employee will abide by the terms of the statement and will notify the employer of any conviction of, or plea of guilty or nolo contendere to, any violation of Chapter 893 or of any controlled substance law of the United States or any state, for a violation occurring in the workplace no later than five (5) calendar days after such conviction.
- 5) Impose sanctions on, or require the satisfactory participation in a drug abuse assistance or rehabilitation program if such is available in the employee's community, by any employee who is so convicted.
- 6) Make a good faith effort to continue to maintain a drug-free workplace through implementation of this section.

Electrical and Mechanical Maintenance Inc.

Company Name

Authorized Signature

Paul Rademaker

Print Name

Vice President

Title



AFFIDAVIT OF COMPLIANCE WITH SECTION 287.138, FLORIDA STATUTES

AFFIDAVIT OF COMPLIANCE WITH SECTION 287.138, FLORIDA STATUTES CONTRACTING WITH FOREIGN ENTITIES OF CONCERN

The undersigned ("Affiant"), on behalf of the entity listed below ("Entity"), hereby attests under penalty of perjury as follows:

1. Affiant is the Vice President - GM of Electrical and Mechanical Maintenance Inc.
(Title) (Business Name)
which does business in the State of Florida, hereinafter called the "Entity".
2. Entity is not owned by the government of a foreign country of concern, as defined in Section 287.138 (1) (c), Florida Statutes.
3. The government of a foreign country of concern does not have a controlling interest in Entity, as defined in Section 287.138 (1)(a), Florida Statutes.
4. Entity is not organized under the laws of, and does not have a principal place of business in, a foreign country of concern.
5. Entity is not owned or controlled by the government of a foreign country of concern.
6. For purposes of this affidavit, a foreign country of concern means the People's Republic of China, the Russian Federation, the Islamic Republic of Iran, the Democratic People's Republic of Korea, the Republic of Cuba, the Venezuelan regime of Nicolas Maduro, or the Syrian Arab Republic, including any agency of or any other entity of significant control of such foreign country of concern, as defined in Section 287.138(1)(c), Florida Statutes.

The undersigned is authorized to execute this affidavit on behalf of the Entity.

Date: August 25, 2025 Signed: John Miller

Entity: Electrical and Mechanical Maintenance Inc. Name: John Miller

Title: VP-GM

STATE OF: Florida COUNTY OF: Manatee

The foregoing instrument was acknowledged before me by means of ☒ physical presence or ☐ online notarization, this 25 day of August, 2025, by John Miller and who: ☒ Is personally known to me; or ☐ has produced _____ as identification.

Paul Rademaker

Notary Public, State of Florida at Large:

(seal)

Printed Name/Seal of Notary, Commission and Expiration Date:

My commission expires: 05/20/2029



PAUL RADEMAKER
Notary Public
State of Florida
Comm# HH641248
Expires 5/20/2029

This document must be completed and returned with your Submittal



UTILITIES MOTOR AND PUMP REPAIR SERVICES

Electrical and Mechanical Maintenance Inc.

Paul Rademaker

6115 31st Street East

Bradenton, FL. 34203

941-915-5313

September 10, 2025



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C. Standard General Requirements

Electrical & Mechanical Maintenance Inc. (EMMI)

6115 31st Street East
Bradenton, FL. 34203

Paul Rademaker – Vice President Business Development
941-915-5313

FEIN – 93-4787107

Our organization has been in business in Sarasota/Bradenton since 1983 under the banner Mader Electric. In February 2024, Mader Electric was sold to Electrical & Mechanical Maintenance Inc. (EMMI). Throughout our 38-year tenure, our company has firmly been established within the water/wastewater marketplace. EMMI is an ESOP company with a majority shareholder and over 30 employee shareholders.

Gary Deremer is our majority shareholder and CEO

John Miller is our VP - GM

Paul Rademaker is our VP – Business Development

Rob Farmer is our Service Manager

Leon LE is our inside salesman

These gentlemen represent the core of the largest shareholders of EMMI. The other shareholders have minimum shares within EMMI.

EMMI/Mader has never failed to complete work awarded to us nor defaulted on any contracts.

EMMI/Mader has never had any claims, arbitrations, administrative hearings or lawsuits brought by or against EMMI or Mader Electric during the last five (5) years; nor have we had any criminal proceedings or hearings concerning business related offenses in which the EMMI, its principals or officers or Mader Electric were defendants; EMMI, its principals, officers or Mader Electric have been CONVICTED of a Public Entity Crime, debarred or suspended from bidding by any government entity.

D. Transmittal Letter

Electrical & Mechanical Maintenance Inc. (EMMI) is fully aware of our understanding of the work to be done. EMMI has been actively working within the municipal marketplace for 42 years. We have been the recipient of many motor/pump repair contracts over the years. Our company has devoted itself to providing excellent service both in our shop and in the field. Our first motor/pump contract we won was for Sarasota County Utilities back in 1991. From there it was a steady climb of winning contracts from Sarasota to City of Daytona Beach where we currently enjoy a piggyback contract with the city. EMMI understands that water and wastewater plants including lift stations and wells, are critical to the infrastructure of a city in keeping water/sewage flowing to residents and businesses. We therefore understand the importance of delivering fast turnarounds on repairs and field service work. Meeting deadlines ahead of schedule has always been a differentiator for EMMI. We are not considered to be among the “large” motor shops in Florida, who cater to the phosphate/power/industrial marketplace. For them, municipal business is simply a filler from what they make their money off. For EMMI and similar companies of our size and stature, we aggressively go after the municipal marketplace because we can best provide them with resources dedicated to their needs 24/7. We don’t have to “squeeze” in their repairs in between servicing one of our large industrial customers. 95% of our business comes from the water/wastewater industry and we are proud of that distinguishing mark. As you will read further, EMMI has what I believe is the most talented work force in Florida, even among the “large” motor shops. I’ve been in this business for 42 years and I’ve never had a motor/pump shop with such experience and dedication in serving our customers. Our service manager has managed the largest motor shop in Florida and has 23 years of experience both in the shop and in the field. There is nothing he can’t fix or find a cure for any field-related problems. That level of professionalism and wisdom has been passed through our entire company. That is what separates us from the rest of the field.

EMMI submits this bid as a firm and irrevocable offer for the engagement period.

Paul Rademaker – VP Business Development

Paul Rademaker

E. Technical Qualifications of Firm

EMMI is headquartered in Bradenton along with a facility that handles our lift station services in New Port Richey. We have just purchased \$275,000.00 worth of motor shop equipment that will be installed in our new 20,000sf building in Jacksonville early next year. Our long-range plan is to open another motor shop somewhere in south Florida around the Miami area.

Currently, we have a 20,000sf facility in Bradenton that handles all our repairs and from where our field services emanate from. Our motor shop is fully air conditioned and can handle motor repairs up to 1500HP at 4160-volts. We have two 5-ton travelling bridge cranes to support the shop in moving heavy equipment around. We have 5 bench mechanics who disassemble and reassemble rotating equipment. We have two winders who provide all our winding needs for all HP and Voltages. We have a machinist who runs our machine shop and provides us with the necessary machining in-house to maintain quality and fast turnaround time. We have 3 teams of field service technicians all equipped with a service vehicle with auto cranes that handle all field-related work. Push/Pulls of rotating equipment, laser alignment of motors/pumps/blowers, controls including VFD/Soft Start troubleshooting and replacements, preventative and predictive maintenance. All field service technicians can work nights and weekends to satisfy the needs of our customers, especially those under contract.

EMMI does not rely on any subcontractors to handle the workload. We have a 17-ton crane that we own. However, sometimes we need to rent a larger crane to handle push/pulls in the field. Other than that, we are independently sufficient with in-house resources. Furthermore, EMMI handles Wells, both pulling well pumps and installing new as well as installing new drop pipes. We do not do drilling, for that we would need to subcontract that out. EMMI does repair turbine pumps in our shop. If we encounter a turbine pump too large for our lathe, we subcontract that out to our vendor. However, we haven't run into a pump coming out of a municipal facility that we couldn't handle in-house.

EMMI is very proficient at rebuilding all brands of Lift Station Pumps. We are equipped to rebuild Flygt and Sulzer Pumps with ease and very competitively. We are the Sulzer Pump rep for the industrial marketplace in Florida along with a slew of other manufacturers of motors and controls.

EMMI is an EASA Motor shop which allows us full access to their database of winding information and training videos/documentation. We subscribe to their published warranties on rewinds and reconditioning of motors/pumps/blowers/gearboxes.

Finally, EMMI is the exclusive rep for Artesis Predictive Maintenance Controllers. With our patented eMCM controller, we can accurately predict the failure of your rotating equipment (motor/pump/gearbox/blower/generator) six months ahead of a failure and with a 90% accuracy rating. We do this without the use of any sensors on the equipment, just by recording the volts and amps of the motor. We can see the electrical/mechanical/and process related faults of the rotating equipment. Vibration, winding insulation degradation, bearing issues, cavitation, etc. We can also show you where on the pump curve your pump is pumping without the need of pressure and flow meters. Allow us to show this cutting-edge technology to you.

F. Technical Qualifications of the Project Team

EMMI has a very talented team supporting our efforts. The company is run by our general manager John Miller. John has been in the motor repair world for 30+ years. John successfully ran Mader Motors in Ft. Myers and Tampa for 12+ years. His background is a motor winder and is one of the best and fastest winders in Florida. He leads a talented crew of shop/field/office workers, dedicated to providing our customers with the finest repair services in the business.

Paul Rademaker is our VP of Business Development. Paul has been in the motor/pump repair business for 42 years. There is nothing he hasn't seen or done throughout his journey. Paul was hired by Mader Electric back in 1989 and was a pivotal player in developing the upswing in business during his first 22 years of service there. Paul went on to open another successful motor/pump repair business for 10 years before coming back to Mader Electric/EMMI two years ago. Paul has successfully managed motor/pump contracts since winning his first contract for Mader with Sarasota County Utilities in 1991. Contracts are his primary priority and will be the City of Ormond Beach's liaison once the contract is ratified (positive thinking!).

Rob Farmer is our service manager and one of the most talented motor/pump technicians in North America. Rob has an excellent resume including years of service running Tampa Armature Works (TAW) for many years. Rob is extraordinary in troubleshooting and repairing rotating equipment in the field or in our shop. He is a certified crane operator, Level II vibration analyzer, certified welder, controls tech for VFD's/PLC's, and provides free training for our customers on lift station control panels, maintenance and repairs on rotating equipment. A tremendous resource to have at your disposal.

Leon Le is our inside salesman. Been in this business for over 25 years. There is no one more resourceful for finding parts and equipment than Leon. He has contacts in every aspect of motors/pumps/controls. He is very knowledgeable in drives and motors specifically. Leon is also very invested in our company as the second largest shareholder. He truly believes in our company and its future success.

Chuggy Lowery is our shop coordinator. She has been in this role for 8 years. Prior to that she ran one of Motion Industries facilities that was embedded inside Tropicana. Chuggy understands motor services and how to serve our customers with great communication skills. Chuggy will be the one coordinating your motor/pump repairs and communicating with you.

Eddie Whitehead is our shop foreman. He was recently promoted from our winding department to shop foreman. Eddie has many years' experience inside a motor shop and the transition to shop foreman has been smooth and beneficial. Eddie will work with Chuggy in coordinating repairs and communicating with the city.

The rest of the company is made up of dedicated employees who handle the many different aspects of running a motor/pump shop.

We have 5 bench mechanics, 2 winders, 1 machinist, 1 driver, 6 field service technicians, 1 service coordinator, 1 field service supervisor, and 1 accountant.

We would invite the city to take a shop tour of our facility should we be considered for this contract. Seeing and talking with our team would certainly provide a better picture and give greater comfort in who EMMI is.

G. References

Please see attached sheet embedded within the bid documents.

H. Responsiveness

EMMI has the ability to turn equipment around in a timely manner commensurate with the requirements of our clientele. We typically can receive a piece of rotating equipment and have it torn down and quoted to our customers within 3 days. We can rewind a motor and return it to our customer within 2 weeks of receiving the motor. We can recondition a motor and return it to our customer within one week of receiving the motor. If the motor is a rush, we can rewind and turn the motor around in 48 -72 hours depending on size and availability of parts. On a recondition, we can sometimes have the motor flipped in 24 hours or less.

On pumps/blowers/gearboxes, the lead times depend on the severity of the parts needed to complete the rebuilds. Most lift station pumps can be turned around in 1 -2 weeks under normal conditions. Rush jobs are obviously quicker. It's all a matter of communication and needs. We ask our customers not to cry wolf unless it is a true emergency. When it is, we go all out to accommodate. Since our shop handles just about all the work in house, we have complete autonomy to govern what jobs need to be bumped up in the rotation to satisfy our customers.

I. Pricing

Regarding how we price our work, we utilize the Vaughens National Price Guidebook. Most if not all motor shops subscribe to this service. It is an excellent tool for providing motor shops with accurate pricing on motor and pump rebuilding. This guide provides the shop with how many hours it should take to perform certain tasks on motor and pump rebuilding. It provides the average costs of labor and materials for the section of the country you are located in. It is where all motor shops estimate their cost vs. sell price.

Allow me at this time to digress a little bit.

I have been bidding on motor repair bids for 35 years. I thoroughly understand how the process works and why municipalities bid this work out. For years the pricing has dropped significantly to where motor shops are cheating their customers by lying to them about their rates just to win a bid. They will publish ridiculously low labor rates just to win a bid and then manipulate the hours they submit to compensate for their low rates. When I came back to Mader/EMMI several years ago, we made a promise to the industry to stop playing the games and start bidding rates that are in line with Vaughens. I'll bet anyone dollars to donuts that if I bid a 100HP motor rewind using my numbers (Vaughens) against a contractor who lowballs a bid to win it at low rates, our final price to the customer will be within a few percentage points of each other. We will invoice the right amount of hours along with the correct hourly rate (per Vaughens and enough to make a profit) and our competitor will invoice that same sell price but have hours that are double or triple our hours. It's a sham, and one that EMMI will never participate in. I encourage the city and every other municipality that bids on this work to carefully vet their vendors rates and question why some are so low. I've seen motor bids where the labor rates are lower than the minimum wage. That is called fraud, and no city should condone those actions by granting them an award.

Price sheet embedded in Bid Document.

J. Location

EMMI is located at 6115 31st Street East, Bradenton, FL 34203. All work for the city will be handled out of this location. All employees are working from this location except our field techs. Most field techs dispatch from their houses every morning and travel directly to the job site. These techs live in the Tampa area close to I-4.

As previously mentioned, EMMI is planning on opening a shop in the Jacksonville area sometime in 2026. Long range goal is to have one opened in Miami as well.

Our Lift Station crews work out of New Port Richey and are dispatched from there to handle all lift station related work.

Our drivers cover the state with pick ups and deliveries on an as needed basis.



RFP Evaluation Summary

Project: Utilities Motor and Pump Repair Services

RFP Number: 2025-40

Recommendation of award highlighted

Date & Time: September 17, 2025 1:00 PM

The RFP's were scored on the following criteria:	Firms							
	Electrical and Mechanical Maintenance Inc				Florida Armature Works, Inc			
	M.S.	T.N.	R.B.	Totals	M.S.	T.N.	R.B.	Totals
Technical Qualifications- 20 points max	17	18	18	53	18	16	20	54
Technical Qualifications of Project Team 20 points max	17	18	15	50	17	15	18	50
References- 20 points max	17	15	18	50	19	16	20	55
Responsiveness- 10 points max	8	7	5	20	9	7	10	26
Pricing- 10 points max	6	8	2	16	9	6	10	25
Location - 15 points max Within 25 miles of City Hall 15 Points Within 50 miles of City Hall 10 Points Within 100 miles of City Hall 5 Points Beyond 100 miles of City Hall 0 Points	0	0	0	0	5	5	5	15
Completeness of Proposal - 5 points max	5	5	5	15	4	5	5	14
Totals	70	71	63	204	81	70	88	239
	Rank			2	Rank			1

Rob Hart
Purchasing Coordinator

Mike Stephenson
Utilities Engineer

Trevor Neal
Utilities Project Manager

Ron Burk
Maintenance Supervisor



City of Ormond Beach
City Commission Agenda
Staff Report

Agenda Date	November 4, 2025	Item No	7.D.
Section	CONSENT AGENDA	Category	Consent - Resolution
Subject	Work Authorization - Northbrook Lane Stormwater Repair		
Recommended Action	Staff recommends approval of the work authorization for the stormwater drainage pipe repair in Northbrook Village.		
Strategic Goal	Water Quality & The Environment - Protect and enhance our environment and invest in infrastructure projects and assets that build resilience benefits to reduce flooding risk and increase sustainability.		
Department Staff Contact	Public Works - Engineering Alex Schumann, City Engineer		

Summary

This work authorization is related to a stormwater pipe in need of repair.

The City has identified a failing stormwater drainage pipe in the Northbrook Village neighborhood. This failing pipe has caused significant depressions in the roadway. After monitoring the state of the pipe, it was determined the best option for remediation is to remove the failing pipe, install new pipe, and repave the damaged roadway.

Repairs will be made by Hazen Construction under the Contract Manager at Risk Contract approved on September 17, 2025, by Resolution 2025-147.

Financial Impact

There is \$250,000 allocated in the FY 2025-26 budget, within Fund 107 - Stormwater Drainage Improvements. The remaining \$44,267.94 will be reallocated from the stormwater pipe lining project.

Citizen Impact

Citizens will be inconvenienced by the construction, but will still be able to access their homes. Citizens will benefit from this project due to the improved stormwater drainage and the new roadway.

Attachments

1. 25-168 Northbrook Stormwater Pipe Repair- Hazen (P25-0145G)
2. Work Authorization - Northbrook Ln SW Pipe Repair
3. Northbrook Lane Stormwater Repair Prelim Plans

RESOLUTION NO. 2025-168

A RESOLUTION ACCEPTING A PROPOSAL FROM HAZEN CONSTRUCTION, LLC FOR CONSTRUCTION MANAGEMENT AT RISK FOR UNDERGROUND UTILITY SERVICES REGARDING THE NORTHBROOK LANE STORMWATER PIPE REPAIR PROJECT; AUTHORIZING THE EXECUTION OF A WORK AUTHORIZATION AND PAYMENT THEREFOR; AND SETTING FORTH AN EFFECTIVE DATE.

WHEREAS, pursuant to the Continuing Contract for Construction Management at Risk for Underground Utility Services between the City and Hazen Construction, LLC, the appropriate City staff members have negotiated with Hazen Construction, LLC to provide underground utility construction management services for the Northbrook Lane stormwater pipe repair project (“the Project”), as described on the attached Work Authorization and Scope of Work, at a cost not to exceed \$294,267.94, and

WHEREAS, the City Manager has certified that funds have been appropriated to the credit of the Stormwater Fund (107) for the Project and have not been appropriated for any other purpose, and

WHEREAS, the City Commission concurs with the foregoing recommendations, now therefore,

BE IT RESOLVED BY THE CITY COMMISSION OF THE CITY OF ORMOND BEACH, FLORIDA, THAT:

SECTION ONE. The proposal submitted by Hazen Construction, LLC to perform the Project at a total cost not to exceed \$294,267.94 is hereby accepted.

SECTION TWO. The Mayor and the City Manager are hereby authorized and directed to execute a Work Authorization with Hazen Construction, LLC for the performance of the Project at the said price, and to pay the cost thereof from the Stormwater Fund.

SECTION THREE. This Resolution shall take effect immediately upon its adoption.

APPROVED AND AUTHENTICATED this 4th day of November, 2025.

JASON LEASLIE
Mayor

ATTEST:

SUSAN CARROLL DAUDERIS
City Clerk

WORK AUTHORIZATION

In accordance with and incorporating the terms of the Continuing Contract for Underground Utilities Construction Management Services, dated August 21, 2025, between the City of Ormond Beach, Florida, and Hazen Construction, LLC, the following Scope of Work and Schedule of Payments are agreed to by the parties to the Agreement:

Project Title: Northbrook Lane Stormwater Pipe Repair

Project Description: Replacing stormwater pipe that has failed and is causing significant depressions in roadway, as detailed in the attached proposal dated September 9, 2025.

Estimated Project Construction Cost: \$294,268

Schedule of Payments and Fee Basis

<u>Required Work Task</u>	<u>Fee Basis</u>	<u>Fee</u>
Northbrook Lane Stormwater Pipe Repair	Guaranteed Maximum	\$294,267.94
Total Fee Authorized:	Not to Exceed	<u>\$294,267.94</u>

Funding Source: Stormwater Fund (107)

Estimated Time for Completion: Thirty (30) days from Authorization to Proceed

AUTHORIZED:
CITY OF ORMOND BEACH

By: _____
Jason Leslie
Mayor

Date: _____

ACCEPTED:
HAZEN CONSTRUCTION, LLC

By: _____
Chad S. Hazen
Owner

Date: _____

By: _____
Joyce A. Shanahan
City Manager

Date: _____

I. COMPLIANCE WITH FLORIDA PUBLIC RECORDS LAW

Contractor expressly agrees that it shall comply with the public records law provided in Florida Statutes, Chapter 119, and specifically to:

- (a) Keep and maintain public records required by the City to perform the contracted service.
- (b) Upon request from the City Clerk, provide the City with a copy of the requested records or allow the records to be inspected or copied within a reasonable time at a cost that does not exceed the cost provided in Chapter 119, Florida Statutes, or as otherwise provided by law.
- (c) Ensure that public records that are exempt or confidential and exempt from public records disclosure requirements are not disclosed except as authorized by law for the duration of the contract term and following completion of the contract if the contractor does not transfer the records to the City.
- (d) Upon completion of the contract transfer, at no cost to the City, all public records in possession of the contractor or keep and maintain public records required by the City to perform the service. If the contractor transfers all public records to the City upon completion of the contract, the contractor shall destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. If the contractor keeps and maintains public records upon the completion of the contract, the contractor shall meet all applicable requirements for retaining public records. All records stored electronically must be provided to the City, upon request from the City Clerk, in a format that is compatible with the information technology systems of the City.
- (e) Failure of the Contractor to comply with Public Records Law as provided by Florida Statutes, Chapter 119, shall subject the Contractor to penalties under Chapter 119.10 and subject this Agreement to termination for cause by the City.

IF THE CONTRACTOR HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO THE CONTRACTOR'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS CONTRACT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT:

**CITY CLERK
22 SOUTH BEACH STREET
ORMOND BEACH, FLORIDA 32174 (386) 610-0400
CITYCLERK@ORMONDBEACH.ORG**

Ref: Fla. Stat. §119.0701(2016)

II. VERIFICATION OF EMPLOYMENT STATUS USING E-VERIFY SYSTEM

1. Section 448.09, *Florida Statutes*, makes it unlawful for any person to knowingly employ, hire, recruit, or refer, either for herself or himself, or on behalf of another, for private or public employment within the state, an alien who is not duly authorized to work in the United States. Contractor warrants that it is registered with the U.S. Department of Homeland Security's E-Verify system, and is compliant with the requirements of Sections 448.09 and 448.095, *Florida Statutes*.
2. Contractor agrees that if the contractor enters into an agreement with a subcontractor, the subcontractor must provide the contractor with an affidavit stating that the subcontractor does not employ, contract with, or subcontract with an unauthorized alien, and contractor warrants it shall maintain any such affidavits for the duration of the contract. If the City has a good faith belief that a subcontractor knowingly violated Section 448.09 (1), the City shall promptly notify the contractor and order the contractor to immediately terminate the contract with the subcontractor.
3. In the event the City has a good faith belief that the contractor has knowingly violated Section 448.09 (1), *Florida Statutes*, the City shall terminate the contract, and as provided by statute, the contractor may not be awarded a public contract for at least one (1) year after the date of termination. The contractor may also be held liable for any additional costs incurred by the City as a result of the termination of the contract.

HAZEN CONSTRUCTION, LLC

September 9, 2025

VIA EMAIL: Lane.Carter@ormondbeach.org

City of Ormond Beach
501 N. Orchard Street
Ormond Beach, FL 32174
Attn. Lane Carter

RE: Northbrook Lane Removal and Replacement of Storm Pipe and Pavement

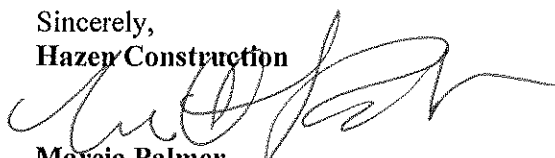
Dear Lane,

Hazen Construction is pleased to submit this proposal for the above-mentioned project. Our guaranteed maximum lump sum price of \$294,268 includes the performance bond, labor, equipment, and materials needed to complete the following scope of work:

- Set up dewatering
- Set up traffic control devices
- Remove and replace approximately 320 LF of 14x23 ERCP
- Remove and replace three (3) valley grate inlets
- Remove and replace approximately 100 SF of 6" driveway apron to 105 Northbrook Lane
- Remove 4" PVC pipes and core for 15" RCP to manhole
- Clearing approximately 1,400 SF of wooded area for headwall access
- Coordination of pole holds for two (2) power poles
- Remove and replace one (1) headwall 24x38"
- Remove and replace approximately 144 LF of 24x38" ERCP
- Remove and replace approximately 465 SF of 6" driveway to 119 Northbrook Lane
- Remove and replace approximately 75 LF of miami curb
- Backfill and compact, add base as needed in trench
- Mill and resurface approximately 975 SY with SP-9.5
- Replace sod as needed – assumes bahia is acceptable
- Watering of sod not included
- Estimated 3-4 weeks repair
- City to inform residents and coordinate parking accommodations
- Void if not accepted in writing within 30 days of submission

We are willing to meet with the city to discuss this proposal in more detail at your earliest convenience to confirm / clarify the overall scope and understanding. If you would like us to complete this work, please let me know and we will schedule accordingly. If you have any questions or require additional information, please give me a call.

Sincerely,
Hazen Construction



Marcia Palmer
Project Engineer

Fee Schedule

City of Ormond Beach

Northbrook Lane Open Cut

9/23/2025



Row	Description	Unit	Labor Cost	Material Cost	Total
1	Project Clean up	2 Days	\$ 1,750.00	\$ 1,050.00	\$ 2,800.00
2	20'x70' Clearing for Headwall	2 Days	\$ 3,275.00	\$ 2,275.00	\$ 5,550.00
3	MOT Set up and Maintenance	2 Weeks	\$ 3,000.00	\$ 1,750.00	\$ 4,750.00
4	Dewatering Set up and Removal	3 Days	\$ 917.00	\$ 1,258.00	\$ 2,175.00
5	Dewatering Activity	10 Days	\$ 6,100.00	\$ 10,298.00	\$ 16,398.00
6	Pole Holds FPL	2 Days	\$ 1,400.00	\$ 4,780.00	\$ 6,180.00
7	Remove and Replace Headwall	1 Day	\$ 6,748.00	\$ 2,982.00	\$ 9,730.00
8	Remove and Replace 24x38" ERCP (144 LF)	4 Days	\$ 26,992.00	\$ 18,902.00	\$ 45,894.00
9	Opencut Road	4.5 Hours	\$ 3,424.00	\$ 45.00	\$ 3,469.00
10	Remove and Replace 14x23 ERCP (325 LF)	10 Days	\$ 67,480.00	\$ 19,016.00	\$ 86,496.00
11	Remove and Replace Inlet (3 EA)	3 Days	\$ 20,244.00	\$ 3,535.00	\$ 23,779.00
12	Demolish and Haul Curb (75 LF)	2 Hours	\$ 127.00	\$ 300.00	\$ 427.00
13	Demolish and Haul Driveway (565 SF)	4.5 Hours	\$ 253.00	\$ 300.00	\$ 553.00
14	Core Existing Manhole	2 Hours	\$ 750.00	\$ 150.00	\$ 900.00
15	Install 15" RCP (8 LF)	3 Hours	\$ 2,024.00	\$ 426.00	\$ 2,450.00
16	Backfill and Compact Trench	2 Days	\$ 13,496.00	\$ 378.00	\$ 13,874.00
17	Add Limerock (63 CY)	1 Day	\$ 8,891.00	\$ 2,984.00	\$ 11,875.00
18	Mill Pavement (SF)	1 Day	\$ 12,953.00	\$ 47.00	\$ 13,000.00
19	Pave with SP 9.5 (SF)	2 Days	\$ 9,060.00	\$ 16,847.00	\$ 25,907.00
20	Furnish and Install Curb (LF)	1 Day	\$ 725.00	\$ 1,000.00	\$ 1,725.00
21	Furnish and Install Driveway (SF)	1 Day	\$ 1,650.00	\$ 5,130.00	\$ 6,780.00
22	Sod Restoration	1 Day	\$ 4,181.00	\$ 1,742.00	\$ 5,923.00
Subtotals:			\$ 195,440.00	\$ 95,195.00	\$ 290,635.00
			Bond (1.25%) - N/A		\$ 3,632.94
			Grand Total:		\$ 294,267.94

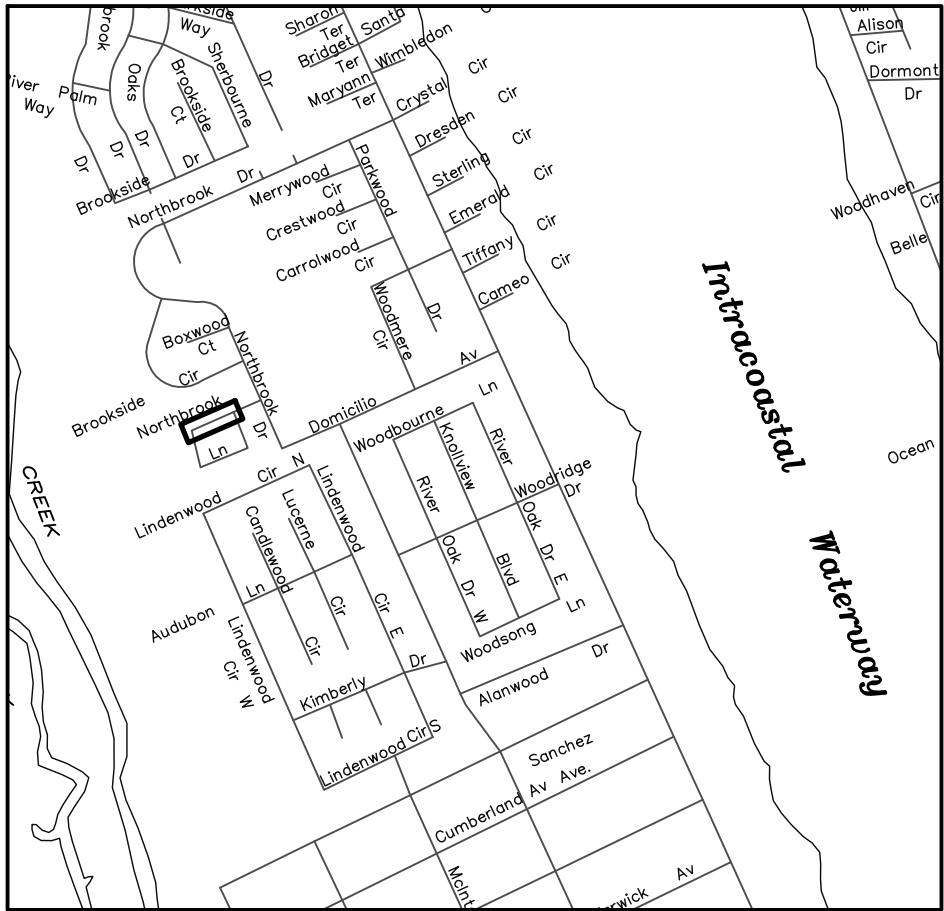
Clarifications

- Void if not accepted in writing within 30 Days of submission
- No other changes or improvements are included in this quote
- City to Inform residents and coordinate parking accommodations

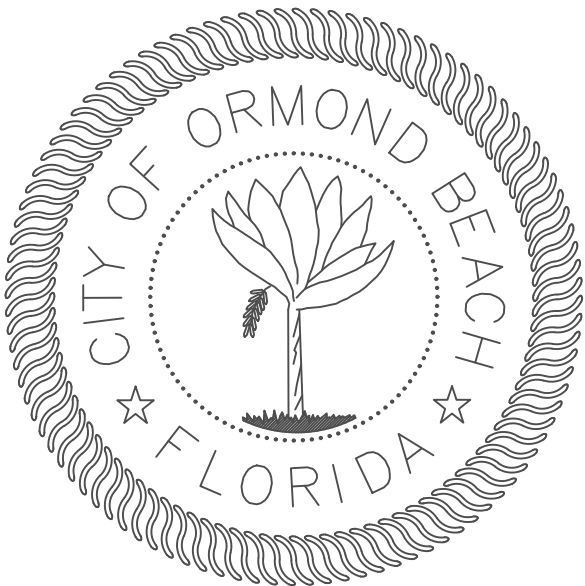
CITY OF ORMOND BEACH

NORTHBROOK LANE STORM WATER REPAIR

 - SITE LOCATION



SITE LOCATION MAP



SHEET	DESCRIPTION
1	COVER SHEET
2	GENERAL NOTES
3	STORM DRAINAGE NOTES
4	PLAN
5	PROFILE & SECTIONS
6	DETAILS

MAYOR

JASON LESLIE

COMMISSIONERS

LORI TOLLAND, ZONE 1

TRAVIS SARGENT, ZONE 2

KRISTIN DEATON, ZONE 3

HAROLD BRILEY, ZONE 4

CITY MANAGER

JOYCE SHANAHAN

IN ORDER TO ENSURE THAT NEW DEVELOPMENTS WITHIN THE CITY ARE CONSTRUCTED SUBSTANTIALLY IN ACCORDANCE WITH CITY REGULATIONS AND THE APPROVED DRAWINGS "AS-BUILT" DRAWINGS ARE REQUIRED:

THE FOLLOWING INFORMATION IS REQUIRED ON ALL PAVING AND DRAINAGE "AS-BUILT" DRAWINGS:

1. PAVEMENT AND CURB WIDTHS SHALL BE VERIFIED AND DIMENSIONED FOR EACH STREET AT EACH BLOCK. ALL RADII AT INTERSECTIONS SHALL BE VERIFIED AND DIMENSIONED. THIS INFORMATION TO CLEARLY INDICATE IT AS AS BEING "AS-BUILT" INFORMATION.
2. ROADWAY ELEVATIONS SHALL BE RECORDED AT ALL GRADE CHANGES OR OTHER INTERVALS AS NEEDED ALONG ALL STREETS. STREET CENTERLINE AND CURB INVERT ELEVATIONS SHALL BE RECORDED AS NOTED. THE "AS-BUILT" CENTERLINE PROFILE OF ALL STREETS SHALL ALSO BE SHOWN ON THE PLAN AND PROFILE SO IT MAY BE COMPARED TO THE EXISTING AND DESIGNED PROFILE GRADE LINES. ALL STREET CENTERLINES ON "AS-BUILTS" SHALL BE LABELED WITH STREET NAME AND RIGHT-OF-WAY WIDTH ON EVERY PAGE.
3. STORM DRAINAGE STRUCTURES SHALL BE LOCATED AND/OR DIMENSIONED FROM CENTERLINES OR LOT LINES AS APPROPRIATE.
4. STORM DRAINAGE PIPE INVERT AND STRUCTURE TOP AND BOTTOM ELEVATIONS SHALL BE RECORDED AND CLEARLY DENOTED AS "AS-BUILT" INFORMATION. DESIGN ELEVATIONS SHALL BE CROSSED OUT AND "AS-BUILT" INFORMATION WRITTEN NEXT TO IT.
5. STORM DRAINAGE PIPE MATERIAL, LENGTH, AND SIZE SHALL BE MEASURED AND/OR VERIFIED. THIS INFORMATION TO CLEARLY INDICATE IT AS BEING "AS-BUILT" INFORMATION.
6. ALL APPLICABLE TOPOGRAPHIC INFORMATION, PERTINENT TO THE ON SITE DRAINAGE SYSTEM SUCH AS DITCHES, LAKES, CANALS, ETC. THAT ARE DEEMED APPROPRIATE BY THE CITY SHALL BE NOTED. NORMALLY, RECORDING ELEVATIONS EVERY 100 FEET AT THE TOP OF BANK AND TOE OF SLOPE WILL BE REQUIRED. MEASUREMENTS SHALL BE TAKEN AND RECORDED IN ORDER TO ACCURATELY TIE DOWN THESE FEATURES TO THE ROADWAY CENTERLINES AND TO PLAT LINES. WHENEVER POSSIBLE, CONTOUR LINES SHALL BE UTILIZED TO GRAPHICALLY DESCRIBE THESE TOPOGRAPHIC FEATURES.
7. RETENTION AREAS SHALL HAVE THEIR TOP-OF-BANK AND BOTTOM ELEVATIONS RECORDED. ACTUAL MEASUREMENTS SHALL BE TAKEN AND DIMENSIONS RECORDED OF THE SIZE OF ALL RETENTION AREAS. MEASUREMENTS SHALL BE DONE FROM TOP-OF-BANK TO TOP-OF-BANK WITH SIDE SLOPES INDICATED. SEPARATE CALCULATIONS SHALL BE SUBMITTED TO INDICATE REQUIRED AND PROVIDED RETENTION VOLUMES.
8. STORM DRAINAGE SWALE CENTERLINES SHALL BE LOCATED AND ELEVATIONS OF FLOW LINE SHALL BE RECORDED EVERY 100 FEET.
9. ANY SPECIAL FEATURES SUCH AS CONCRETE FLUMES, LAKE BANKS, WALLS, FENCING, ETC., WHICH WERE A PART OF THE APPROVED CONSTRUCTION DRAWINGS SHOULD ALSO BE LOCATED AND DIMENSIONED.
10. ACTUAL MATERIALS USED AND ELEVATIONS AND DIMENSIONS OF OVERFLOW WEIR STRUCTURES AND SKIMMERS SHALL BE NOTED ON THE "AS-BUILT".

THE FOLLOWING INFORMATION IS REQUIRED ON ALL WATER AND SEWER "AS-BUILT" DRAWINGS:

11. SANITARY SEWER MANHOLES SHALL BE VERIFIED AND DIMENSIONED FROM STREET CENTERLINES OR LOT LINES AS APPROPRIATE. ALL RIM AND INVERT ELEVATIONS SHALL BE VERIFIED AND RECORDED. THIS INFORMATION TO CLEARLY INDICATE IT AS BEING "AS-BUILT" INFORMATION.
12. SANITARY SEWER LINE LENGTHS, SIZES, MATERIAL, SLOPE, ETC., SHALL BE VERIFIED AND RECORDED. THIS INFORMATION TO CLEARLY INDICATE IT AS BEING "AS-BUILT" INFORMATION.

13. SEWER LATERALS SHALL BE VERIFIED AND RECORDED AT THEIR CLEAN-OUT LOCATIONS. STATIONING AND OFFSET DISTANCES SHALL BE MEASURED FROM DOWNSTREAM MANHOLES TOWARDS UPSTREAM MANHOLES.
14. LIFT STATIONS AND FORCE MAINS SHALL BE VERIFIED AND DIMENSIONED FROM STREET CENTERLINES OR LOT LINES AS APPROPRIATE. FORCE MAIN DEPTH AND LOCATION INCLUDING VALVES WILL BE PROVIDED AND TIED TO PERMANENT ABOVE GRADE FEATURES EVERY 500 FEET. DIMENSIONAL AND ELEVATION INFORMATION INDICATED ON THE APPROVED PLAN SHALL BE VERIFIED AND RECORDED. THIS INFORMATION TO CLEARLY INDICATE IT AS BEING "AS-BUILT" INFORMATION. BURIED ELECTRICAL SERVICE LINE SHALL BE CLEARLY DIMENSIONED, LOCATED AND LABELED.
15. CURB CUTS OR METAL TABS, USED TO MARK SEWER LATERALS, WATER SERVICES AND WATER VALVES, SHALL BE VERIFIED FOR PRESENCE AND ACCURACY OF LOCATION.
16. WATER MAIN LINES SHALL BE DIMENSIONED OFF THE BACK OF CURB OR EDGE OF PAVEMENT IF NO CURB IS PRESENT. WATER MAIN LINE MATERIAL, SIZE, LENGTH AND DEPTH PLACED SHALL ALSO BE NOTED. THIS INFORMATION TO CLEARLY INDICATE IT AS BEING "AS-BUILT" INFORMATION.
17. WATER VALVES, TEES, ALL SERVICES, BLOW - OFFS AND FIRE HYDRANTS SHALL BE LOCATED BY TYING THEM TO SANITARY SEWER MANHOLES. STATIONING AND OFFSET DISTANCES SHALL BE MEASURED FROM DOWNSTREAM MANHOLES TO UPSTREAM MANHOLES.

THE FOLLOWING INFORMATION IS GENERAL REQUIREMENTS OF ALL "AS-BUILT" DRAWINGS:

18. FOR PERPENDICULAR CROSSINGS OF STORM WATER, SANITARY SEWER, POTABLE WATER, OR RECLAIMED WATER, THE "AS-BUILT" PLANS SHALL CLEARLY INDICATE WHICH UTILITIES ARE LOCATED OVER OR UNDER OTHER UTILITIES, AS NECESSARY.
19. WHEN STORM WATER, POTABLE WATER, RECLAIMED WATER, OR SANITARY SEWER IMPROVEMENTS ARE LOCATED WITHIN AN EASEMENT, THE "AS-BUILT" SHALL ACCURATELY DEPICT THE LOCATION OF THE EASEMENT ITSELF AS WELL AS THE EXACT LOCATION OF THE IMPROVEMENTS WITHIN THE EASEMENT. THIS IS REQUIRED IN ORDER TO VERIFY THAT THE IMPROVEMENTS HAVE BEEN PROPERLY LOCATED AND TO ENSURE THAT FUTURE SUBSURFACE EXCAVATION TO PERFORM REMEDIAL REPAIR CAN BE ACCOMPLISHED WITHOUT DISTURBANCE BEYOND THE EASEMENT. SUCH DOCUMENTATION AND THE ASSOCIATED PROPOSED EASEMENT DOCUMENT WITH LEGAL DESCRIPTION SHALL BE SUBMITTED FOR CITY REVIEW AND APPROVAL PRIOR TO RECORDING OF SAID EASEMENT. UPON CITY APPROVAL, THE EASEMENT SHALL BE RECORDED VIA A SEPARATE LEGAL INSTRUMENT AND SHALL NOT BE INCLUDED AS PART OF HOMEOWNER COVENANTS AND RESTRICTIONS.
20. SUBMIT CERTIFIED PAPER PRELIMINARY "AS-BUILT" (24"x36") WITH REQUEST FOR FINAL INSPECTION. SUBMIT 3 SETS SHOWING WATER FACILITIES, 3 SETS WITH SEWER FACILITIES, AND 3 SETS WITH PAVING AND DRAINAGE FACILITIES. PRELIMINARY "AS-BUILT" MAY BE SUBMITTED IN DIGITAL FORMAT. FOLLOWING FINAL INSPECTION AND COMMENTS, THE CONTRACTOR SHALL REVISE AS-BUILTS TO ADDRESS CITY COMMENTS AND SUBMIT 3 SETS CERTIFIED FINAL "AS-BUILTS" ALONG WITH 1 SET CERTIFIED MYLARS AND 1 CD-ROM CONTAINING AUTO-CAD FILES AND PDF VERSIONS SHOWING ALL "AS-BUILT" SHEETS. ALL "AS-BUILT" DRAWINGS SHALL BE CERTIFIED BY A REGISTERED LAND SURVEYOR AND ENGINEER OF RECORD. ALL DIGITAL FILES SHALL HAVE A DIGITAL SIGNATURE OF SURVEYOR AND/OR ENGINEER OF RECORD.
21. INDICATE VERTICAL DATUM REFERENCE ON ALL SHEETS.
22. CAD FILE OF "AS-BUILTS" SHALL BE IN STATE PLANE COORDINATES; FILE SHOULD INCLUDE REFERENCE TO PROJECTION. (FLORIDA EAST, NAD83)
23. ALL "AS-BUILT" DRAWINGS SHALL BE PREPARED BY A FLORIDA REGISTERED LAND SURVEYOR USING THE FINAL APPROVED SITE DESIGN PREPARED BY THE ENGINEER OF RECORD. LINE WEIGHTS, LINETYPES, AND ANNOTATION SHALL BE MANAGED IN A MANNER THAT CLEARLY DISTINGUISHES DESIGN INFORMATION FROM "AS-BUILT" INFORMATION.
24. ALL "AS-BUILT" SHEETS SHALL INCLUDE A TITLE BLOCK AND CLEARLY STATE PROJECT NAME, PROJECT SURVEYOR, DATE OF FIELD WORK, AS WELL AS PROJECT CERTIFICATION BLOCK FROM THE ENGINEER OF RECORD.

NOTE: REFERENCES TO WATER SHALL MEAN BOTH POTABLE AND RECLAIMED WATER.

GENERAL NOTES:

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF ORMOND BEACH'S LAND DEVELOPMENT CODE REQUIREMENTS, AND THE STANDARD CONSTRUCTION DETAILS AND CONSTRUCTION SPECIFICATIONS (SCDCS). AN ENGINEERING PERMIT AND TREE REMOVAL PERMIT IS REQUIRED PRIOR TO STARTING CONSTRUCTION.
2. NO LAND SHALL BE CLEARED, EXCAVATED OR FILLED AND NO STRUCTURE SHALL BE ERECTED, REPAIRED OR DEMOLISHED WITHOUT PROPER PERMIT(S) AS REQUIRED BY THE CITY OF ORMOND BEACH.
3. NOTIFY THE CITY OF ORMOND BEACH AT COMDEV@ORMONDBEACH.ORG 48 HOURS PRIOR TO THE START OF CONSTRUCTION.
4. ANY CONSTRUCTION CHANGES TO APPROVED PLANS SHALL BE SUBMITTED TO THE CITY OF ORMOND BEACH FOR APPROVAL PRIOR TO PERFORMING THE WORK.
5. ROAD CONSTRUCTION AND PIPE INSTALLATION COMPACTION AND DENSITY TESTING SHALL CONFORM TO THE CITY OF ORMOND BEACH'S MINIMUM REQUIREMENTS. CERTIFIED COPIES OF TEST REPORTS SHALL BE SUBMITTED TO THE CITY INSPECTOR AND THE CITY'S ENGINEERING DIVISION.
6. A PRE-PAVING UTILITY INSPECTION MUST BE REQUESTED AND COMPLETED PRIOR TO THE PAVING OF ALL ROADS, STREETS, AND PARKING AREAS.
7. A FINAL INSPECTION, TO BE CONDUCTED BY THE CITY OF ORMOND BEACH, SHALL BE PERFORMED ON ALL CONSTRUCTION. THE DESIGN ENGINEER SHALL NOTIFY THE CITY OF ORMOND BEACH AT COMDEV@ORMONDBEACH.ORG WHEN REQUESTING A FINAL INSPECTION.
8. THREE COMPLETE SETS OF AS-BUILT DRAWINGS (5 FOR SUBDIVISIONS) ARE REQUIRED TO BE SUBMITTED TO THE CITY OF ORMOND BEACH PRIOR TO REQUESTING A FINAL INSPECTION. AS-BUILT DRAWINGS MAY BE SUBMITTED IN DIGITAL FORMAT WITH DIGITAL SIGNATURE OF SURVEYOR AND/OR ENGINEER OF RECORD.
9. THE CITY HAS A CONTRACTOR FOR ROLL OFF SERVICE. NO OTHER CONTRACTOR SHALL BE PERMITTED TO PROVIDE THIS SERVICE. VERIFY COMPANY UNDER CONTRACT WITH THE CITY.
10. CONSTRUCTION SITES THAT DISTURB ONE ACRE OR MORE WILL BE REQUIRED TO SEEK COVERAGE UNDER THE GENERIC PERMIT FOR STORM WATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES. IN ACCORDANCE WITH THIS REQUIREMENT, A STORM WATER POLLUTION PREVENTION PLAN (SWPP) MUST BE SUBMITTED TO THE CITY OF ORMOND BEACH AT COMDEV@ORMONDBEACH.ORG PRIOR TO CONSTRUCTION TO BE IN COMPLIANCE WITH THE PERMIT.
11. CONTRACTOR WILL FOLLOW REQUIRED WASTE MANAGEMENT PRACTICES
12. SEEDING OR SODDING SHALL BE INITIATED FOR EROSION AND SEDIMENT CONTROL ON DISTURBED AREAS AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED.
13. ANY FIELD MODIFICATIONS OR DEVIATIONS TO THIS CONSTRUCTION PLAN REQUIRES WRITTEN APPROVAL BY BOTH THE ENGINEER OF RECORD AND THE CITY OF ORMOND BEACH.



STANDARD CONSTRUCTION DETAIL
REQUIREMENTS FOR "AS-BUILT" DRAWINGS

INDEX

M-1A

MAY 2020



STANDARD CONSTRUCTION DETAIL
REQUIREMENTS FOR AS BUILT DRAWINGS

INDEX

M-1B

MAY 2020



STANDARD CONSTRUCTION DETAIL
GENERAL CONSTRUCTION NOTES

INDEX

M-2

MAY 2020

NO.	DATE	REVISIONS	BY

City of Ormond Beach
Engineering Division

JASON LESLIE, MAYOR JOYCE SHANAHAN, CITY MANAGER
ALEX SCHUMANN, P.E. CITY ENGINEER

NORTHBROOK LANE
STORM WATER REPAIR

GENERAL NOTES

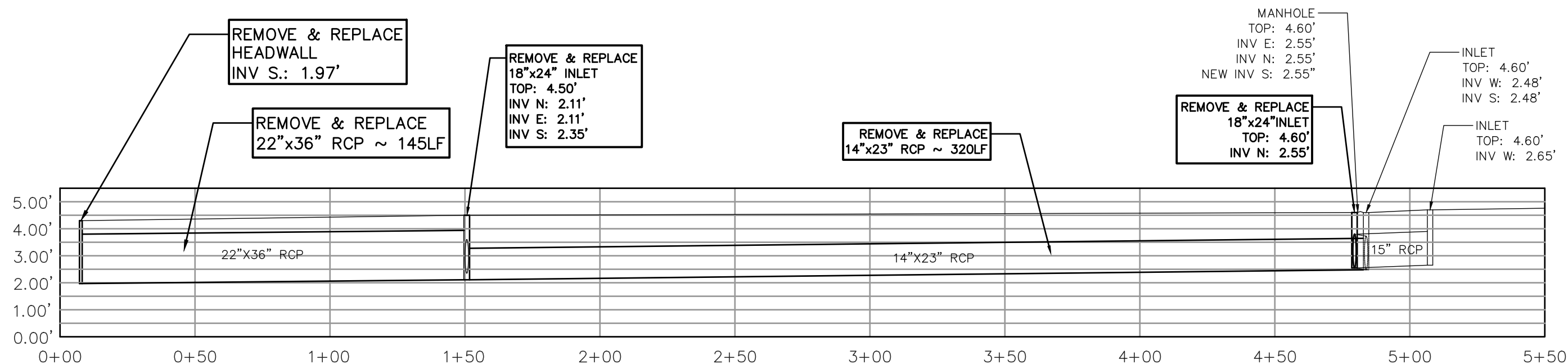
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DRAWING STATUS	
	DRAFT
	PERMIT
	BID
	ADDENDA
	CONSTRUCTION
	RECORD

1. CONSTRUCTION STANDARDS FOR ALL DRAINAGE SYSTEM COMPONENTS SHALL CONFORM TO THE LATEST EDITION OF THE "FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" AND AS SPECIFIED HEREIN. 2. ALL STORM WATER PIPES AND STRUCTURES SHALL BE INSTALLED ON A FIRM FOUNDATION WITH ALL UNSUITABLE MATERIAL (MUCK, ROCK, COQUINA, ETC.) REMOVED AND REPLACED WITH CLEAN GRANULAR MATERIAL. 3. DEWATERING SHALL BE PROVIDED TO KEEP GROUNDWATER ELEVATION A MINIMUM OF 6 INCHES BELOW THE COMPONENT BEING INSTALLED. 4. ALL PIPES AND STRUCTURES SHALL BE PLACED TRUE TO LINES AND GRADES AS DEPICTED ON THE APPROVED PLANS. 5. ALL PIPE JOINTS SHALL BE PROPERLY HONED AND FILTER FABRIC LINED USING A METHOD TO HOLD THE FABRIC IN PLACE DURING BACKFILL. 6. BACKFILL AND COMPACT TO THE SPRING-LINE (CENTER OF PIPE) ELEVATION AND REQUEST CITY INSPECTION AND APPROVAL BEFORE CONTINUING. 7. ALL WORK COVERED WITHOUT CITY INSPECTION WILL BE REQUIRED TO BE EXCAVATED AND INSPECTED AT THE CONTRACTOR'S EXPENSE. 8. TRENCHES SHALL BE BACKFILLED AND COMPACTED WITH CLEAN GRANULAR MATERIAL IN MAX 6" LIFTS WITH A MINIMUM COMPACTION OF 98 PERCENT (AASHTO-T180) IN PAVED AREAS AND 95 PERCENT (AASHTO-T180) IN UNPAVED AREAS. 9. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT TRENCH COMPACTION TESTS AT POINTS 1' ABOVE THE PIPE AND AT A MAX. 1' VERTICAL INTERVALS TO FINISH GRADE, AT A MAXIMUM SPACING OF 100 FEET, AND TO FURNISH COPIES OF TEST REPORTS PROMPTLY TO THE CITY'S INSPECTOR. 10. ALL STORM SEWER PIPE SHALL BE REINFORCED CONCRETE (RCP), HIGH DENSITY POLYETHYLENE (HDPE), POLYVINYL CHLORIDE (PVC) OR ALUMINUM CORRUGATED METAL PIPE (ACMP), AS SHOWN ON THE PLANS. 11. STORM DRAINAGE PIPES WITHIN PUBLIC RIGHT-OF-WAY SHALL BE A MINIMUM OF FIFTEEN (15) INCH RCP DIAMETER OR EQUIVALENT. 12. STORM INLETS, MANHOLES, AND CATCH BASINS SHALL BE EITHER POURED IN PLACE OR PRECAST REINFORCED CONCRETE. STRUCTURES SHALL BE REQUIRED AT EACH CHANGE OF PIPE SIZE OR CHANGE IN PIPE DIRECTION.	13. STORM INLETS SHALL BE SPACED IN SUCH A MANNER AS TO ACCEPT ONE HUNDRED (100) PERCENT OF THE DESIGN STORM RUNOFF. 14. WET DETENTION PONDS SHALL BE EIGHT (8) FEET MINIMUM TO TWELVE (12) FEET MAXIMUM DEPTH BELOW THE DESIGN LOW OR NORMAL WATER STAGE. 15. MAXIMUM DISTANCES BETWEEN INLETS AND/OR JUNCTION BOXES:<table><tr><th>PIPES SIZE (INCHES)</th><th>LENGTH OF RUN (FEET)</th></tr><tr><td>15</td><td>150</td></tr><tr><td>18</td><td>300</td></tr><tr><td>24 OR GREATER</td><td>400</td></tr></table> 16. ALL SWALES, DITCHES, AND DRY RETENTION POND SIDE SLOPES SHALL BE NO STEEPER THAT 4:1 (H:V) AND SHALL BE SODDED. 17. ALL RETENTION POND BACKSLOPES SHALL BE NO STEEPER THAN 3:1 (H:V) AND SHALL BE SODDED. 18. NORMAL ROADSIDE SWALES SHALL BE CONSTRUCTED TO A MAXIMUM DEPTH OF 18" BELOW THE OUTSIDE EDGE OF PAVEMENT OR CONCRETE CURB. 19. CONCRETE EROSION CONTROL MUST BE PROVIDED WHERE SWALES OR CULVERTS INTERCEPT DRAINAGE DITCHES. 20. A MINIMUM ONE FOOT (1') FREEBOARD ABOVE THE DESIGN HIGH WATER ELEVATION IS REQUIRED AT ALL POINTS AROUND WET RETENTION PONDS. 21. A MINIMUM SIX INCH (6") FREEBOARD ABOVE THE DESIGN HIGH WATER ELEVATION IS REQUIRED AT ALL POINTS AROUND DRY RETENTION PONDS. 22. POND INFLOW SHALL GENERALLY BE CONSTRUCTED WITH REINFORCED CONCRETE AND SHALL BE SUBJECT TO THE APPROVAL OF THE CITY. 23. OUTLET STRUCTURES ARE REQUIRED ON ALL PONDS. ALL OUTLET STRUCTURES SHALL BE PERMANENT CONCRETE OVERFLOW WEIRS OR CONCRETE OUTLET CONTROL STRUCTURES. NO SODDED WEIRS OR OTHER NON-PERMANENT OVERFLOW STRUCTURES SHALL BE ALLOWED. 24. SOIL EROSION CONTROL MEASURES SATISFACTORY TO THE CITY, SHALL BE EMPLOYED DURING CONSTRUCTION AND UPON COMPLETION OF THE POND. 25. THE CITY MAY REQUEST THAT THE DEVELOPER SUBMIT A REPORT BY A QUALIFIED HYDROLOGIST ON THE IMPACT THE POND WILL HAVE ON NEIGHBORING WATER TABLE ELEVATIONS BOTH DURING CONSTRUCTION AND AFTER POND COMPLETION. THE CITY MAY REQUIRE GROUNDWATER MONITORING DURING THE POND EXCAVATION.	PIPES SIZE (INCHES)	LENGTH OF RUN (FEET)	15	150	18	300	24 OR GREATER	400	26. ADEQUATE MAINTENANCE ACCESS AS APPROVED BY THE CITY SHALL BE PROVIDED AROUND THE ENTIRE PERIMETER OF ALL PONDS AND ASSOCIATED OUTFALLS DISCHARGING INTO AND OUT OF PONDS. 27. IN GENERAL, ALL RETENTION/DETENTION PONDS MUST BE CONSTRUCTED PRIOR TO ANY ROAD, PARKING LOT, OR BUILDING CONSTRUCTION COMMENCING OR AS CURRENT PERMIT CONDITIONS DICTATE. 28. THE CONTRACTOR SHALL BE RESPONSIBLE TO OBTAIN ANY DEWATERING PERMITS THAT MAY BE REQUIRED. 29. CULVERTS CROSSING RIGHT-OF-WAYS SHALL EXTEND FROM RIGHT-OF-WAY LINE TO RIGHT-OF-WAY LINE UNDER THE ROADWAY. 30. ALL STORM WATER DISCHARGE FROM RETENTION/DETENTION PONDS ARE REQUIRED TO BE CHANNELED INTO DEFINED DRAINAGE PATHS TO EXISTING WATER BODIES, WETLANDS, DITCHES, ETC. 31. THE CITY OF ORMOND BEACH REQUIRES THE DEVELOPER TO TELEWISE ANY AND ALL STORM SEWER PIPE SYSTEMS IN THE PRESENCE OF THE CITY INSPECTOR BY A REPUTABLE COMPANY THAT ENGAGES IN THIS TYPE OF WORK. THE DVD SHALL BE IN HIGH QUALITY STANDARD RESOLUTION USING A CAMERA WITH SUITABLE LIGHTING TO ALLOW A CLEAR FOCUSED PICTURE OF THE ENTIRE INSIDE PIPE CIRCUMFERENCE. THE DVD SHALL BE NON-STOP WITH AUDIO DESCRIBING WHAT IS BEING VIEWED. COPIES OF DVD SHALL BE SUBMITTED IN DVD FORMAT ACCOMPANIED BY WRITTEN LOGS DESCRIBING THE CONDITION OF THE LINES AT LEAST FORTY-EIGHT (48) HOURS PRIOR TO REQUESTING FINAL INSPECTIONS. ANY DEFECTS NOTED SHALL BE CORRECTED PRIOR TO ACCEPTANCE BY THE CITY OR ISSUANCE OF CERTIFICATE OF OCCUPANCY. 32. IN ACCORDANCE WITH SECTION 3-58(F) ALL WET DETENTION PONDS SHALL INCLUDE AN AERATION FOUNTAIN TO ENSURE PROPER WATER QUALITY, ENHANCE MAINTENANCE, AND IMPROVE AESTHETICS. PONDS SHALL BE DESIGNED TO APPEAR NATURAL AND NON-GEOMETRIC.
PIPES SIZE (INCHES)	LENGTH OF RUN (FEET)									
15	150									
18	300									
24 OR GREATER	400									

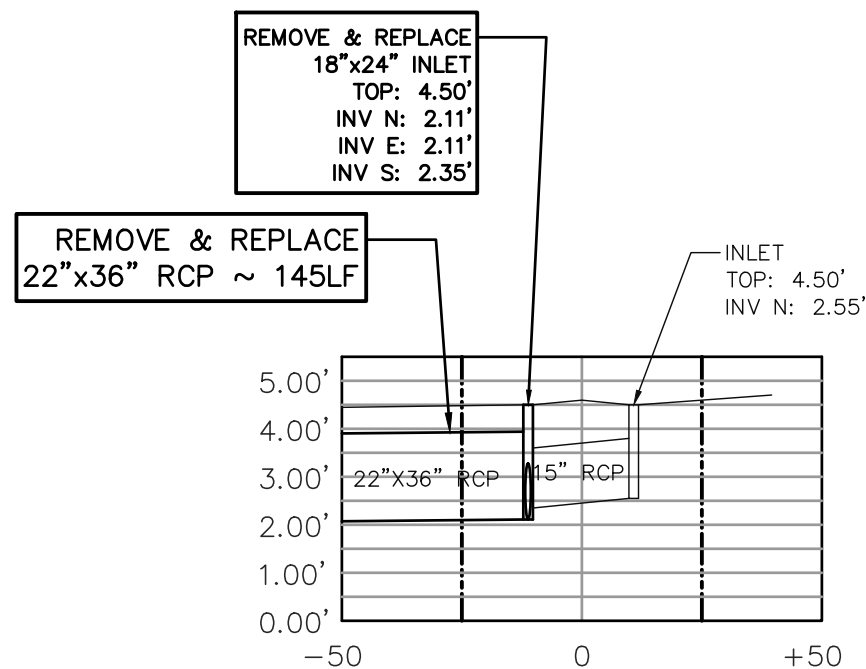
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DRAWING STATUS	
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	ADDENDA
	CONSTRUCTION
	RECORD



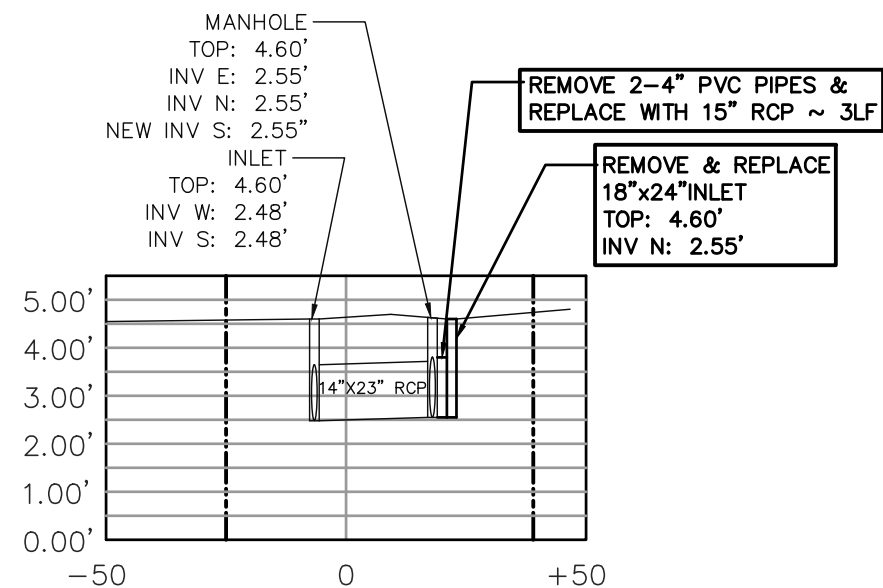
PROFILE

SCALE: H=1"=30' V=1"=3'



CROSS-SECTION A-A

SCALE: H=1"=30' V=1"=3'



CROSS-SECTION B-B

SCALE: H=1"=30' V=1"=3'

DRAWING STATUS

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☐	RECORD

NO.	DATE	REVISIONS	BY

City of Ormond Beach
Engineering Division

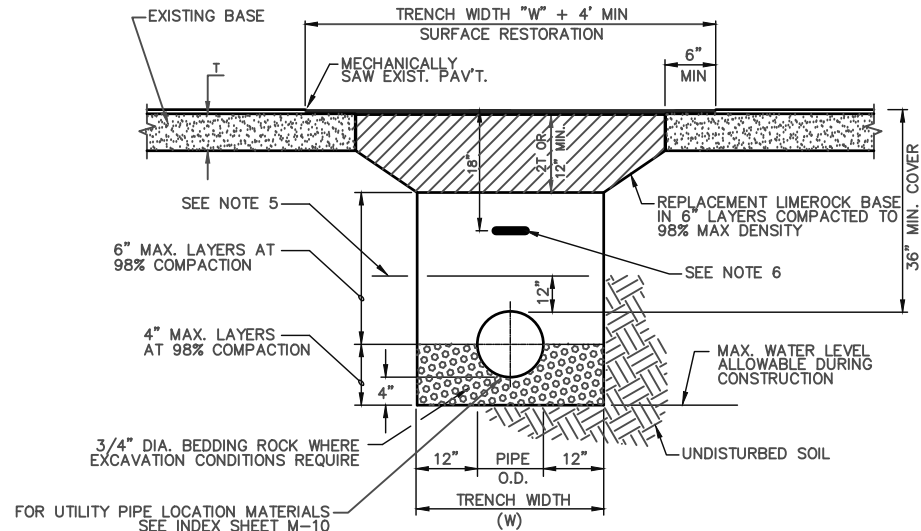
JASON LESLIE, MAYOR
JOYCE SHANAHAN, CITY MANAGER
ALEX SCHUMANN, P.E. CITY ENGINEER

**NORTHBROOK LANE
STORM WATER REPAIR**

PROFILE & SECTIONS

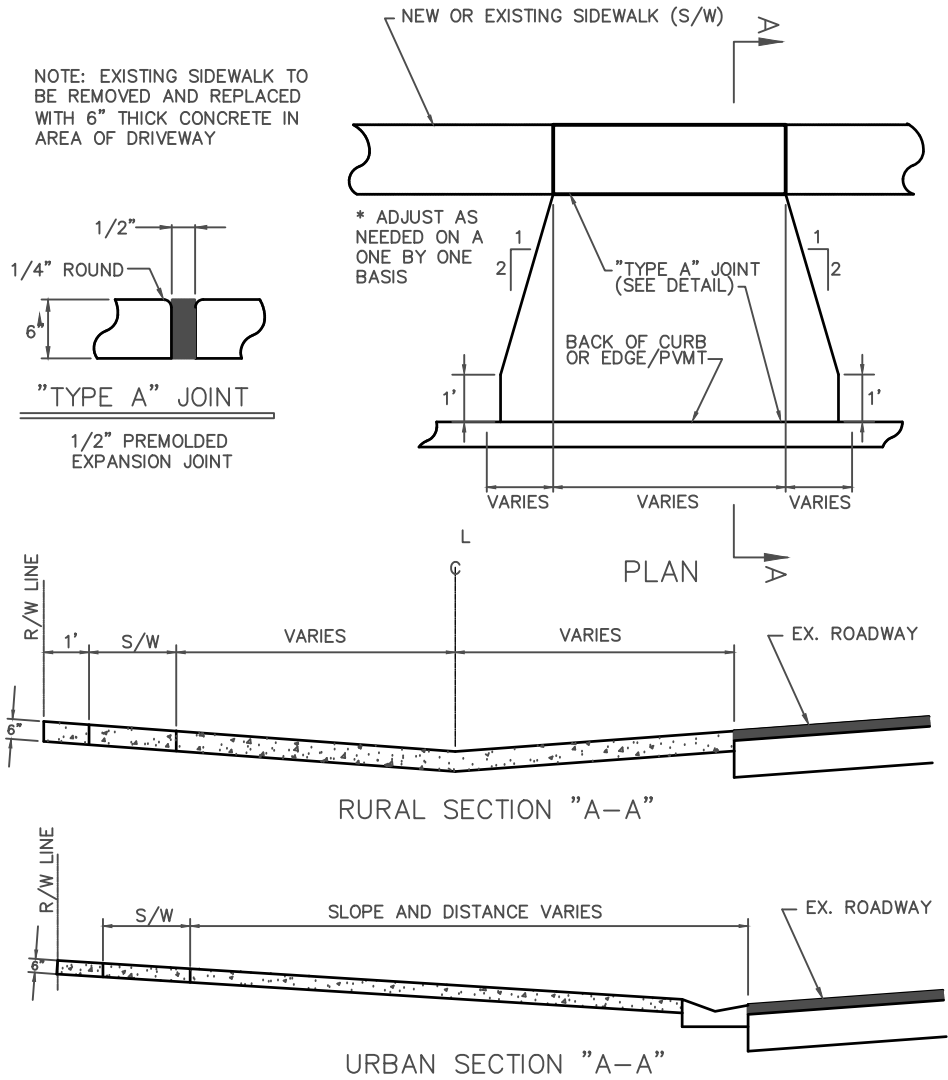
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PROJECT NO.: 00-
FILE NAME:
SHEET: 5 of 6

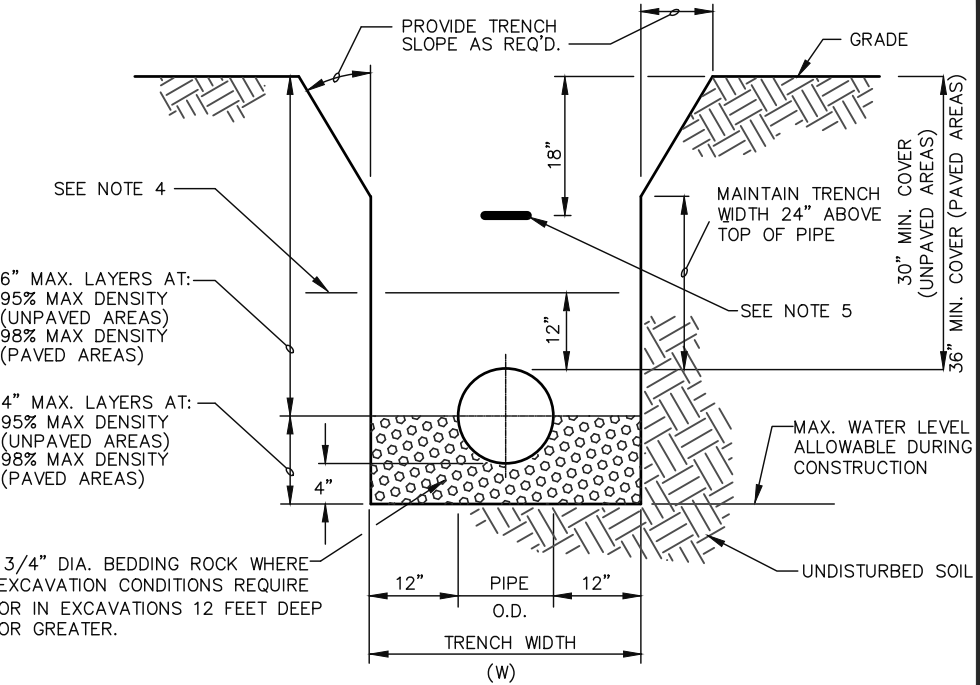


PAVEMENT CUT AND PATCH DETAIL

- NOTES:
1. WHERE SOIL CONDITIONS CAN NOT BE MAINTAINED AS SHOWN ABOVE, PROVIDE APPROVED METHOD OF CONSTRUCTION.
 2. SHEETING WILL BE REQUIRED AS DETERMINED IN THE FIELD.
 3. NEW SURFACING MATERIALS SHALL BE CONSISTENT WITH EXISTING AND SHALL HAVE LAPPED & FEATHERED JOINTS (1 1/2" MIN. THK.)
 4. COMPACTION PERCENTAGES SHOWN REFER TO A.A.S.H.T.O. T-180. PROVIDE COMPACTION TEST REPORTS TO CITY INSPECTOR.
 5. MECHANICAL COMPACTION NOT ALLOWED BELOW THIS LEVEL.
 6. INSTALL METALLIC TAPE OVER FULL LENGTH OF PIPE.
 7. EIGHT INCHES (8") OF HIGH EARLY-STRENGTH CONCRETE MAY BE SUBSTITUTED FOR LIMEROCK UPON APPROVAL BY CITY ENGINEER.



DRIVEWAY APRON BASE TO BE COMPACTED AND TESTED TO 95% DENSITY WITH MINIMUM L.B.R. 40 BASED ON AASHTO MODIFIED PROCTOR TEST F.B.V.-75 CONCRETE DRIVEWAY APRON TO BE 28 DAY, 3000 PSI.



PIPE INSTALLATION DETAIL

- NOTES:
1. WHERE SOIL CONDITIONS CAN NOT BE MAINTAINED AS SHOWN ABOVE, PROVIDE APPROVED METHOD OF CONSTRUCTION.
 2. SHEETING WILL BE REQUIRED AS DETERMINED IN THE FIELD.
 3. COMPACTION PERCENTAGES SHOWN REFER TO A.A.S.H.T.O. T-180. PROVIDE COPIES OF CERTIFIED TEST REPORTS TO CITY INSPECTOR.
 4. MECHANICAL COMPACTION NOT ALLOWED BELOW THIS LEVEL.
 5. INSTALL METALLIC TAPE OVER FULL LENGTH OF PIPE.



STANDARD CONSTRUCTION DETAIL
PAVEMENT CUT AND PATCH
NTS

INDEX

R-8

MAY 2020



STANDARD CONSTRUCTION DETAIL
RESIDENTIAL DRIVEWAY APRON
DRAWINGS
NTS

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M-7

MAY 2020



STANDARD CONSTRUCTION DETAIL
PIPE INSTALLATION
NTS

INDEX

M-9

MAY 2020

NO.	DATE	REVISIONS	BY

City of Ormond Beach
Engineering Division

JASON LESLIE, MAYOR
JOYCE SHANAHAN, CITY MANAGER
ALEX SCHUMANN, P.E. CITY ENGINEER

**NORTHBROOK LANE
STORM WATER REPAIR**

DETAILS

DATE: 8/12/25 PROJECT NO.: 00-
SCALE: FILE NAME:
DRAWN BY: MC SHEET: 6 of 1147

DRAWING STATUS

	DRAFT
	PERMIT
	BID
	ADDENDA
	CONSTRUCTION
	RECORD



City of Ormond Beach
City Commission Agenda
Staff Report

Agenda Date	November 4, 2025	Item No	7.E.
Section	CONSENT AGENDA	Category	Consent - Resolution
Subject	Interlocal Agreement - Volusia Co., Fire Apparatus Fleet Services and Contingency Fueling		
Recommended Action	Staff recommends approval of the interlocal agreement with Volusia County for the provision of maintenance and repair services for fire apparatus.		
Strategic Goal	Public Safety - Ensure the physical security of City assets and operations.		
Department Staff Contact	Fire Department Nathan Quartier, Deputy Fire Chief		

Summary

This item is a request for approval of an interlocal agreement with Volusia County for the provision of maintenance and repair services for City fire apparatus on an as-needed basis. Under the agreement, Volusia County Fleet Management Services will provide facilities, personnel, equipment, and tools necessary to complete routine maintenance, complex repairs, and other vehicle services.

The agreement ensures work will be performed by certified Emergency Vehicle Technicians (EVTs), which is critical for the safety and reliability of fire apparatus. The County has the facilities, staff, and technical expertise to handle large-scale and complex repairs that may otherwise strain the City's internal resources.

The agreement also allows for the use of Volusia County's fueling sites at the identified rates. This allows for contingency fueling of City vehicles in the event the City's Fleet site is inaccessible (such as being damaged during a disaster).

This partnership allows the City's Fleet Division to focus on its already heavy workload while ensuring timely and professional repairs for fire apparatus, minimizing downtime and ensuring emergency readiness.

Financial Impact

Charges for services are based on Volusia County's established Fleet Management Service rates, with the City being billed on a monthly basis for any services utilized.

- Labor Rate: \$90 per hour for maintenance and repairs.
- Parts: At cost through the NAPA IBS contract.
- Sublet Vendor Services: Cost plus 20%.
- Fuel: Cost plus \$0.16 per gallon (unleaded) and \$0.28 per gallon (diesel).
- Towing: Per current County Master Agreement rates.

This agreement does not create long-term debt obligations and is subject to annual budget appropriations.

Funding is included in the Fiscal Year 2025-26 budget, General Fund (001), and not to exceed \$323,618.

Citizen Impact

Approval of this agreement ensures fire apparatus are repaired and maintained to industry standards by certified EVTs, thereby improving the safety and reliability of emergency response services. Reduced downtime means fire vehicles remain available and operational when needed most, directly benefiting public safety and service delivery.

Attachments

1. 25-169 Interlocal w-County-Fleet & Fuel (P25-0083G)
2. City of Ormond Beach Interlocal w-VCounty.9.26.25

RESOLUTION NO. 2025-169

A RESOLUTION AUTHORIZING THE EXECUTION OF AN
INTERLOCAL AGREEMENT WITH THE COUNTY OF
VOLUSIA FOR THE PROVISION OF MUNICIPAL FLEET
MAINTENANCE SERVICES ON AN AS-NEEDED BASIS;
SETTING FORTH AN EFFECTIVE DATE.

WHEREAS, the maintenance of the City's fire apparatus is an important aspect of public safety, and

WHEREAS, the maintenance of said apparatus can be best accomplished by interlocal agreement with the County of Volusia because the County can provide the facilities, certified Emergency Vehicle Technicians, equipment and tools necessary for complex repairs, and

WHEREAS, the City Manager has certified that funds for the repairs in FY25-26 shall not exceed \$323,618.00 and has been appropriated to the General Fund and that funding for subsequent years shall be approved by the City Commission, and

WHEREAS, the attached agreement complies with the requirements of Chapter 163, *Florida Statutes*, now therefore,

**BE IT RESOLVED BY THE CITY COMMISSION OF THE CITY OF
ORMOND BEACH, FLORIDA, THAT:**

SECTION ONE. The Mayor and the City Manager are hereby authorized and directed to execute an Interlocal Agreement for Provision of Municipal Fleet maintenance Services on an as-needed basis, a copy of said Agreement being attached hereto and incorporated herein by reference. Said Agreement shall be effective retroactively to October 1, 2025.

SECTION TWO. This Resolution shall take effect immediately upon its adoption.

APPROVED AND AUTHENTICATED, this 4th day of November, 2025.

JASON LESLIE
Mayor

ATTEST:

SUSAN CARROLL DAUDERIS
City Clerk

**INTERLOCAL AGREEMENT
FOR THE PROVISION OF
MUNICIPAL FLEET MAINTENANCE SERVICES
BY COUNTY OF VOLUSIA TO
THE CITY OF ORMOND BEACH**

THIS AGREEMENT is entered into by and between the County of Volusia, a body corporate and politic and a political subdivision of the State of Florida, with administrative offices at 123 West Indiana Avenue, Deland, Florida 32720-4612, hereinafter referred to as “**COUNTY**,” and the City of Ormond Beach, a Florida municipal corporation, 22 South Beach Street, Ormond Beach, Florida, 32174, hereinafter referred to as “**CITY**”.

RECITALS

WHEREAS, the COUNTY is authorized by §125.01(1)(p), Florida Statutes, to “enter into agreements with other governmental agencies within or outside the boundaries of the COUNTY for the joint performance, or performance by one unit in behalf of the other, of any of either agency’s authorized functions;” and

WHEREAS, public agencies (including COUNTY and CITY) are authorized by §163.01(14), Florida Statutes, to “enter into contracts for the performance of service functions of [such] public agencies, but *shall not be deemed to authorize the delegation of the constitutional or statutory duties of state, county, or city officers.*” The parties expressly deny any intent, express or implied, in this Agreement to provide for a delegation by CITY of such constitutional or statutory duties to COUNTY; and

WHEREAS, the foregoing authorization for such agreements is granted to counties and cities for the purpose of permitting “local governmental units to make the *most efficient use* of their powers by enabling them to cooperate with other localities on a basis of mutual advantage and thereby to provide services and facilities in a manner and pursuant to forms of governmental organization that will accord best with geographic, economic, population, and other factors influencing the needs and development of local communities.” §163.01(2), Florida Statutes; and

WHEREAS, the CITY, after evaluation of options for the provision, has made a determination that it will be best served by contracting with COUNTY for provision of such services, which services will be performed by COUNTY personnel; and

WHEREAS, COUNTY certifies that it either currently has, or will employ, a sufficient number of personnel, appropriately qualified to perform the services enumerated therein, and COUNTY is willing to provide such services to CITY.

NOW, THEREFORE, in consideration of the mutual promises contained herein, the parties agree as follows:

PART I. General Provisions

1. Legislative Findings/Representations. The foregoing recitals are hereby adopted and incorporated herein as a material part of this Agreement.

2. Purpose. The purpose of this Agreement is for the COUNTY to provide specified *services* and *equipment* to the CITY(hereinafter, the "Contract Services"), at agreed upon levels of service ("LOS") as established herein.

3. County Departments. COUNTY shall manage the delivery of the Contract Services by allocating service task responsibilities along the organization line of the COUNTY'S Departments (hereinafter, "Departments"), as depicted in PART II hereof. The Director of the applicable Department or his/her designee shall be the COUNTY'S liaison to CITY for purposes of performance, interpretation and implementation of this Agreement.

4. Not a Lien. The parties agree that this Agreement does not constitute a general indebtedness of either party within the meaning of any constitutional statutory, or charter provision or limitation, and the parties expressly agree that the neither shall have the right to require or compel the exercise of ad valorem taxing power of the other or taxation of any real or personal property therein for providing the services described herein for payment of any monetary obligations due under the terms of this Agreement. It is further agreed that this Agreement and any funds called for to be paid hereunder shall not constitute a lien upon any real or personal property of either party or any part thereof, and that the obligation for monetary payments called for to be made hereunder shall be deemed to exist for less than a year at any point in time and shall be entirely subject to the legislative budgetary discretion of the parties respectively. The parties' monetary obligations to one another pursuant to this Agreement is limited to the budgeted amount for the then current fiscal year of this Agreement and is otherwise limited to legally available non ad-valorem tax revenues.

5. Division of Management Responsibilities. The Contract Services specified in this Agreement reflect the managerial and policy decisions of the CITY. Beyond the types of services identified herein, the CITY may identify the task within the scope of this Agreement to be performed by COUNTY, and the portion of the recent budget to be allocated thereto. The COUNTY shall have responsibility for the operational management of the Fleet Management Services. In cases where specific professional standards are applicable to the design or performance of such task, the COUNTY'S designated officer in charge ("OIC"), the designee, shall have the authority for decision making within that realm. The relevant COUNTY department director or the OIC shall be available on a regular basis to the CITY'S authorized designee to provide consultation and recommendations as contemplated herein.

6. Level of Service (LOS). COUNTY agrees to provide the personnel and equipment at the LOS established herein. Should the CITY desire the COUNTY provide services either different in kind, or at a higher level than that contemplated herein, the CITY Manager shall make written request therefore to the County Manager. Any modification to an LOS established pursuant to this Agreement shall be reduced to writing and approved by both parties. Any reduction in LOS desired by the CITY shall be effective only at the beginning of a new contract year unless both parties agree otherwise.

7. Personnel Matters. COUNTY shall allocate manpower and equipment for the performance of the Contract Services on an "as needed" basis. This Agreement shall not require any particular County employee to be dedicated fulltime to the Contract Services. All COUNTY personnel assigned to perform Contract services shall remain subject to COUNTY merit rules and regulations for all purposes contemplated merit and cost-of-living raises, annual leave and sick leave and disciplinary actions. Any claim of a disciplinary nature by CITY regarding a COUNTY employee shall be referred to the Department Director, who shall remain the "appointment authority" for such employee, for all purposes designated under the COUNTY Merit Rules. Such

COUNTY employees shall have no right to elect or choose any procedures available to CITY employees.

8. Term. This Agreement shall take effect on October 1, 2025, notwithstanding the date of expiration of any other similar Agreement, and shall continue in effect until September 30, 2027. The parties may, by mutual agreement, renew this Agreement upon the same or modified terms. Should the CITY desire to renew this Agreement, it shall make application in writing therefore, to COUNTY no later than February 1 of that contract year.

9. Termination. Either party may terminate this Agreement without cause or further liability to the other, upon written notice to the party representative specified in Part I, Section 10, given no less than one hundred eighty (180) days prior to the requested termination date. Such notice shall be the date the receipt therefore is signed by an official or authorized representative of the other party.

10. Notice. Notice as required to be given in this Agreement shall be provided to the following persons:

COUNTY:

CITY OF ORMOND BEACH:

County of Volusia
123 W. Indiana Avenue
DeLand, FL 32720-4612
Attention: County Manager

Copy to: Fleet Management Director
1270 Indian Lake Road
Daytona Beach, FL 32124

Joyce Shanahan, City Manager
22 South Beach Street
Ormond Beach, FL 32174

11. Third Parties. In no event shall any of the terms of this Agreement confer upon any third person, corporation, or entity other than the parties hereto any right or cause of action for damages claimed against any of the parties to this Agreement arising from the performance of the obligations and responsibilities of the parties herein or for any other reason.

12. Dispute Resolution. Any disputes concerning non-performance, or other aspects of this Agreement for which either party initiates litigation to enforce its rights hereunder, shall be subject to the provisions of Chapter 164, Florida Statutes, the "Florida Governmental Conflict Resolution Act."

13. Severability. If any provision of this Agreement is found to be unconstitutional, illegal, or otherwise unenforceable by judgment of a court of competent jurisdiction, such judgment shall not invalidate the remainder of this Agreement, unless such judgment renders the purpose or performance of this Agreement no longer practical for either party.

PART II. Specific Services

Article One. Fleet Management

1. Vehicle Repair and Fleet Services. The COUNTY shall provide the facilities, personnel, equipment, tools and supplies necessary and desirable to perform routine maintenance and minor repair and fuel services to vehicles and equipment owned by the CITY on an "as-needed" basis. The COUNTY may perform the services at any COUNTY maintenance facility at the COUNTY'S sole discretion. The Scope of Available Services and Schedule of Charges to be paid by the CITY to the COUNTY is attached hereto and incorporated herein as **Attachment 1**. The CITY shall pay the COUNTY for services rendered within forty-five (45) days of receipt by CITY of COUNTY invoice for services in accordance with the Schedule of Charges on **Attachment 1**.

A. Authorization for Services.

1. Prior to authorization for services by COUNTY:
 - (a) CITY and COUNTY shall develop a well-defined project description and complete understanding of the scope of services to be provided.
 - (b) COUNTY shall provide CITY with a detailed Work Order that provides the total estimated cost for the services based on the prices set forth in **Attachment 1**. If the Work Order is accepted by CITY, both parties shall execute the Work Order.
2. Each Work Order shall contain:
 - (a) The project description.
 - (b) The scope of work which shall describe the services to be performed.
 - (c) The dates for commencement and completion of work.

The Work Orders will be issued under and shall incorporate the terms of this Agreement. CITY makes no covenant or promise as to the number of available projects or that COUNTY will perform any project for CITY during the life of this Agreement. CITY reserves the right to contract with other parties for the services contemplated by this Agreement when it is determined by CITY to be in the best interest of CITY to do so.

2. Fuel. The COUNTY will allow the CITY to obtain fuel at the Fleet Management Facilities described in Section II of **Attachment 1**. The CITY shall pay the COUNTY for services rendered within forty-five (45) days of receipt by CITY of COUNTY invoice for services in accordance with the Schedule of Charges on **Attachment 1**. The provision of fuel shall be in accordance with **Attachment 1** and subject to availability as described hereafter. CITY acknowledges that the COUNTY has a fuel rationing plan in place for times of emergency and agrees to abide by such plan if implemented. An emergency is defined as any circumstance where the fuel supply will experience or is expected to experience an interruption. Partial rationing is referred to as **Mission Essential**. Full rationing is referred to as **Mission Critical**. Notification of emergencies will be accomplished through the Emergency Operations Center (EOC), through the County's intranet system (*i.e.*, Employee News Network or "ENN"), and by phone or e-mail as appropriate. During times of emergency, vehicles from outside agencies may be locked out of the COUNTY fuel system. When the fuel supply returns to normal levels, as determined by the COUNTY, the COUNTY will lift all restrictions from COUNTY pumps. For the aforementioned reason, outside agencies should have alternate fueling sources prearranged.

PART III. Miscellaneous

1. Sovereign Immunity. Each participating party expressly retains all rights, benefits and immunities of sovereign immunity in accordance with Section 768.28, Florida Statutes. Unless otherwise pre-empted by federal law, this Agreement shall be governed by and construed in accordance with the laws of the State of Florida. Notwithstanding anything set forth in any section of this Agreement to the contrary, nothing in this Agreement shall be deemed as a waiver of immunity and/or the limits of liability of either party beyond any statutory limited waiver of immunity or limits of liability which may have been adopted by the Florida Legislature or may be adopted by the Florida Legislature, and the cap on the amount and liability of either party for damages, regardless of the number or nature of claims in tort, equity, or contract, shall not exceed the dollar amount set by the legislature for tort. Nothing in this section shall be deemed to relieve or limit the amounts to be paid by either party for services rendered by the other party. Nor shall anything in this Agreement be construed or interpreted as requiring or allowing one party to this Agreement to indemnify or insure the other party to this Agreement for the other party's negligence or to assume any liability for the other party's negligence in contravention of § 768.28, Florida Statutes. Nothing in this Agreement shall inure to the benefit of any third party for the purpose of allowing any claim against either party, which would otherwise be barred under the doctrine of sovereign immunity or by operation of law.

2. Hold Harmless. Each party shall defend and hold the other harmless from and against its own negligent acts related to or arising from this Agreement. CITY shall be further responsible for promptly notifying the proper response authorities, environmental agency or agencies, and each other of any Hazardous Materials ("HAZMAT"), fuel, or pollutant spills and/or releases caused by CITY and undertaking diligent and reasonable efforts to contain and clean any such spills or releases upon the occurrence thereof. For fuel spills and/or pollutant releases caused by CITY, CITY shall, in addition to its indemnification obligations hereunder, reimburse the COUNTY for the amount of the deductible paid on any claim against the COUNTY's pollution liability and/or storage tank policy. Containment and cleanup of any spills and/or releases will be the responsibility of the party that caused the spill and/or release. CITY will also be responsible for any damage to a COUNTY facility that occurs as a direct result of use by CITY, normal wear and tear excepted. This section shall survive the expiration or termination of this Agreement.

3. Workers' Compensation. The CITY shall secure and maintain at its sole cost and expense all Workers' Compensation insurance required by Florida law, for all employees or contracted workers who are allowed to obtain services under this Agreement. Such Workers' Compensation insurance shall include a waiver of subrogation under which the insurer agrees not to seek restitution or recovery for damages or losses occasioned by the acts of the COUNTY.

4. Authorized Users/Vehicles. CITY shall provide written updates to the initial list of vehicles and authorized users in the same format as they occur, and before any new user or vehicle will be recognized for fuel service at the fueling facilities.

5. Entire Agreement. This Agreement reflects the full and complete understanding of the parties and may be modified or amended only by a document in writing executed by all the parties, with the same formalities as this Agreement.

IN WITNESS WHEREOF, the parties to this Interlocal Agreement for the Provision of Municipal Fleet Maintenance Services by County of Volusia to the City of Ormond Beach have caused the same to be signed by their duly authorized representatives and executed on the date last marked below.

**CITY OF ORMOND BEACH,
a municipal corporation**

By: _____
Name: Jason Leslie
Title: Mayor
Date: _____

ATTEST:

By: _____
Name: Joyce A. Shanahan
Title: City Manager

**COUNTY OF VOLUSIA, a political
subdivision of the State of Florida**

By: _____
Name: Jeffrey S. Brower
Title: County Chair
Date: _____

ATTEST:

By: _____
Name: George Recktenwald
Title: County Manager

ATTACHMENT 1

SCOPE OF SERVICES SCHEDULE OF CHARGES

I. SCOPE OF SERVICES AVAILABLE

Volusia County Fleet Management Services (FMS) is committed to providing the full range of services needed in today's environment, serving the City of Ormond Beach's (CITY) needs, and continually staying abreast of new developments in the CITY'S fleet.

FMS available to the CITY are as follows:

Maintenance, Repair, and Safety Services

- A-1. Preventative Maintenance Services at 5,000 miles, 15,000 miles, and 30,000 miles for vehicles; 250 hours and 1,000 hours for heavy vehicles and equipment.
- A-2. All unscheduled repairs.
- A-3. On-demand safety checks
- A-4. Contract maintenance services managed by FMS.
- A-5. Towing services using FMS equipment *or approved tow vendors*.
- A-6. Washing of vehicles when manpower permits.

Fueling Services

- B-1. Maintenance of fuel inventories and operations of fuel facilities for in-house fueling of vehicles/equipment.
- B-2. Issuance of vehicle identification and employee identification codes for easy processing and security of in-house fueling.

Acquisition

- C-1. New vehicle numbering and entry into computer database

Financial and Information Services

- D-1. Monthly billing report including utilization data
- D-2. Annual utilization report.

Extra Charge Services

- E-1. Damage to COUNTY fuel station facility or equipment. – Cost of repair
- E-2. Driver training and CDL testing.
- E-3. Additional ad hoc reports.

Other Vehicle Services

- F-1. Parking and storage

II. FLEET MANAGEMENT FUELING FACILITIES

The Volusia County fueling facilities are at the following addresses:

Deland R&B- 2560 W. State Road Highway 44, DeLand, FL
New Smyrna Beach R&B - 530 Old North Dixie Highway, New Smyrna Beach, FL
Osteen R&B - 200 N. State Road Highway 415, Osteen, FL
Daytona Beach Indian Lake Road - 1336 Indian Lake Road, Daytona Beach, FL
Daytona Beach Landfill - 1990 Tomoka Farms Road, Daytona Beach, FL
Transfer Station – 261 DeLand Crossings Blvd. DeLand, FL

III. HOURS OF OPERATION

All fueling locations are open 24 hours a day, except Deland Road and Bridge and the Tomoka Landfill.

Deland Road and Bridge: 7:30 am – 6:00 pm weekdays
Tomoka Landfill: 7:00 am - 5:30 pm Monday through Saturday

IV. FLEET MANAGEMENT FACILITIES

The Volusia County Fleet Management Division operates facilities at:

Fleet Management – 1270 Indian Lake Road, Daytona Beach. FL 32124
Tomoka Landfill – 1990 Tomoka Farms Road, Daytona Beach, FL 32128

V. HOURS OF OPERATION AND KEY PHONE NUMBERS

Administration: 7:30 to 5:00 Monday through Friday

Shops:

Fleet Management	(386) 254-1595	7:30 to 4:00	Monday through Friday
Tomoka Landfill	(386) 947-1850	7:00 to 5:30	Monday through Friday

VI. LEVEL AND QUALITY OF SERVICE

1. Unscheduled repairs and scheduled Preventative Maintenance (PM) and Safety Checks

- 1-a. Preventative Maintenance:* Vehicles are generally PM'd every ten (10) weeks, and stickers are placed in the vehicles as a reminder. Safety checks are generally performed on each vehicle.
- 1-b. Work Order Services:* A customer service writer or mechanic writes up work orders or each maintenance request.
- 1-c. Time promised:* The turn around time for PM servicing and safety checks is usually one (1) day or less. However, during these inspections the operator reports deficient items which are repaired at such time and may increase down time by over one (1) day.

In addition, other unreported deficiencies may be observed by an inspector which may affect safety, or could cause damage to the equipment. These are corrected prior to releasing the vehicle for service.

When the repair involves the securing of parts not stocked by either the COUNTY or by private parts vendors, the downtime can be several days. In any case, FMS will make every effort to minimize downtime

- 1-d. *Quality of Service (QS): For the above services QS is measured by feedback received from users and comeback reports from the FMS computerized fleet system. It is intended that a user survey be done to ascertain in greater detail where the subjective quality of service performance lies and can be improved. More objective measures such as turnaround time and comebacks have proven good to excellent during the past year.*
- 1-e. *Cleanliness: All vehicles may be cleaned and washed depending on the condition of the vehicles and on the availability of labor for such purposes.*

VII. CHARGING FOR SERVICES AND BILLING

A. CHARGES FOR SERVICES

Direct Charge for Service Method

All direct costs will be accounted for by vehicle identification. Labor costs will be charged per work order, upon completion of each job, at a competitive rate. The labor rate for maintenance and all services shall be the same as Fleet Management standard labor rate for all County divisions, currently \$90.00 per hour. The repair parts shall be the rate charged by the NAPA IBS contract and the sublet (outside vendor labor) rate is cost plus 20%. Fuel rates are cost plus the same mark up as charged to all County divisions currently sixteen (16¢) per gallon, unleaded and twenty-eight (28¢) per gallon, diesel. Towing charges will be in accordance with current Master Agreement pricing.

B. BILLING

Billing shall be done monthly using the FMS in-house computer system. Bills are to be itemized and sent:

**Attention: CITY OF ORMOND BEACH
22 S. Beach Street
Attn: Finance Dept.
Ormond Beach, FL 32174**

C. SERVICE WARRANTY

All services provided by FMS shall be performed at a level equal to prevailing industry standards. Work which is not completed, to the satisfaction of the CITY will be redone at no additional charges.

VIII. RESPONSIBILITIES OF THE CITY

A. REPORT VEHICLE MALFUNCTIONS PROMPTLY

The CITY shall report vehicle malfunctions and other needed repairs to FMS as soon as practical following notice of such condition.

B. PAYMENT

The CITY shall promptly process journal vouchers for payment of the preceding month's services.

C. OPERATOR TRAINING

The CITY shall review departmental programs for operating training so FMS may contribute their expertise and suggestions for developing operator training programs for employees of the CITY.

D. COMPLIANCE WITH PREVENTATIVE MAINTENANCE (PM) SCHEDULING

The CITY shall comply with all PM scheduling.



City of Ormond Beach
City Commission Agenda
Staff Report

Agenda Date	November 4, 2025	Item No	7.F.
Section	CONSENT AGENDA	Category	Consent - Resolution
Subject	Category 8 FBO Certification - R & B Executive Aviation Services, LLC.		
Recommended Action	Staff recommends approval of the attached resolution authorizing Fixed Base Operator Category 8 status for R & B Executive Aviation Services, LLC at the Ormond Beach Municipal Airport.		
Strategic Goal	Economic Development - Actively promote the value of the Municipal Airport and pursue improvements that maximize its use and economic/business contributions to the City.		
Department Staff Contact	Economic Development - Airport Steven Lichliter, Airport Manager		

Summary

This is a Resolution authorizing Fixed Base Operator (FBO) Category 8 status for R & B Executive Aviation Services, LLC at the Ormond Beach Municipal Airport.

R & B Executive Aviation Services, LLC is a limited liability corporation located at 1060 Lambert Avenue in Flagler Beach, Florida. R & B Executive Aviation Services, LLC has purchased 3,795 square feet of executive hangar and office space under a sub-lease deed with KOMN Condominium Association, located on the airport at 85 Hangar Way, Hangar No. 2.

The Managing Member of R & B Executive Aviation Services, LLC is Mr. William Culberson. Staff interviewed Mr. Culberson and his partner, Ms. Rose Ann Sgarlato, to assess the ability of R & B Executive Aviation Services, LLC to meet the financial and technical ability requirements for FBO Category 8.

Mr. Culberson holds a Bachelor of Science in Electrical Engineering Technology from the University of Alabama. He started his aerospace career as an electrical systems engineer for an engineering, manufacturing and certification consulting company in Mobile, Alabama. He then started his own aerospace consulting company, StarAviation. During that time, he was an FAA designee, commonly referred to as a DER or Designated Engineering Representative. He held that responsibility with the FAA for 17 years and still performs consulting work in that field. He holds a multi-engine Airline Transport Pilot certification and a Certified Flight Instructor

designation, including instrument and multi-engine training for aircraft. He obtained his Airframe & Power Plant license for maintenance on aircraft; primarily for the aircraft he owns.

Ormond Beach City Code requires the following for Category 8 FBO status:

Sec. 3.3-65.2 - Category 8: Specialized Aviation Service Operation (SASO).

1. Specialized Aviation Service Operations (SASOs), also known as single service operators or special fixed base operators, are persons or entities providing a single or limited number of commercial aeronautical activities or aviation support services. Fixed base operators in this category shall:
2. Lease or provide, under terms acceptable to the city, for this exclusive use a facility located on the airport of appropriate size to accommodate the services being offered, be accessible to the flying public, and be marked with appropriate signage;
3. Employ personnel properly certified by the Federal Aviation Administration to provide and support the types of services and activities which will be offered under this category;
4. Make provisions to have appropriate personnel in attendance at the facility at all times during posted business hours. An operator who does not have posted business hours shall provide for adequate means of contacting the operator to arrange for appointments and must agree to contact potential customers within not less than 24 hours of the original inquiry for service.
5. Provide to the Airport Manager and keep current a written statement of names, addresses, and contact information for all personnel responsible for the operation and management of the SASO.

In accordance with Section 3.3-48 of the Code of Ordinances, the Airport Manager has determined that R & B Executive Aviation Services, LLC meets all of the requirements for FBO Category 8 for their intended use of this designation. Initial business plans include leasing space in their hangar facility to other aircraft owners on an annual or monthly basis.

Financial Impact

Approval of this FBO request will have no budgetary impact, as R & B Executive Aviation Services, LLC has purchased a large hangar and has a sub-lease deed with KOMN Condominium Association. The Airport Fund receives rent payments from the condominium association.

Citizen Impact

Certification of a new FBO at the airport pertains specifically to current and planned airport operations, and will have no impact upon the City's general population.

Attachments

1. 25-170 R&B Executive Aviation Services LLC. Airport - Economic Dev. Cat. 8 FBO
2. R&B Executive Aviation FBO 8 Application

RESOLUTION NO. 2025-170

A RESOLUTION APPROVING THE APPLICATION OF R&B EXECUTIVE AVIATION SERVICES, LLC TO PROVIDE SERVICES AS A CATEGORY EIGHT FIXED BASE OPERATOR AT THE ORMOND BEACH MUNICIPAL AIRPORT; ESTABLISHING CONDITIONS OF APPROVAL; AND SETTING FORTH AN EFFECTIVE DATE.

WHEREAS, R&B Executive Aviation Services, LLC, is a Florida Limited Liability Company located at 1060 Lambert Avenue, Ste. 807, Flagler Beach, Florida, and

WHEREAS, R&B Executive Aviation Services, LLC, has submitted an application to provide services as a “fixed base operator” in Category 8, as set forth in Chapter 3.3, Article IV, Division 2, *Code of Ordinances*, and

WHEREAS, the Airport Manager has determined that all requirements have been met and recommends approval of the application, and

WHEREAS, the City Commission concurs with the recommendation of the Airport Manager, now therefore,

BE IT RESOLVED BY THE CITY COMMISSION OF THE CITY OF ORMOND BEACH, VOLUSIA COUNTY, FLORIDA, THAT:

SECTION ONE. The application of R&B Executive Aviation Services, LLC, to establish an operation at the Airport as a “fixed base operator” in Category 8 (Specialized Aviation Service Operation) is hereby approved.

SECTION TWO. R&B Executive Aviation Services, LLC shall fully comply with all applicable provisions of Chapter 3.3, *Code of Ordinances*, specifically including section 3.3-65.2 thereof, as the same presently exists or may after be amended.

SECTION THREE. This Resolution shall take effect immediately upon its adoption.

APPROVED AND AUTHENTICATED this 4th day of November, 2025.

JASON LESLIE

Mayor

ATTEST:

SUSAN CARROLL DAUDERIS

City Clerk



**APPLICATION FOR
FIXED BASE OPERATOR STATUS
AT
ORMOND BEACH MUNICIPAL AIRPORT**

APPLICANT INFORMATION:

Company Name: R & B Executive Aviation Services LLC _____

Address: 1060 Lambert Avenue
Flagler Beach, FL 32136

Telephone No.: (917)-923-4211 FAX No.: None

Name & Title of Principals in Company:

Rose Ann Sgarlato, William B Culberson

FIXED BASE OPERATOR CATEGORY BEING APPLIED FOR:

- ☐ Category 1: Sale of aviation & petroleum products & ramp services
- ☐ Category 2: Flight instruction & aircraft rental
- ☐ Category 3: Air taxi operators and charter
- ☐ Category 4: Aircraft sales
- ☐ Category 5: Aircraft, engine, propeller & accessory maintenance
- ☐ Category 6: Radio & instrument repair service
- ☐ Category 7: Airship Operations
- ☒ Category 8: Specialized Aviation Service Operation

GENERAL REQUIRED INFORMATION:

- ☐ Attach copy of written lease for airport property (at least three (3) Years)
- ☒ Attach dimensional floor plan for hangar area, showing usages/areas required for requested category(ies)
- ☒ Attach statement as to applicants "technical" ability to perform the proposed services, and copies of any licenses or certifications as appropriate
- ☒ Attach copies of applicant's financial statements for past three (3) years & projected financial statements for future two (2) years

DETAILED INFORMATION (provide only for the categories being requested):

Category 1: Sale of aviation & petroleum products & ramp services -

- ___ Does applicant's facility at airport provide for 1,350 sq. ft. of adequately lighted & environmentally controlled space to provide a separately enclosed waiting room, a pilot lounge and/or a conference room, with telephone service to flight service?
- ___ Does applicant's facility provide a public telephone & sanitary public restrooms?
- ___ Will pilot supplies be available for purchase?
- ___ Attach a statement demonstrating the applicant's capability to perform minor aircraft repairs and ability to perform annual inspections.
- ___ Does the applicant's facility at airport provide for a minimum of 3,500 sq. ft. of shop and hangar space as a repair station?
- ___ Does the applicant's facility at airport provide for storage of fuel in aboveground tanks to provide and maintain an adequate supply for each grade of aviation fuel usually required for aircraft using the airport?
- ___ Does the applicant's facility at airport maintain pumping equipment meeting all applicable safety requirements with reliable metering devices subject to independent inspection with a pumping efficiency capable of servicing all aircraft normally using the airport?

- ___ Will applicant have available on a normal full-time basis Federal Aviation Administration certified technicians in the field of aircraft electronic and/or aircraft instruments with proper Federal Communications Commission licenses to conduct complete aircraft transmitter, receiver and antenna repair?
- ___ Will applicant provide satisfactory arrangements for storage of aircraft being worked on?

Category 7: Airship Operations

- ___ Will applicant's facility at the airport provide 25,000 sq. ft. of exclusive use space as a hangar, shop, and storage area?
- ___ Will applicant have available on a full-time basis a minimum of one (1) properly certified pilot with current commercial airship ratings and comply with all Federal Aviation regulations to applicable airship operations?
- ___ Will applicant provide, and at all times maintain, an airship currently certified and continuously airworthy, owned or leased by and under the exclusive control of the applicant, properly certified for airship operations?

Category 8: Specialized Aviation Service Operation

- Y Will applicant lease or provide, under terms acceptable to the city, for this exclusive use a facility located on the airport of appropriate size to accommodate the services being offered, be accessible to the flying public, and be marked with appropriate signage?
- Y Will applicant employ personnel properly certified by the Federal Aviation Administration to provide and support the types of services and activities which will be offered under this category?
- Y Will applicant make provisions to have appropriate personnel in attendance at the facility at all times during posted business hours?
- Y Will applicant who does not have posted business hours provide for adequate means of contacting the applicant to arrange for appointments and agree to contact potential customers within not less than 24 hours of the original inquiry for service?
- Y Will applicant provide to the Airport Manager and keep current a written statement of names, addresses, and contact information for all personnel responsible for the operation and management of the SASO?

Attach exhibits for any question requiring additional information.

The applicant does hereby certify the all of the information provided in this application is true and correct. Furthermore, the applicant does hereby certify that the proposed Fixed Base Operator operation will comply with all federal, state, county and city laws, rules, and regulations.



Applicant's Signature

Printed name: William Culberson

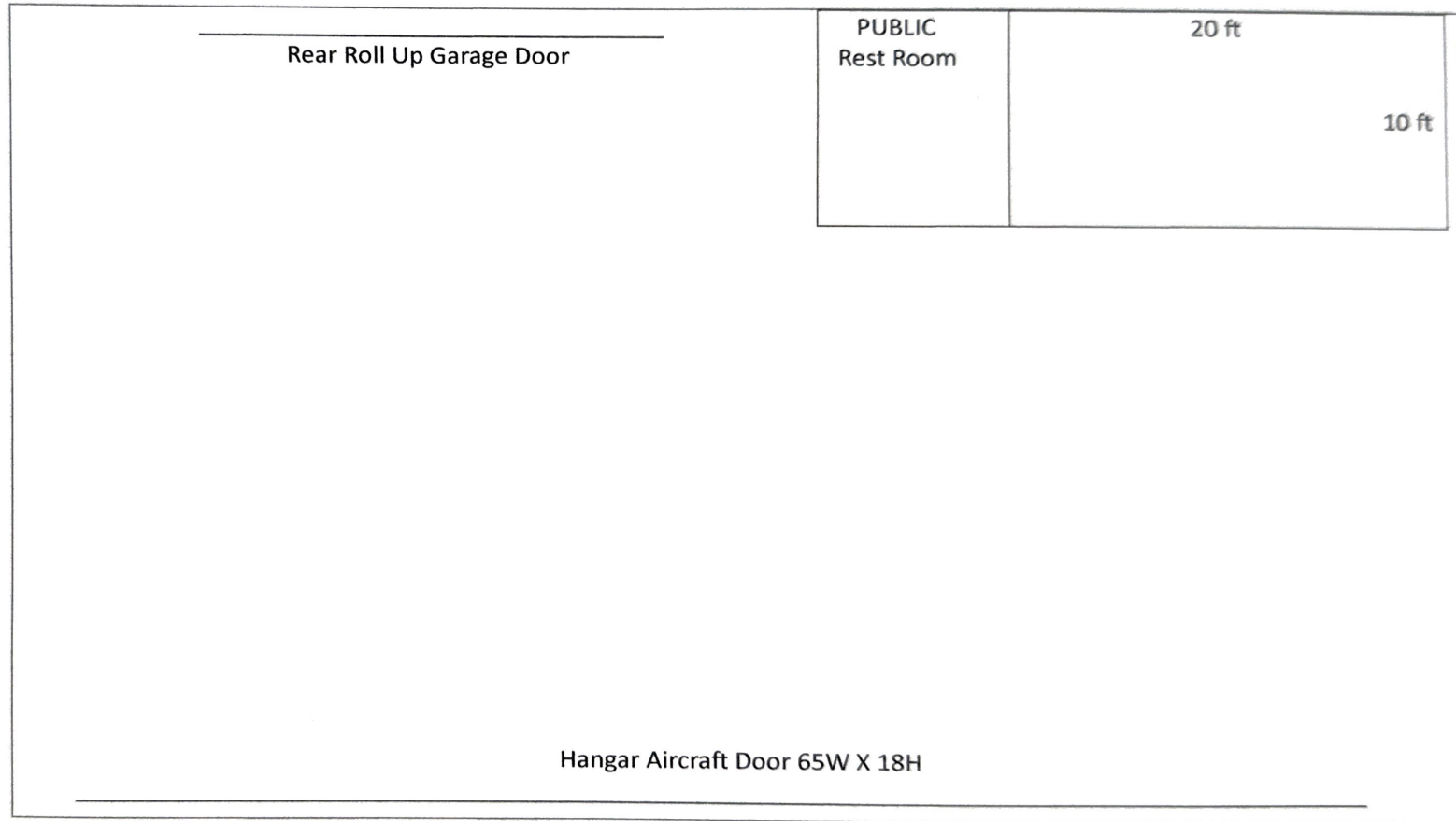
Title: Managing Member

Date: 9/20/25

R&B EXECUTIVE AVIATION SERVICES, LLC

HANGAR #2

85 HANGAR WAY ORMOND BEACH, FL 32174





September 18, 2025

To Whom It May Concern:

This letter is to verify that Cadence Bank Asset Management & Trust manages a personal investment management account for Mr. William Culberson, and testifies that Mr. Culberson's investment management account has a current market value of approximately \$9,000,000.

Sincerely,

A handwritten signature in blue ink that reads "Misty Poe".

Misty Poe
Vice President & Trust Officer



September 19, 2025

To whom it may concern:

This letter is to verify that your investment accounts are managed by the Investment Advisor, Robert D'Andria. Advisory services are provided through the Registered Investment Advisor, International Assets Investment Management, Inc.

The current total value of assets managed for Ms. Rose Ann Sgarlato as of September 19, 2025 is approximately \$5,335,778.91. Account values are subject to market fluctuations.

This letter is provided as a courtesy from your Financial Consultant. It is not, and should not be construed as a substitute for your account statements and confirmations.

Sincerely,

Robert J. D'Andria
Advisor/President
SterlingNoble Wealth Management, LLC.

Buyer's and Seller's Combined Closing Statement

JEFFREY C. SWEET
ATTORNEY AT LAW

Name of Buyer: R & B Executive Aviation Services LLC
Buyer Address: 1060 Lambert Ave., Suite 807, Flagler Beach, FL 32136
Name of Seller: Paul F. Holub, Jr. Trust dated October 12, 2006
Seller Address: P.O. Box 730086, Ormond Beach, FL 32173
Property Address: 85 Hangar Way, Hangar 2, Ormond Beach, FL 32174
Id# 420703000020
Settlement Agent: JEFFREY C. SWEET, ATTORNEY AT LAW
Phone #(386) 677-3431
Place of Settlement: 595 WEST GRANADA BOULEVARD, SUITE A, ORMOND BEACH, FL 32174
Settlement Date: 9/11/2025 Settlement Agent Tax Id#: 59-3466124

Summary of Buyer's Transaction		Buyer	Summary of Seller's Transaction		Seller
K	Gross Amount Due From Buyer		M	Gross Amount Due to Seller	
01	Contract sales price	825,000.00	01	Contract sales price	825,000.00
02	Personal property		02	Personal property	
03	Total Settlement Charges to Buyer from Page 2 ▶	8,405.13	03		
04			04		
05			05		
Adjustments for items paid by seller in advance			Adjustments for items paid by seller in advance		
06	City/town taxes to		06	City/town taxes to	
07	County taxes to		07	County taxes to	
08	Assessments 9/11/2025 to 12/31/2025	1,855.56	08	Assessments 9/11/2025 to 12/31/2025	1,855.56
09	Insurance Dif (8/25-8/26) 9/11/2025 to 8/25/2026	174.99	09	Insurance Dif (8/25-8/26) 9/11/2025 to 8/25/2026	174.99
10	Insurance (8/25-8/26) 9/11/2025 to 8/25/2026	2,072.64	10	Insurance (8/25-8/26) 9/11/2025 to 8/25/2026	2,072.64
11	to		11	to	
12	to		12	to	
Gross Amount Due From Buyer		837,508.32	Gross Amount Due To Seller		829,103.19
L	Amounts Paid by or on Behalf of Buyer		N	Reductions In Amount Due to Seller	
01	Deposit or earnest money	20,000.00	01	Excess deposit (see instructions)	
02	Seller Financing		02	Total Settlement Charges to seller from Page 2 ▶	3,787.88
03	Existing loan(s) taken subject to		03	Existing loan(s) taken subject to	
04			04	Pavoff of first mortgage loan	
05			05	Pavoff of second mortgage loan	
06			06		
07			07		
08			08		
09			09	Deposit Directly to Seller	20,000.00
10	City/town taxes to		10	City/town taxes to	
11	County taxes to		11	County taxes to	
12	Assessments to		12	Assessments to	
13	to		13	to	
14	to		14	to	
15	to		15	to	
Total Amounts Paid by or on Behalf Of Buyer		20,000.00	Total Reductions in Amount Due Seller		23,787.88
CALCULATION			CALCULATION		
Total due from Buyer at Closing (K)		837,508.32	Total due to Seller at Closing (M)		829,103.19
Total paid by or on behalf of Buyer at Closing (L)		20,000.00	Total due from Seller at Closing (N)		23,787.88
Cash to Close ☒ From ☐ To Buyer		817,508.32	Cash ☒ To ☐ From Seller		805,315.31

595 WEST GRANADA BOULEVARD
SUITE A
ORMOND BEACH, FL 32174

UNITED STATES OF AMERICA XI
DEPARTMENT OF TRANSPORTATION • FEDERAL AVIATION ADMINISTRATION
IV NAME
WILLIAM BRYANT CULBERSON
V ADDRESS 4193 RIVER OAKS LN
MOBILE AL 36619-9571

VI NATIONALITY USA
IVa D.O.B. 25 DEC 1963
IX HAS BEEN FOUND PROPERLY QUALIFIED TO EXERCISE THE PRIVILEGES OF

II AIRLINE TRANSPORT PILOT
III CERTIFICATE NUMBER 3289910
X DATE OF ISSUE 24 JAN 2025

SEX HEIGHT WEIGHT HAIR EYES
M 76 243 BLOND BLUE

XIV *Christopher J. Ruelshaus*
VIII ACTING ADMINISTRATOR

DRIVER LICENSE
ALABAMA
NO. 5696250
D.O.B. 12-25-1963
WILLIAM BRYANT CULBERSON
4193 RIVER OAKS LN
MOBILE AL 36619-9571
ENDORSEMENTS
ISS 06-13-2024

CLASS DMV
EXP 01-26-2027
REST
SEX M HT 6-04 EYES BLU
WT 255 HAIR BLN


Secretary Hal Taylor
Secretary of Law Enforcement

UNITED STATES OF AMERICA XI
DEPARTMENT OF TRANSPORTATION • FEDERAL AVIATION ADMINISTRATION
IV NAME
WILLIAM BRYANT CULBERSON
V ADDRESS 4193 RIVER OAKS LN
MOBILE AL 36619-9571

VI NATIONALITY USA
IVa D.O.B. 25 DEC 1963
IX HAS BEEN FOUND PROPERLY QUALIFIED TO EXERCISE THE PRIVILEGES OF

II FLIGHT INSTRUCTOR
III CERTIFICATE NUMBER 3289910CFI
X DATE OF ISSUE 20 JAN 2025

SEX HEIGHT WEIGHT HAIR EYES
M 76 250 BLOND BLUE

XIV *Christopher J. Ruelshaus*
VIII ACTING ADMINISTRATOR

UNITED STATES OF AMERICA XI
DEPARTMENT OF TRANSPORTATION • FEDERAL AVIATION ADMINISTRATION
IV NAME
WILLIAM BRYANT CULBERSON
V ADDRESS 4193 RIVER OAKS LN
MOBILE AL 36619-9571

VI NATIONALITY USA
IVa D.O.B. 25 DEC 1963
IX HAS BEEN FOUND PROPERLY QUALIFIED TO EXERCISE THE PRIVILEGES OF

II MECHANIC
III CERTIFICATE NUMBER 3289910
X DATE OF ISSUE 1 NOV 2024

SEX HEIGHT WEIGHT HAIR EYES
M 76 251 BLOND BLUE

XIV *Michael J. Smith*
VIII ADMINISTRATOR



2025



Bill Culberson



Expires December 31, 2025

Meet the Pilot: Bill Culberson

Bill Culberson joined the FighterJets Team in 2014 as an additional PREMIER Jet Demonstration Pilot. Bill performs full aerobatic and formation displays across North America in the MiG-15, MiG-17F, CT-133(Canadian T-33), L-29, L-39 and soon the Yak-9.

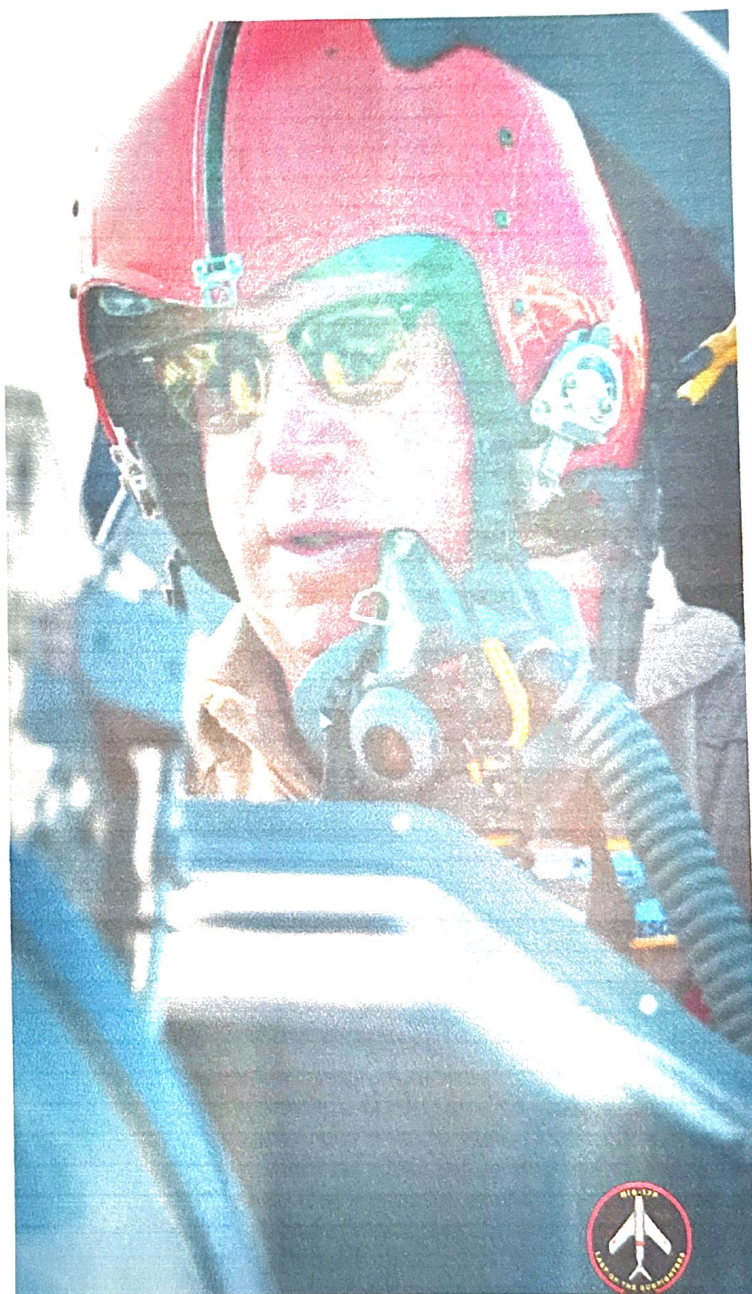
Bill owns and operates through FighterJets Inc. two MiG-17Fs, a MiG-15UTI & The Canadian CT-133/T-33. These aircraft are based in Mobile, Alabama and Flagler Beach, Florida where he resides. These locations provide good access to Airshows throughout the Southeast and Florida/Caribbean.

Bill was born the son of a USAF fighter pilot and has had aviation in his blood ever since. Bill began his flying passion at 14 when he received his Glider Solo certificate. Bill is now rated as an Air Transport Pilot with 3900+ hours flying experience. This includes 800+ hours in Tactical Jets, 600+ hours in Soviet Jets & 500+ hours in the MiG-15/-17. Degreed as an Aerospace Electrical Engineer Bill also enjoys the engineering and design aspects of the aircraft he operates. He is also an instructor authorized to provide flight training in the MiG series aircraft as well as the T-33, L-29 and L-39. You can contact Bill at BillC@RedStarAero.com for more information on Airshow and Flight Training.

Bill is passionate about Military Aviation history and is always ready to discuss its amazing history. He supports this passion through Life Memberships at the Experimental Aircraft Association (EAA) and Warbirds of America. Additionally, he is a board Member for the Classic Jet Aircraft Association.

Mr. Culberson holds a Bachelor of Science of Electrical Engineering Technology from The University of Alabama. He was an FAA Systems and Equipment (Electrical) DER for 17 years. As a pilot he holds an ATP Multi-engine Land certificate as well as an FAA Instructors License and is rated in the L-29 Delphin, L-39 Albatross, T-33 Shooting Star, MiG-15 Fagot/ MiG-17 Fresco, B-17 Flying Fortress & P-51 Mustang.

**Inspiring the next generation
of aviation professionals with
every show.**





City of Ormond Beach
City Commission Agenda
Staff Report

Agenda Date	November 4, 2025	Item No	7.G.
Section	CONSENT AGENDA	Category	Consent - Resolution
Subject	2026 Florida Healthcare Plans Employee Health Insurance Coverage		
Recommended Action	Staff recommends contracting with FHCP for employee medical health insurance coverage effective January 1, 2026.		
Strategic Goal	Governance - Attract, develop, and support the best talent for Ormond Beach to be recognized as an Employer of Choice.		
Department Staff Contact	Human Resources Samantha Potts, Human Resources Manager		

Summary

This is a request to approve a contract with Florida Health Care Plans (FHCP) to provide employee group medical insurance effective January 1, 2026.

The City currently provides employees with a High Deductible Health Care Plan (HDHP) through FHCP, paired with a city-funded health savings account, as part of its health care strategy to reduce financial costs to the city and employees, while preserving a high level of care. As a result of continued efforts to encourage preventative care maintenance, proactively manage chronic health conditions, and offer alternative urgent care resources, the City's annual premium rate increases have averaged less than 3% per year, well below industry standards.

For the 2026 plan year, FHCP proposed a decrease in premium of 1%, 6% below the average in comparable markets. The renewal includes the same benefits and coverage levels as the previous plan year, other than small increases to the annual deductible and out-of-pocket limits mandated by the Internal Revenue Service.

The City will continue to pay the full cost of the HDHP plan for employee-only coverage and employees may enroll dependents at their own expense. Funding for the health savings account is presented in the next agenda item for the Commission's review.

Financial Impact

Based on current enrollment, the City's annual cost is estimated to be \$3,100,984 and is within the FY 2025-2026 budget, with a renewal decrease of 1% from the previous year premium cost.

Citizen Impact

Providing quality and affordable healthcare for City employees contributes to a fair and competitive work environment, which enables the City to recruit and retain staff for successful delivery of services to its residents.

Attachments

1. 25-171 Health Ins Fla Health Care (P25-0140G)
2. FHCP Contract
3. FHCP Cost Summary
4. Plan Summary TI4
5. Plan Summary TF4

RESOLUTION NO. 2025-171

A RESOLUTION ACCEPTING A PROPOSAL FROM FLORIDA HEALTH CARE PLANS, INC. FOR THE PROVISION OF EMPLOYEE HEALTH/MEDICAL BENEFIT SERVICES; AUTHORIZING THE EXECUTION OF A CONTRACT AND PAYMENT THEREFOR; AND SETTING FORTH AN EFFECTIVE DATE.

WHEREAS, the city, through its agent of record, solicited a proposal in accordance with section 112.08, *Florida Statutes* and section 2-300, *Code of Ordinances* for the provision of employee health/medical benefit services (Proposal), and

WHEREAS, the city's professional staff and its agent of record evaluated the proposal that was received as more particularly described in the City Manager Memorandum dated November 4, 2025 attached hereto (Evaluation), and has recommended the acceptance of a proposal from Florida Health Care Plans for the provision of employee health/medical benefit services as being in the best overall interest of the city (Recommendation), and

WHEREAS, the City Manager has certified that the money for the payment of the services has been included in the FY 2025-2026 budget and has not been appropriated for any other purpose, now therefore,

BE IT RESOLVED BY THE CITY COMMISSION OF THE CITY OF ORMOND BEACH, FLORIDA, THAT:

SECTION ONE. The proposal of Florida Health Care Plans, Inc. for the provision of employee health/medical benefit services based on the HDHP/HSA/POS TI4/TF4 plans are hereby accepted for an effective period of January 1, 2026 through and including December 31, 2026 in accordance with the City Manager Evaluation and Recommendation attached hereto.

SECTION TWO. The mayor and the city manager are hereby authorized and directed to execute a contract between the city and Florida Health Care Plans, Inc., a copy of which is attached hereto and incorporated herein by reference, for the provision of employee health/medical benefit services and to pay the premiums therefore.

SECTION THREE. This Resolution shall take effect immediately upon its adoption.

APPROVED AND AUTHENTICATED this 4th day of November, 2025.

JASON LESLIE
Mayor

ATTEST:

SUSAN CARROLL DAUDERIS
City Clerk

October 9, 2025

Dear Ms. Joyce Shanahan, City Manager,

It is Florida Health Care Plans' continued pleasure to provide health care coverage to **CITY OF ORMOND BEACH**, employees.

FHCP is proud to once again claim top honors in the News-Journal Reader's Choice Award as the "Best HMO Around". This honor reflects our commitment to offer the highest quality medical care and service to our members' at the most affordable price.

FHCP strives to provide the most competitive rates available. Please be advised that the renewal rates for this organization were determined based on the cost factors for the current employee census. If the actual census or employees who participate in FHCP change significantly, this could have a material impact on rates, either positive or negative. If based on actual enrollment, rates reflect a greater than 10% variance; FHCP reserves the right to make necessary adjustments.

I have attached the following contract documents for your group for this renewal period.

- FHCP Large Group Insurance Contract
- Employer Application
- Group Contract Information Page that provides the plan rates
- Applicable Rider(s)
- Summary of Benefit and Coverage (SBC) Document(s)

Please confirm **CITY OF ORMOND BEACH'S** acceptance of FHCP coverage by:

- 1) **Reviewing and signing** the attached FHCP Large Group Insurance Contract.
- 2) **Completing and signing** the attached Employer Application.
- 3) **Reviewing and signing** the attached Group Contract Information page.

Please return these documents to me **as soon as possible**, along with your member enrollment spreadsheet or applications. You can scan and email the signed contract documents to jen.ferreira@bcbsfl.com.

If you have any questions, please feel free to contact me at 386-615-5076, or **David Miller**, your Account Management Specialist at **386-615-5074**.

Sincerely,

Jen Ferreira, Sales Resource Specialist

Attachments

FLORIDA HEALTH CARE PLAN, INC.
2450 Mason Avenue
Daytona Beach, FL 32114

Group Insurance Contract
(herein called the Contract)

Florida Health Care Plan, Inc., (hereinafter called FHCP), agrees to provide the health care services described under the provisions of the Group Plan as further described in the applicable Certificate of Coverage, Schedule of Benefits, and other applicable documents, to all Covered Employees of the Employer and their Covered Dependents. The provision of services is subject to all of the terms on this page and those that follow, including any limitations, restrictions or exclusions, as well as any amendments made a part of this GroupPlan.

The Employer may act on behalf of all eligible employees and dependents. Every act by, agreement made with, or notice given to the Employer will be binding on all Covered Employees and Covered Dependents.

This Group Plan is issued in consideration of the application of the Employer and payment of Premium in advance by the Employer at FHCP’s corporate office in Daytona Beach, FL 32114.

This Group Plan is effective on the Group Effective Date shown on the Group Plan Information Page. The first Premium covers the period starting on the Group Effective Date.

The parties hereto have caused this Agreement to be executed by their duly authorized officers or agents.

FLORIDA HEALTH CARE PLAN, INC.

By:_____Date: 10/09/2025
Marie Atanasoski
CFO
Florida Health Care Plan, Inc.

GROUP / EMPLOYER

By:_____Date:_____
Authorized Representative

CITY OF ORMOND BEACHGroup #: 128Effective Date: 01/01/2026
Company Name

1. Responsibilities of the Employer

The Employer acknowledges and warrants that is eligible for the health care coverage provided under this Group Plan by virtue of being an Employer, as defined in the Florida Statutes and applicable law, at the time this Group Plan is issued. The Employer shall offer to all eligible employees the opportunity to become a Covered Employee under this Group Plan. Such offer shall be made in such a fashion that employees are made aware, and understand, that this Group Plan contains a benefit structure that may require the use of a Primary Care Physician and/or Participating Providers.

The Employer shall pay FHCP the applicable Premium as further described herein. The Employer may require an employee to pay some portion of the Premium. However, the Employer must contribute the same percentage toward the cost of all health benefit plans established and maintained by the Employer.

2. Responsibilities of FHCP

In consideration of the payment of Premium by the Employer, FHCP shall provide coverage for Covered Employees and, if applicable, their Covered Dependents. In doing so, FHCP may enter into agreements with providers of health care, one or more other Group Policies or insurers and such other individuals and entities as may be necessary to enable FHCP to fulfill its obligations under this Group Plan.

FHCP agrees to provide coverage without discrimination because of race, color, national origin, age, disability, religion, or sex or any other basis prohibited by law.

3. Employee Eligibility

Subject to any Eligibility Exceptions noted on the Group Plan Information Page or other applicable documents, an individual becomes eligible for coverage on the date they complete any applicable waiting period established by the Employer, as shown on the Group Plan Information Page or other applicable documents. The waiting period is the length of time an individual must wait before becoming eligible for coverage.

If an eligible person is currently covered under any other Plan issued by FHCP, or any other health benefit plan established and maintained by the Employer, they will not be considered eligible for coverage under this Group Plan.

4. Commencement of Coverage

On the Group Plan Effective Date as shown on the Group Plan Information Page, FHCP agrees to provide the coverage stipulated in this Group Plan, Certificates of Coverage, Schedule of Benefits, and other applicable documents to all Covered Employees and, if applicable, their Covered Dependents, if any. Such coverage begins on the Covered Person's effective date, which will be the first of the month after the receipt and approval of the application by FHCP, unless this Group Plan specifies a date other than the first of the month (See Special Enrollees, Late Enrollees, and Dependent Effective Date provisions of the Certificate of Coverage). FHCP accepts no liability for benefits related to expenses incurred prior to the Covered Person's effective date or after the Covered Person's termination date, which will be on the last day of the coverage month, except as described in the Extension of Benefits provision or as specified in the Terms of Renewal and Termination provisions.

5. Minimum Participation Requirements

Employer must maintain a minimum enrollment agreed upon by FHCP. If these participation requirements are not satisfied, FHCP reserves the right to terminate this Group Plan after giving the Employer forty-five (45) days written notice prior to the Group's anniversary date.

FHCP reserves the right to request evidence of employee and dependent coverage under other plans to verify eligibility and compliance with this Provision.

6. Termination of this Plan by the Employer

The Employer may terminate this Group Plan as of any Premium due date and should give FHCP at least forty-five (45) days prior written notice. In such event, no benefits will be provided on or after such termination date, except as specifically set forth in this Group Plan.

7. Termination of this Plan by FHCP

FHCP may terminate this Group Plan as of any Premium due date if the Employer has not paid the entire required Premium by the end of the Grace Period as set forth herein. However, if the Employer has given FHCP prior written notice in advance of an earlier date of termination, this Group Plan will terminate as of that earlier date. The Employer is liable to FHCP for any unpaid Premium for the time the Group Plan was in force, or for any amounts otherwise due FHCP.

If the Group's coverage is terminated for any reason set forth in this Group Plan, FHCP will mail the Employer a written notification that this Group Plan has terminated. This notification will disclose the date of termination and the reason(s) for termination. It is the Employer's obligation to immediately notify each Covered Person of any such termination.

8. Terms of Renewal

This Group Plan is a guaranteed renewable Plan. This means the Plan renews each year on the Group Plan Anniversary Date shown on the Group Plan Information Page. FHCP guarantees the Employer the right to renew the Group Plan each year, at the Employer's option, with the exception of non-payment of Premium or loss of eligibility. FHCP will give the Group at least forty-five (45) days advance written notice of our intent to non-renew this Group Plan, if one of the following circumstances has occurred:

- A. The Employer fails to timely pay Premium or contributions in accordance with the terms of this Group Plan;
- B. The Employer fails to comply with material provisions of this Group Plan which relates to rules for contribution or participation;
- C. FHCP ceases offering this Plan to all policyholders;
- D. The Employer and enrollees no longer work or reside in the service area of FHCP or in the area in which FHCP is authorized to do business;
- E. The Employer has performed an act or practice that constitutes fraud or made an intentional misrepresentation of material fact under the terms of this Group Plan;
- F. FHCP is required to by applicable law.

9. Discontinuance of this Plan

FHCP may discontinue offering this particular Group Plan if:

- A. FHCP provides at least ninety (90) days notice to each policyholder and to participants

- and beneficiaries covered under the Plan prior to renewal; and
- B. FHCP offers each policyholder the option to purchase other coverage currently being offered by FHCP.

10. Discontinuance of all Coverage in the GroupMarket

FHCP may discontinue offering all coverage in Florida if:

- A. We provide notice to the Office of Insurance Regulation (hereinafter called Office) and each Employer and enrollee 180 days prior to renewal; and
- B. All health coverage issued or delivered for issuance in Florida is discontinued and coverage under such health coverage is not renewed.

11. PREMIUM.

Employer shall pay FHCP Premium for services rendered in accordance with this Agreement.

- A. **Premium:** means any payments or amounts required by a health contract for coverage, by whatever name called. This includes but is not limited to any monthly subscription fee.

B. Premium Due Date

After the Group Effective Date shown on the Group Plan Information Page, the Premium due date will be the first day of each month.

C. Payment of Premium

The first Premium payment is due on the Effective Date shown on the Plan Information Page. Each following Premium payment is due monthly unless the Employer and FHCP agree on some other method and/or frequency of payment. Premium payments should be sent to FHCP's home office or the billing address provided by FHCP.

12. The Grace Period

This Plan has a 10-day grace period. A grace period means that if any required Premium is not paid on or before the date it is due, it may be paid during the grace period immediately following that Premium due date. During the grace period, the Plan will stay in force. The grace period does not apply to the Premium due on the Effective Date, or if the Employer has given FHCP written notice that the Plan is to be terminated prior to the Premium due date. If the Premium is not paid by the end of the grace period, the Plan may terminate as of the date the payment was due. Any late payment penalties are subject to Department of Insurance approval.

13. Monthly Premium Statement

FHCP will prepare a monthly statement of the Premium due on or before the Premium due date. This monthly statement will also reflect any pro rata Premium charges and credits resulting from changes in the number of Covered Persons and changes in the amounts of coverage that took place in the previous month. If a Covered Person becomes ineligible for coverage under this Group Plan for any reason, the Employer shall, if possible, provide FHCP with prior written notice of such ineligibility. However, in any event, written notice of such ineligibility shall be provided by the Employer to FHCP no later than thirty (30) days after such ineligibility. In the event that notice of termination of a Covered Person, or a decrease in coverage, is received by FHCP more than one month after the termination or decrease, retroactive credit will be limited to premium paid after date of termination or decrease in coverage.

FHCP's billing cycle is as follows:

1. If members are added on or before the 15th of the month, they are billed for the

whole month. If members are added on or after the 16th of the month, they are not billed for that month.

2. If members are canceled on or before the 15th of the month, they will not be billed for that month. If members are canceled on or after the 16th of the month, they are billed for the whole month.

This is called the “wash cycle”. If you have any questions, please call the FHCP Enrollment Department at 386-676-7176 or 1-800-352-9824 ext. 7176 during business hours, Monday through Friday, 8:00 a.m. to 5:00 p.m.

[This provision is subject to FHCP billing policies, protocols, and procedures which may change from time to time.]

14. Simplified Accounting

Premium adjustments will be made on the monthly Premium statement date that is the same as or next follows the date:

- A. A person becomes covered;
- B. The amount of coverage on a Covered Person changes, but not due to a revision of the coverage plan; or
- C. A person ceases to be covered.

15. Changes in Premium

No change in Premium rates will be made for the first twelve (12) months that this Group Plan is in effect. A change in Premium rates will not be made more often than once in a twelve

(12) month period. FHCP will give the Employer written notice of any changes in Premium rates at least thirty (30) days prior to the Group’s renewal date.

16. Incorrect Premium Payment

Any Premium adjustment made due to the correction of an error in the Premium payment will be made without interest on the next Premium due date after the facts are made known to FHCP.

17. Entire Plan

The entire agreement is made up of this document, the Employer’s application for coverage, Certificate of Coverage, Schedule of Benefits, and any amendments, riders, or certificates attached hereto along with the applications for all Covered Employees and their covered dependents, or any other documents mutually agreeable by both FHCP and Employer to be incorporated herein. All statements made by the Employer or by a Covered Employee are considered to be representations, not warranties. This means that the statements are considered to have been made in good faith. No such statement will void this Plan, reduce the benefits it provides, or be used in defense to a claim for coverage unless it is contained in a written application and a copy is furnished to the person making such statement.

18. Time Limits for Certain Defenses

After two years from the effective date of this Plan, no misstatement made by the Employer, except a fraudulent misstatement made in the Employer’s application for this Plan, may be used to

void this Plan. After two years from a Covered Person's effective date, no misstatement made by the Covered Person, except a fraudulent misstatement on his or her application, may be used to deny a claim for any benefit which begins after the end of the two- year period from the Covered Person's effective date.

19. Employer as FHCP's Agent for Limited Purposes

The Employer is considered to be an agent of FHCP only for the following purposes:

- A. Collecting employee enrollment information;
- B. Collecting any required employee contribution; and
- C. Giving out Certificates of Coverage or other coverage information to the Covered Employees.

20. Administration

The Employer must provide FHCP with the information it needs to administer this Group Plan and to compute the Premium due. Failure of the Employer to provide this information will not void or continue a Covered Person's coverage. FHCP has the right to examine the Employer's records on any issues necessary for the proper administration of this Group Plan at any reasonable time while this Group Plan is in force.

21. Financial Responsibilities of the Employer

FHCP reserves the right to recover any benefit payments made to or on behalf of any individual whose coverage has been terminated. Recovery efforts will relate to benefit payments made for services or supplies rendered subsequent to the Covered Person's termination date and prior to the date notice of coverage termination by the Employer. The Employer shall cooperate with and support such recovery efforts.

In the event that the Employer does not comply with the notice requirements set forth in the Premium Statement section, the Employer shall be solely liable to FHCP to the extent of any payment made on behalf of such individual for services or supplies rendered subsequent to the date notice of a Covered Person's termination was due.

22. Certificates of Coverage

FHCP will issue Certificates of Coverage for each Covered Employee. The certificate will describe the benefits provided and the limitations of this Group Plan. Nothing in the certificate will change or void the terms of this Group Plan.

The Employer agrees that, if requested by FHCP, the Employer will distribute to Covered Persons, the Certificate of Coverage and any amendments or endorsements to it, other coverage materials and notices applicable to all or any Covered Persons.

23. Changes to this Group Plan

FHCP may change this Group Plan from time to time as required by applicable state and federal laws and subject to Office approval. No change to this Group Plan will be effective unless made by an amendment or rider that has been signed by an officer of FHCP. No agent may change this Group Plan or waive any of its provisions.

If FHCP increase the cost share for any benefit or delete, amend or limit any of the benefits to

which a Covered Person is entitled to under this plan, We will give the Group forty-five (45) days written notice prior to renewal. The Group will not be notified if benefits are increased or if the Group requests any changes, deletions or limitations.

24. Misstatements

If information about a Covered Person is misstated, FHCP may adjust the Premium to correctly reflect the true information. If the misstatement affects the amount of the Covered Person's coverage, the true information may be used to determine the correct amount of coverage.

25. Worker's Compensation

This Plan does not affect or take the place of Workers' Compensation.

26. Assignment

Neither this Plan, nor the benefits provided under this Plan, may be assigned except as otherwise specifically described in this Plan.

27. Certificate of Coverage Provisions made part of this GroupPlan

The remainder of the Group Plan consists of the provisions shown in the Certificate of Coverage issued to Covered Employees under this Group Plan. These provisions are made a part of the Group Plan. Amendments, if any, changing the provisions of the Certificate of Coverage are also made a part of the Group Plan.

28. Service Area

The Service Area shall consist of the counties in which FHCP is authorized and licensed to do business.

29. Blue Cross Blue Shield Association

Subscriber, or Group Subscriber on behalf of itself and its participants hereby expressly acknowledges its understanding this policy/Agreement constitutes a contract solely between Subscriber and Florida Health Care Plans, which is an independent corporation operating under a license from the Blue Cross and Blue Shield Association, an association of independent Blue Cross and Blue Shield Plans, (the "Association") permitting Florida Health Care Plans to use the Blue Cross and/or Blue Shield Service Mark[s] in Florida and that Florida Health Care Plans is not contracting as the agent of the Association. Subscriber, or Group Subscriber on behalf of itself and its participants further acknowledges and agrees that it has not entered into this policy/Agreement based upon representations by any person other than Florida Health Care Plans and that no person, entity, or organization other than Florida Health Care Plans shall be held accountable or liable to Subscriber, or Group Subscriber for any of Florida Health Care Plans obligations to Subscriber, or Group Subscriber created under this policy/Agreement. This paragraph shall not create any additional obligations whatsoever on the part of Florida Health Care Plans other than those obligations created under other provisions of this agreement.

30. Retroactive Enrollment Activity

Requests for retroactive enrollment activity shall be submitted in writing to FHCP's Enrollment Department and shall include an explanation for the retroactive request. Such requests are only granted in FHCP's sole discretion. Parties acknowledge that granting of requests may be subject to certain reporting requirements under state or federal guidelines. FHCP reserves the right, in its sole discretion, to process reversal of any claims payments made during the retroactive termination period. Parties acknowledge that individual members may be billed for reversed claims.

CONTRACT INFORMATION PAGE

Employer Name: CITY OF ORMOND BEACH

Group Number(s): 128

Group Plan(s): HDHP-HSA and POS

Applicable Options:

Group Effective Date: 01/01/1997

Contract Anniversary Date: 01/01/2026 - 12/31/2026

Eligibility Exceptions: SEE BELOW

of Eligible Employees:

- ☐ Vision Rider
- ☒ Pharmacy Rider \$3/10/30/55 + Ded RX
- ☒ COBRA Coverage
- ☒ WFW effective 4/1/2013 Co-pay \$0.00
- ☐ Wellness Services Rider effective
- ☒ Preferred Fitness Gym Rider 10/1/2011
- ☐ Religious/Moral Contraception Objection

Employer Contribution Method: PERCENTAGE (% or flat) Employee 100% Dependent 0%

Waiting Period: First of the month following 30 days of eligible employment, **Directors: Eligible** First of the month following date of hire. **Terminate:** Last day of billing cycle.

Rate Schedule

Group Plan	HDHP-HSA POS TI4	HDHP-HSA POS TF4		
Rx & Rx Code	\$3/10/30/55 Ded RX (G7)	\$3/10/30/55 Ded RX (G7)		
Single	\$719.82	N/A		
SP w/ any # Children	N/A	\$1,238.08		
Couple	N/A	\$1,238.08		
Family	N/A	\$1,439.63		

Florida Health Care Plan, Inc. (hereinafter called FHCP) agrees to provide the health care services described under the provisions of this Group Insurance Contract (herein called the Contract) and the FHCP Group Member Handbook (which by reference thereto is made a part thereof) for all Covered Employees of the Employer and their covered dependents. The provision of services is subject to all of the terms on this page, those that follow, and the FHCP Group Member Handbook, including any limitations, restrictions or exclusions, as well as any amendments made a part of this Contract.

The Employer may act on behalf of all eligible employees and dependents. Every act by, agreement made with, or notice given to the Employer will be binding on all Covered Employees and Covered Dependents.

The contract is issued in consideration of the application of the Employer and payment of subscription fees in advance by the Employer. This Contract is effective on the Contract Anniversary Date shown above. The first subscription fees cover the period starting on the Contract Anniversary Date.

Signed for Florida Health Care Plan, Inc., Florida to take effect on the Contract Anniversary Date for delivery in the State of Florida.

BY:

Marie Atanasoski
CFO
Florida Health Care Plan, Inc.

Jenevieve Ferreira

Witness

Date: 10/09/2025

BY:

Name : Joyce Shanahan
Title: City Manager
Group Name: City of Ormond Beach

Witness

Date:

**HEALTH SAVINGS ACCOUNT COMPATIBLE HIGH DEDUCTIBLE
HEALTH PLANS AND
FHCP CLINICS
ACKNOWLEDGEMENT**

CITY OF ORMOND BEACH (“Group”) is hereby selecting to offer to its eligible employee and dependents (if applicable) enrolled in a Health Savings Account compatible High Deductible Health Plans access to Florida Health Care Plan, Inc.’s (FHCP) Clinics at a reduced or no cost share. Group acknowledges and agrees that as a sophisticated party they have had an opportunity to review the applicable law and to seek their own legal or tax advice on the matter. Group hereby indemnifies and releases FHCP and all its affiliates, their employees, directors, or agents of any and all liability in relation to this matter.

This Acknowledgment is signed by an authorized representative of the Group.

Signature

Printed Name

Position

Date

POINT OF SERVICE RIDER

Florida Health Care Plans Group HMO Contract is hereby amended and supplemented by the terms and conditions of this Rider.

Nothing contained in this Rider will be held to vary, alter, waive, or extend any of the terms, conditions, provisions, exclusions or limitations of the Contract to which this Rider is attached, other than as specifically stated herein.

Additionally, this Rider in no way extends benefits beyond what has been stated in the HMO Contract (Certificate of Coverage, Schedule of Benefits and Coverage and Summary of Benefits and Coverage) in terms of specific service limits or benefit maximums. This Rider does not create any duplication of coverage or coordination of benefits contained in the FHCP Plan or any other Riders you may elect.

Please read this Rider carefully and keep it with your FHCP Plan Contract.

HOW THE POINT OF SERVICE RIDER WORKS...

PLAN DESIGN

This rider is designed to complement FHCP's existing HMO benefit plans. FHCP members are still members of our HMO, and are encouraged to utilize their HMO network for lowest out of pocket costs, however they have the added benefit of choosing to have their medical care rendered, at the point of service, by an HMO provider or a non-participating provider. With this rider, the plan is open access in that the member may self-refer to any provider.

OUT-OF-POCKET EXPENSE

A major feature of the POS rider is that the amount of the member's out-of-pocket expense (cost sharing) is determined by the member's choice of provider at the point of service. Members choosing HMO providers will be responsible for the lowest cost sharing amounts. Members choosing out-of-network providers will pay higher cost sharing in the form of higher deductibles and co-insurance and will also be at risk for non-participating providers fees that are in excess of allowable charges, commonly referred to as Balance Billing. Fees that are in excess of allowable charges are not a covered benefit and therefore do not apply to your deductible or annual out-of-pocket expense limit. These amounts can add up to considerable costs to members.

This Rider gives you options as described below:

In-Network

You can self-refer to any provider listed in FHCP's HMO Participating Provider Network. When you go directly to one of these participating providers without a referral you will be responsible for cost sharing as noted in the Schedule of Benefits and Coverage (SOB) or Summary of Benefits and Coverage (SBC).

Out-of-Network

You can self-refer to any provider outside of FHCP's HMO provider listing without a referral. When you choose a physician, provider or hospital outside the network, you pay a portion of your medical expenses through a separate deductible and coinsurance. Certain benefit limitations apply. You will also be responsible for the portion of nonparticipating provider/hospital fees that are in excess of FHCP's allowable charges (balance billing). These charges can be significant. We recommend whenever possible that you check with out-of-network providers to determine fees in advance.

This Rider provides **separate** deductibles between HMO and Out-of-Network benefits. Before FHCP will begin paying for Covered Services, a Member must satisfy the applicable Calendar or Benefit Year Deductible, which is set forth in the SOB and SBC.

PRIOR AUTHORIZATION

While this is an open access plan, certain services must have prior authorization. Prior Authorization requests require medical necessity and must be made PRIOR to you receiving any services. Services rendered without prior authorization will not be covered. You or your requesting physician may contact Florida Health Care Plans Referral/Prior Authorization Department by calling (386) 238-3230 or 1-800-729-8349 for instructions.

Prior Authorization is required for services rendered by certain types of Specialists, certain tests, services, and for certain injections and infusion therapy drugs administered in the physician's office. For a list of drugs requiring prior authorization please refer to FHCP's website at www.fhcp.com

The following are examples of health services that require prior authorization and are subject to change:

- Inpatient Hospital Services
- Outpatient Surgical Procedure (Ambulatory Surgery Center/Hospital/Provider's Office)
- Residential/Rehabilitation Facility
- Skilled Nursing Facility
- Home Health Care
- Advanced Imaging (MRI, MRA, PET, CT and Nuclear Med)
- Genetic Testing
- Radiation Therapy
- Prosthetics and Medical Brace Device
- Cardiac Rehabilitation Therapy
- Chemotherapy
- Infusion Therapy
- Accidental Dental
- Dental Anesthesia
- Reconstructive Surgery
- Transplants, including Bone Marrow Transplants
- Treatment for Temporomandibular Joint Disorders
- Congenital Anomaly, including Cleft Lip/Palate
- Durable Medical Equipment
- Hyperbaric Oxygen Therapy
- Wound Vac
- Nutrition and Formulas

Should you be unable to keep a scheduled appointment with a Non-Participating Provider, you must cancel the appointment within twenty-four (24) hours of the scheduled time. If you fail to notify the provider within this time frame, sometimes referred to as a "no call - no show," 100% of the cost of the service will be your responsibility.

DEFINITIONS...

Please refer to your Certificate of Coverage for specific definitions and a full description of covered benefits, exclusions, and limitations.

CLAIMS PROCEDURES...

Under this Rider, network providers will generally file claims for you.

If you go to a provider who does not participate, you may be asked to pay for health care services first, and file claims yourself for reimbursement from FHCP. In order to file a claim, submit a copy of the bill and receipt to Florida Health Care Plans at P.O. Box 10348, Daytona Beach, FL 32120-0348.

Only those expenses related to covered benefits which are submitted as a claim to FHCP will be credited toward the Deductible or the Member's Annual Out-of-Pocket Expense Limit.

Reimbursement for Network Provider Services: FHCP will pay the Provider directly for all care received. The Member will not have to submit a claim for payment. Whenever HMO network services are utilized and FHCP's authorization procedure is followed HMO cost sharing will apply. This is a significant cost savings to you.

In the event the Member requires Emergency Services and Care for an Emergency Medical Condition from a Non-Participating Provider while inside or outside the Service Area; or, if FHCP authorizes a referral of the Member to a Non-Participating Provider, and the Member is required to pay the Non-Participating Provider directly for such services, the Member will be reimbursed for the allowed cost of the services less any applicable HMO co-payments for each date of service.

In the event a Member requires Emergency Services and Care for an Emergency Medical Condition from a Non-Participating Provider, call the FHCP Medical Claims Department at (386) 615-5010 to report the emergency as soon as medically possible. Before leaving the hospital or provider's office, obtain a copy of any dictation or sign a medical release form to give legal permission to release the records to the FHCP Medical Claims Department upon their request. Bring or send all claims, bills and medical records to the FHCP Medical Claims Department at 475 S Nova Rd, Ormond Beach, FL 32174, or mail the information to FHCP Medical Claims Department, P.O. Box 10348, Daytona Beach, Florida 32120-0348. For additional information, please refer to the Claims Review section of the Certificate of Coverage.

Medical Payment Guidelines for Non-Participating Provider Care: Whenever utilizing Non-Participating Providers for other than an Emergency Medical Condition, Out-of-Network benefits, deductibles and coinsurance and fees that exceed allowable charges will apply. FHCP's payment for services covered by this Rider will be determined according to the FHCP allowance guidelines (usual and customary rate – UCR) in effect at the time the service was rendered. These guidelines apply to Covered Services only and are not in addition to all of the other provisions, limitations and exclusions contained in the Contract and this Rider. Utilization of services rendered by non-participating providers and/or facilities may result in the member being responsible for significant balance billing in addition to their out-of-network deductible and coinsurance.

INFORMATION LINES

Please contact FHCP Central Referral Department at 386-238-3230 or 1-800-729-8349 for information on obtaining prior authorization. For benefit information and verification of coverage please contact FHCP Member Services Department at 386-615-4022 or 1-877-615-4022.

EXCLUSIONS AND LIMITATIONS...

All services covered under this Rider must be Medically Necessary as defined in your Certificate of Coverage (COC). The benefit exclusions and limitations specified in the COC, SOB and SBC are also applicable to the benefits specified in this Point of Service Rider. Additionally, the following services are not covered or are limited under this Rider:

1. Emergency Services and Care administered by any provider for an Emergency Medical Condition will be covered under the HMO Provider Network. In order for care to be covered, FHCP must be notified as described in the Emergency Services and Care section of the Certificate of Coverage. If notification is not provided as specified in the Certificate of Coverage, services for an Emergency Medical Condition may be payable under the Rider if the service or supply is a covered service as specified in the Certificate of Coverage and not specifically excluded herein.
2. Hearing examinations for hearing aids are available only under the HMO Provider Network and are not an out-of-network benefit.
3. Telehealth services are available only under the HMO Provider Network and are not an out-of-network benefit.
4. Vision examinations are available only under the HMO Provider Network, if vision rider is purchased, and are not an out-of-network benefit.
5. Dental services are available only under the HMO Provider Network, if dental rider is purchased, and are not an out-of-network benefit.
6. The maximum number of days/visits for a Skilled Nursing Facility, Residential or Rehabilitation Facility in any calendar year is a combined number of days/visits provided under BOTH your HMO (in-network) and this POS (out-of-network) benefits.

Florida Health Care Plan, Inc. (hereinafter called FHCP) agrees to provide the health care services described under the provisions of this Point of Service Rider for the Member and his or her Covered Dependents.



PREFERRED FITNESS CERTIFICATE

This Preferred Fitness Certificate is designed to complement your FHCP benefit plan and provide fitness center access and other services to further members' wellness which include:

Fitness Center (Gym) access for eligible members:

Covered members will have access to FHCP contracted fitness centers in our service areas. Please refer to the FHCP Certificate of Coverage for a listing of our service areas.

- FHCP members have access to all contracted fitness centers.
- FHCP members may visit as many contracted fitness centers as they would like and are not restricted on the number of facilities they may join or the number of times they may visit.
- FHCP members must provide their FHCP insurance card to check in and register at contracted facilities.
- FHCP members must abide by all rules and policies of the contracted fitness centers.
- Please check with the specific fitness center for the ages accepted at the fitness facility.
- A list of contracted fitness centers can be found on our website at fhcp.com, or you can contact FHCP's Member Services Department at the contact information below.

Member Portal including Welcome to Wellness:

Members are offered online health information through the Member Portal that includes a large variety of general health and wellness topics. Included are:

- Online Personal Health assessment
- Interactive tools
- Preventive care information
- Quizzes
- Online access to programs and information
- A comprehensive library of health-related topics in English and Spanish

If you have any questions or would like additional information, please contact the Florida Health Care Plans Member Services Department at:

386.615.4022 • 1.877.615.4022
www.fhcp.com



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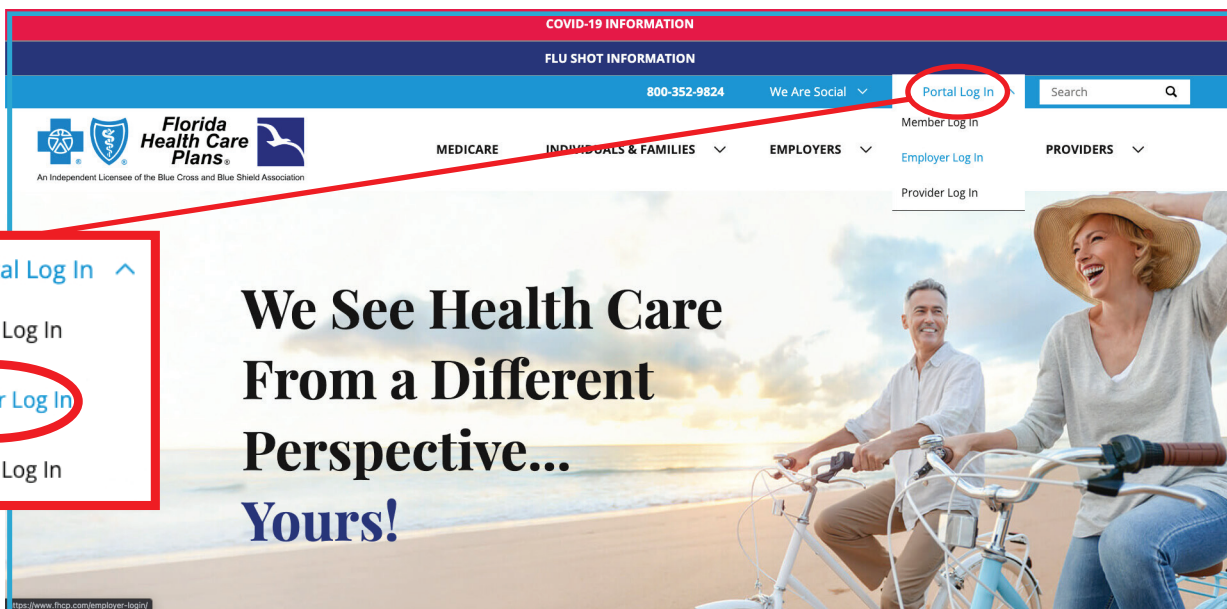


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FHCP EMPLOYER PORTAL SIGN-UP INSTRUCTIONS

1

VISIT FHCP.COM AND CLICK THE “PORTAL LOG IN” BUTTON ON THE TOP, THEN CHOOSE “EMPLOYER LOG IN” FROM THE DROP DOWN MENU.



OR YOU CAN LOOK FOR THIS BUTTON UNDER **EMPLOYERS**:

Portal Log In

2

Employer Group Log In

* Indicates Required Field

Username* Password*

[FORGOT PASSWORD](#) | [FORGOT USERNAME](#)

[Trouble Logging In?](#) | [Help](#) | [Email Customer Service](#) | Call 1-877-814-9909

IMPORTANT NOTE: If you are a new employer, your portal account will be unavailable until 48 hours after enrollment completion with FHCP. If you require assistance with logging into your portal account, please contact technical support at 1-877-814-9909.

NEXT, YOU WILL COME TO THIS PAGE. BE SURE TO CLICK “**NEW GROUP REGISTRATION**” TO CREATE YOUR NEW ACCOUNT. ALL EMPLOYERS WILL NEED TO CREATE AN ACCOUNT WITH FHCP TO LOGIN.

YOU WILL NEED YOUR GROUP TAX ID NUMBER TO REGISTER FOR YOUR ACCOUNT.
ONCE YOU FOLLOW THE STEPS, FHCP WILL CONFIRM YOUR REGISTRATION.
YOU WILL NOW BE ACTIVATED AND ABLE TO USE YOUR ACCOUNT!

TIPS

- USE ONLY SUPPORTED BROWSERS
(UPDATED FIREFOX, CHROME, SAFARI AND INTERNET EXPLORER)
- JOT YOUR USER NAME AND PASSWORD DOWN AND KEEP IT IN A SAFE LOCATION



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FHCP EMPLOYER PORTAL SIGN-UP INSTRUCTIONS

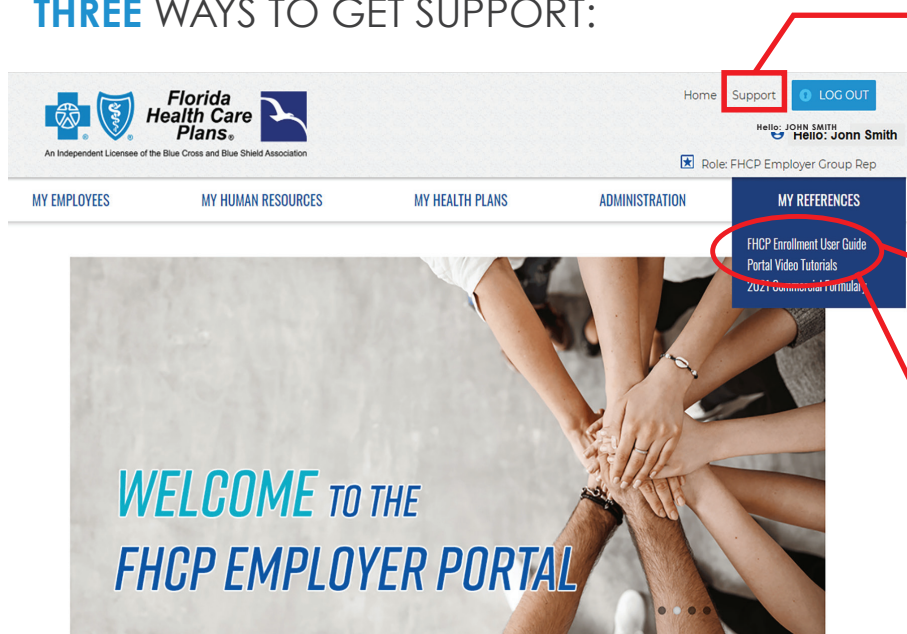
3

FEATURES AVAILABLE IN THE EMPLOYER PORTAL

- SELECT AN EMPLOYEE AND VIEW THEIR DEMOGRAPHICS
- VERIFY BENEFITS AND ELIGIBILITY COVERAGE AND DEDUCTIBLE AND OUT-OF-POCKET ACCUMULATORS FOR AN EMPLOYEE AND/OR DEPENDENTS
- REQUEST REPLACEMENT OR TEMPORARY ID CARDS FOR EMPLOYEE AND/OR DEPENDENTS
- VIEW/ACCESS BENEFIT DOCUMENTS FOR SELECTED EMPLOYEE
- SUBMIT ELECTRONIC "CHANGE ENROLLMENT" TRANSACTIONS TO FHCP
- SUBMIT ELECTRONIC "TERMINATE ENROLLMENT" TRANSACTIONS TO FHCP
- SUBMIT ELECTRONIC "INITIAL ENROLLMENT (ADD)" TRANSACTIONS TO FHCP
- REQUEST/VIEW/DOWNLOAD AN EMPLOYEE ROSTER REPORT

THREE WAYS TO GET SUPPORT:

4



1- CLICK **SUPPORT** TO FIND IMPORTANT FHCP PHONE NUMBERS

2- **ACCESS** THE ENROLLMENT USER GUIDE FOR INSTRUCTIONS ON EACH FUNCTION

3- **ACCESS** VIDEO TUTORIALS FOR INSTRUCTIONS ON EACH FUNCTION

PLEASE NOTE: After you have registered for the portal, you will be sent a confirmation email informing you of available resources and how to register for training. **FHCP Strongly recommends** that you attend training before submitting enrollment changes.

Executive Summary of Medical & Prescription Drug Coverage
City of Ormond Beach
January 01, 2026 - December 31, 2026

	Current		
Vendor	Florida Health Care Plans		
Plan Name	T14 / TF4		
Network	FHCP		
Plan Type	POS - HSA		
Plan Details	Network		
	Single		Family
Plan Deductible	\$1,650		\$3,300
Embedded Deductible:	Yes		
Calendar or Policy Year:	Calendar		
Coinsurance:	20%		
Maximum Out-of-Pocket:	\$3,300		\$6,600 (\$3,300 Ind)
(Includes Deductible, Copay, Rx)	Yes, N/A, Yes		
Physician Services			
Office Visit:	Deductible + Coinsurance		
Specialist:	Deductible + Coinsurance		
Chiropractic:	Deductible + Coinsurance		
Virtual Visits:	Deductible + Coinsurance		
Hospital / Emergency Services			
Inpatient Hospital Per Admission:	Deductible + Coinsurance		
Emergency Room ER Physician:	Deductible + Coinsurance		
Urgent Care:	Deductible + Coinsurance		
Outpatient Surgical Facility:	Deductible + Coinsurance		
Ambulatory Surgery Center:	Deductible + Coinsurance		
Diagnostic Services			
Lab & X-Ray Outpatient:	Deductible + Coinsurance		
Advanced Imaging Services (MRI, MRA, PET, CT):	Deductible + Coinsurance		
Prescription Drug			
Pharmacy Network:	FHCP		
Deductible:	Calendar Year Deductible		
Prescription Tier (Preferred):	\$3 \$10 \$30 \$55 15% 25%		
Prescription Tier (Non-Preferred):	\$15 \$15 \$35 \$60		
Mail Order Prescription (90 Day Supply):	\$6 \$27 \$87 \$162		
Non-Network Plan Details	Non-Network		
Plan Deductible	\$3,000		\$6,600 (\$3,300 Ind)
Coinsurance:	40%		
Maximum Out-of-Pocket:	\$6,000		\$12,000
Per Occurrence Deductible (Inpatient/Outpatient):	N/A		
Plan Rates Current Enrollment	Current		
Employee:	290	\$727.09	
Employee + Spouse:	23	\$1,250.59	
Employee + Child(ren):	15	\$1,250.59	
Family:	28	\$1,454.17	
Estimated Monthly Premiums:	356	\$299,095	
Estimated Annual Premiums:		\$3,589,143	
PEPY		\$10,082	
Rate Change from Current (%):			
Rate Change from Current (\$):			

	Renewal Revised		
Vendor	Florida Health Care Plans		
Plan Name	T14 / TF4		
Network	FHCP		
Plan Type	POS - HSA		
Plan Details	Network		
	Single		Family
Plan Deductible	\$1,700		\$3,400
Embedded Deductible:	Yes		
Calendar or Policy Year:	Calendar		
Coinsurance:	20%		
Maximum Out-of-Pocket:	\$3,400		\$6,800 (\$3,400 Ind)
(Includes Deductible, Copay, Rx)	Yes, N/A, Yes		
Physician Services			
Office Visit:	Deductible + Coinsurance		
Specialist:	Deductible + Coinsurance		
Chiropractic:	Deductible + Coinsurance		
Virtual Visits:	Deductible + Coinsurance		
Hospital / Emergency Services			
Inpatient Hospital Per Admission:	Deductible + Coinsurance		
Emergency Room ER Physician:	Deductible + Coinsurance		
Urgent Care:	Deductible + Coinsurance		
Outpatient Surgical Facility:	Deductible + Coinsurance		
Ambulatory Surgery Center:	Deductible + Coinsurance		
Diagnostic Services			
Lab & X-Ray Outpatient:	Deductible + Coinsurance		
Advanced Imaging Services (MRI, MRA, PET, CT):	Deductible + Coinsurance		
Prescription Drug			
Pharmacy Network:	FHCP		
Deductible:	Calendar Year Deductible		
Prescription Tier (Preferred):	\$3 \$10 \$30 \$55 15% 25%		
Prescription Tier (Non-Preferred):	\$15 \$15 \$35 \$60		
Mail Order Prescription (90 Day Supply):	\$6 \$27 \$87 \$162		
Non-Network Plan Details	Non-Network		
Plan Deductible	\$3,000		\$6,800 (\$3,400 Ind)
Coinsurance:	40%		
Maximum Out-of-Pocket:	\$6,000		\$12,000
Per Occurrence Deductible (Inpatient/Outpatient):	N/A		
Plan Rates Current Enrollment	Renewal		
Employee:		\$777.99	
Employee + Spouse:		\$1,338.13	
Employee + Child(ren):		\$1,338.13	
Family:		\$1,555.96	
Estimated Monthly Premiums:		\$320,033	
Estimated Annual Premiums:		\$3,840,395	
PEPY		\$10,788	
Rate Change from Current (%):		7.0%	
Rate Change from Current (\$):		\$251,252	
		Revised	
		\$719.82	
		\$1,238.08	
		\$1,238.08	
		\$1,439.63	
		\$296,104	
		\$3,553,254	
		\$9,981	
		-1.0%	
		-\$35,890	

* Change to Deductible & OOP Max limits due to 2026 IRS Regulations on HSA plans

Large Group HDHP POS (HSA Compatible) Health Benefit Single Plan TI4



Schedule of Benefits for Covered Services

Amount Member Pays
In-Network Out-of-Network

Financial Features		
Medical Benefits Deductible (DED ¹) (PBP ²) (DED is the amount the member is responsible for before FHCP pays)	\$1,700 per person	\$3,000 per person
Prescription Drug Benefits Deductible (DED ¹) (PBP ²) (DED is the amount the member is responsible for before FHCP pays)	Integrated with Medical	Not Covered
Coinsurance (Coinsurance is the percentage the member pays for services)	20% of Allowed Amount	40% of Allowed Amount
Out-of-Pocket Maximum (OOPM ³) (PBP ²) (OOPM includes DED, Coinsurance, Copayments and Prescription Drugs)	\$3,400 per person	\$6,000 per person
Office Services		
Physician Office Services (per visit) Primary Care Specialist	Deductible + 20% Deductible + 20%	Deductible + 40% Deductible + 40%
Maternity (Office Cost Share for initial visit only. Delivery charges are separate) Primary Care Specialist	Deductible + 20% Deductible + 20%	Deductible + 40% Deductible + 40%
Allergy Injections (per visit) Primary Care Specialist	Deductible + 20% Deductible + 20%	Deductible + 40% Deductible + 40%
Medical Pharmacy: Medications administered by a health care provider in an office or outpatient setting. Includes chemotherapy, infusions, dialysis, therapeutic injections and other medications ordered and administered by a provider. Prior authorization is required. Preferred Medications Non-Preferred Medications	Deductible + 15% Deductible + 25%	Deductible + 40% Deductible + 40%
Important: The Cost Share for Medical Pharmacy Services applies to the Prescription Drug only and is in addition to the Office Services and/or Outpatient Facility Cost Share. Medical Pharmacy does not include immunizations, allergy injections or Services covered through the prescription drug program. Please refer to your Certificate of Coverage for a description of Medical Pharmacy.		
Preventive Care		
Routine Adult & Child Preventive Services, Wellness Services, Blood Work and Immunizations	\$0	Deductible + 40%
Mammogram Screening	\$0	Deductible + 40%
Bone Density / Osteoporosis Screening	\$0	Deductible + 40%
Colonoscopy (Routine for age 45+)	\$0	Deductible + 40%
Emergency Medical Care		
Urgent Care Centers (per visit)	Deductible + 20%	In-Network Deductible + 20%
Hospital Emergency Room or Stand-Alone Emergency Facility Services (per visit)	Deductible + 20%	In-Network Deductible + 20%
Ambulance Services	Deductible + 20%	In-Network Deductible + 20%

¹ DED = Deductible

² PBP = Per Benefit Period

³ OOPM = Out-of-Pocket Maximum

Note: Out-of-Network services may be subject to balance billing.

Florida Health Care Plans is an Independent Licensee of the Blue Cross and Blue Shield Association.

**Large Group HDHP POS (HSA Compatible)
Health Benefit Single Plan TI4**

Schedule of Benefits for Covered Services		Amount Member Pays
		In-Network Out-of-Network
Outpatient Diagnostic and Therapeutic Services - services with an asterisk * require prior authorization. Charges are per visit/test.		
Independent Diagnostic Facility/Provider's Office Allergy Testing X-rays and Ultrasounds Diagnostic Services (except AIS) *Advanced Imaging Services (AIS) (MRI, MRA, PET, CT, Nuclear Med.)	Deductible + 20% Deductible + 20% Deductible + 20% Deductible + 20%	Deductible + 40% Deductible + 40% Deductible + 40% Deductible + 40%
*Therapeutic Services - Therapeutic treatments include, but are not limited to dialysis, intravenous chemotherapy, intravenous infusion, hyperbaric oxygen therapy and radiation oncology.	Deductible + 25%	Deductible + 40%
Independent Clinical Lab (diagnostic testing of blood and specimens)	Deductible + 20%	Deductible + 40%
Outpatient Hospital Facility Services (per visit) Lab Services X-rays and Ultrasounds Diagnostic Services (except AIS) *Advanced Imaging Services (AIS) (MRI, MRA, PET, CT, Nuclear Med.)	Deductible + 20% Deductible + 20% Deductible + 20% Deductible + 20%	Deductible + 40% Deductible + 40% Deductible + 40% Deductible + 40%
*Therapeutic Services - Therapeutic treatments include, but are not limited to dialysis, intravenous chemotherapy, intravenous infusion, hyperbaric oxygen therapy and radiation oncology.	Deductible + 25%	Deductible + 40%
Important: Diagnostic or therapeutic services rendered in physician offices, testing centers or other outpatient locations that are owned and operated by a hospital system are considered by the hospital system to be departments of the hospital. As a result, FHCP will be billed by the hospital for such services, and the member's outpatient hospital benefit will be applied to these claims. Therapeutic services will incur separate charges for the facility service, physician fee and medical pharmacy. FHCP's Provider Directories and online Provider Search application provides information regarding which provider offices are actually hospital outpatient departments. Members should contact FHCP's cost estimation center to determine if having the diagnostic test or service performed in a hospital or hospital owned facility will result in higher cost sharing.		
Delivery / Hospital / Surgical - *all services require prior authorization		
*Ambulatory Surgical Center Facility (ASC)	Deductible + 20%	Deductible + 40%
*Birthing Center	Deductible + 20%	Deductible + 40%
*Outpatient Hospital Facility Services (per visit)	Deductible + 20%	Deductible + 40%
*Inpatient Hospital Facility (per admit)	Deductible + 20%	Deductible + 40%
Mental Health / Substance Dependency - services with an asterisk * require prior authorization		
Outpatient Office Visit Primary Care Specialist Group Therapy	Deductible + 20% Deductible + 20% Deductible	Deductible + 40% Deductible + 40% Deductible + 40%
*Inpatient Hospital Facility (per admit)	Deductible + 20%	Deductible + 40%
*Partial Hospitalization (per day)	Deductible + 20%	Deductible + 40%
*Outpatient Facility Service (per day)	Deductible + 20%	Deductible + 40%
*Residential/Rehabilitation Facility (per day)	Deductible + 20%	Deductible + 40%
Other Provider Services		
Provider Services at ER	Deductible + 20%	In-Network Deductible + 20%
Provider Services at Hospital/Birthing Center Inpatient Outpatient	Deductible + 20% Deductible + 20%	Deductible + 40% Deductible + 40%
Provider Services at an Ambulatory Surgical Center (ASC)	Deductible + 20%	Deductible + 40%
Provider Services at Locations other than Office, Hospital and ER Primary Care Specialist	Deductible + 20% Deductible + 20%	Deductible + 40% Deductible + 40%

**Large Group HDHP POS (HSA Compatible)
Health Benefit Single Plan TI4**



Schedule of Benefits for Covered Services

Amount Member Pays
In-Network Out-of-Network

Other Special Services - services with an asterisk * require prior authorization		
Combined Limit for Outpatient Occupational, Physical and Speech Therapy (per visit)	Deductible + 20%	Deductible + 40%
*Combined Limit for Outpatient Cardiac and Pulmonary Rehabilitation Therapy (per visit)	Deductible + 20%	Deductible + 40%
Chiropractic Care (per visit)	Deductible + 20%	Deductible + 40%
*Durable Medical Equipment Motorized Wheelchair All Other	Deductible + 20% Deductible + 20%	Deductible + 40% Deductible + 40%
*Prosthetics and Medical Brace Device	Deductible + 20%	Deductible + 40%
*Home Health Care (per day)	Deductible + 20%	Deductible + 40%
*Skilled Nursing Facility (per day)	Deductible + 20%	Deductible + 40%
Hospice (per day)	Deductible + 20%	Deductible + 40%
*Enteral Formulas	Deductible + 20%	Deductible + 40%
Telehealth Services General Medicine visit rendered by a designated Telehealth Services Provider Mental Health/Behavioral Health visit rendered by a designated Telehealth Services Provider	Deductible Deductible + 20%	Not Covered Not Covered
Diabetes Care Management		
Diabetes Outpatient Self-Management Education	\$0	Not Covered
Glucometer (2 per year)	\$0	Not Covered
50 Test Strips (per box)	\$10 Copay	Not Covered
Lancets (per box)	\$4 Copay	Not Covered

***Prior Authorization is Required:** There are certain medical services, supplies and medications for which **members are required to obtain Prior Authorization** before receiving. If you don't obtain prior authorization from FHCP, you will have to **pay the entire cost** of the service, supply or medication. Before receiving a service, supply or medication you should visit www.fhcp.com or call toll-free 1-877-615-4022 to see if prior authorization is required.

Benefit Maximums – Combined Limit In-Network and Out-of-Network	
Home Health Care	60 Days PBP
OT, PT, ST Outpatient Rehabilitation Therapy	20 Visits PBP
Cardiac and Pulmonary Therapy	20 Visits PBP
Chiropractic Care	20 Visits PBP
Skilled Nursing/Rehabilitation Facility	20 Days PBP
Behavioral Health Residential Facility	20 Days PBP

**Large Group HDHP POS (HSA Compatible)
Health Benefit Single Plan TI4**

Schedule of Benefits for Covered Services

Amount Member Pays

Prescription Drug Program

Pharmacy Network: A Preferred Retail pharmacy is an FHCP owned and operated pharmacy. A Non-Preferred Retail Pharmacy is a participating network pharmacy that is listed in FHCP's Pharmacy Directory and is not owned and operated by FHCP. Members must use a Preferred FHCP pharmacy or a Non-Preferred Retail pharmacy to have a prescription filled or the member will have to pay the full cost of the drug (except in certain situations such as emergencies). Mail Order is only available through FHCP Mail Order Pharmacy. Members should log into their member account at www.fhcp.com and click Find a Pharmacy to locate a Network Provider pharmacy.

	Retail Network Pharmacies (1 month supply)		Mail Order (3 month supply)
	Preferred - FHCP	Non-Preferred	FHCP Only
Generic Drugs			
Preventive (e.g., oral contraceptives)	\$0	Not Covered	\$0
Preferred Generic	Deductible + \$3 Copay	Deductible + \$15 Copay	Deductible + \$6 Copay
Non-Preferred Generic	Deductible + \$10 Copay	Deductible + \$15 Copay	Deductible + \$27 Copay
Preferred Brand Drugs	Deductible + \$30 Copay	Deductible + \$35 Copay	Deductible + \$87 Copay
Non-Preferred Brand Drugs	Deductible + \$55 Copay	Deductible + \$60 Copay	Deductible + \$162 Copay
Specialty Drugs (Prior authorization is required)			
Preferred Specialty	Deductible + 15% Coinsurance	Not Covered	Not Covered
Non-Preferred Specialty	Deductible + 25% Coinsurance	Not Covered	Not Covered

If a Brand Name Prescription Drug is requested when there is a Generic Prescription Drug available, the member will be responsible for paying the Usual and Customary cash price for that prescription.

FHCP Pharmacy benefit provides coverage for Generic contraceptive medications or supplies (e.g., oral contraceptives, emergency contraceptive, and diaphragms) at no cost when obtained from a pharmacy owned and operated by FHCP. FHCP's Pharmacy Benefit also covers certain preventive medications at no cost in accordance with the United States Preventative Task Force (USPSTF) Affordable Care Act A and B recommendations as long as all criteria are met and the medication is obtained from a FHCP owned and operated pharmacy.

Amount Member Pays

Schedule of Benefits for Covered Services

Network Provider Out-of-Network Provider

Pediatric Vision

Network Provider Services: The services listed below must be received from a Network Provider or the member will have to pay the full cost of the service (except in certain situations such as emergencies). Members should log onto www.fhcp.com and click **Find a Provider/Facility** to locate a Network Provider near them.

Eyeglass Exam (1x per year)	Not Covered	Not Covered
Eyeglasses (includes frames & lenses - single vision, bifocal, trifocal or lenticular)	Not Covered	Not Covered
Contact Lenses Exam (1x per year) <i>(Instead of eyeglass exam)</i>	Not Covered	Not Covered
Contact Lenses (2 boxes, 1x per year) <i>(Instead of eyeglasses)</i>	Not Covered	Not Covered

Note: Anything over the allowance will not count toward your out-of-pocket maximum limitation.

Pediatric Dental

Preventive, Basic and Major Services	Not Covered
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Large Group HDHP POS (HSA Compatible) Health Benefit Single Plan TI4



Additional Benefits and Features

- In the event the allowable rate for a service rendered is less than the Member's contractual copayment amount for that service, the member will be responsible for the lesser charge.
- To find out more about their benefits and/or treatment options, members are encouraged to call the Member Services Department at 1-877-615-4022. This can help them save time and money.
- For a list of network providers, please visit <https://www.fhcp.com/our-provider-network> or call 1 (877) 615-4022 to request a printed provider directory.
- Members have online access to view their health benefit plan information as well as self-service tools through the Member Portal at www.fhcp.com.

This is not an insurance contract or Benefit Booklet. This Benefit Schedule is only a partial description of the many benefits and services provided or authorized by Florida Health Care Plans. This does not constitute a contract. For a complete description of benefits and exclusions, please see the Florida Health Care Plans Certificate of Coverage; its terms prevail.

Large Group HDHP POS (HSA Compatible) Health Benefit Family Plan TF4



Schedule of Benefits for Covered Services

Amount Member Pays
In-Network Out-of-Network

Financial Features		
Medical Benefits Deductible (EM DED ¹) (PBP ²) (DED is the amount the member is responsible for before FHCP pays)	\$3,400 per person \$3,400 per family ¹	\$3,400 per person \$6,800 per family ¹
Prescription Drug Benefits Deductible (EM DED ¹) (PBP ²) (DED is the amount the member is responsible for before FHCP pays)	Integrated with Medical	Not Covered
Coinsurance (Coinsurance is the percentage the member pays for services)	20% of Allowed Amount	40% of Allowed Amount
Out-of-Pocket Maximum (EM OOPM ³) (PBP ²) (OOPM includes DED, Coinsurance, Copayments and Prescription Drugs)	\$3,400 per person \$6,800 per family ³	\$6,000 per person \$12,000 per family ³
Office Services		
Physician Office Services (per visit) Primary Care Specialist	Deductible + 20% Deductible + 20%	Deductible + 40% Deductible + 40%
Maternity (Office Cost Share for initial visit only. Delivery charges are separate) Primary Care Specialist	Deductible + 20% Deductible + 20%	Deductible + 40% Deductible + 40%
Allergy Injections (per visit) Primary Care Specialist	Deductible + 20% Deductible + 20%	Deductible + 40% Deductible + 40%
Medical Pharmacy: Medications administered by a health care provider in an office or outpatient setting. Includes chemotherapy, infusions, dialysis, therapeutic injections and other medications ordered and administered by a provider. Prior authorization is required. Preferred Medications Non-Preferred Medications	Deductible + 15% Deductible + 25%	Deductible + 40% Deductible + 40%
Important: The Cost Share for Medical Pharmacy Services applies to the Prescription Drug only and is in addition to the Office Services and/or Outpatient Facility Cost Share. Medical Pharmacy does not include immunizations, allergy injections or Services covered through the prescription drug program. Please refer to your Certificate of Coverage for a description of Medical Pharmacy.		
Preventive Care		
Routine Adult & Child Preventive Services, Wellness Services, Blood Work and Immunizations	\$0	Deductible + 40%
Mammogram Screening	\$0	Deductible + 40%
Bone Density / Osteoporosis Screening	\$0	Deductible + 40%
Colonoscopy (Routine for age 45+)	\$0	Deductible + 40%
Emergency Medical Care		
Urgent Care Centers (per visit)	Deductible + 20%	In-Network Deductible + 20%
Hospital Emergency Room or Stand-Alone Emergency Facility Services (per visit)	Deductible + 20%	In-Network Deductible + 20%
Ambulance Services	Deductible + 20%	In-Network Deductible + 20%

¹ EM DED = Deductible is Embedded: A covered member's family deductible costs are capped at the individual deductible amount on the family plan.

² PBP = Per Benefit Period

³ EM OOPM = Out-of-Pocket Maximum is Embedded: A covered family member's out-of-pocket costs are capped at the individual out-of-pocket maximum amount on the family plan.

Note: Out-of-Network services may be subject to balance billing.

Florida Health Care Plans is an Independent Licensee of the Blue Cross and Blue Shield Association.

**Large Group HDHP POS (HSA Compatible)
Health Benefit Family Plan TF4**

Schedule of Benefits for Covered Services		Amount Member Pays
		In-Network Out-of-Network
Outpatient Diagnostic and Therapeutic Services - services with an asterisk * require prior authorization. Charges are per visit/test.		
Independent Diagnostic Facility/Provider's Office Allergy Testing X-rays and Ultrasounds Diagnostic Services (except AIS) *Advanced Imaging Services (AIS) (MRI, MRA, PET, CT, Nuclear Med.)	Deductible + 20% Deductible + 20% Deductible + 20% Deductible + 20%	Deductible + 40% Deductible + 40% Deductible + 40% Deductible + 40%
*Therapeutic Services - Therapeutic treatments include, but are not limited to dialysis, intravenous chemotherapy, intravenous infusion, hyperbaric oxygen therapy and radiation oncology.	Deductible + 25%	Deductible + 40%
Independent Clinical Lab (diagnostic testing of blood and specimens)	Deductible + 20%	Deductible + 40%
Outpatient Hospital Facility Services (per visit) Lab Services X-rays and Ultrasounds Diagnostic Services (except AIS) *Advanced Imaging Services (AIS) (MRI, MRA, PET, CT, Nuclear Med.)	Deductible + 20% Deductible + 20% Deductible + 20% Deductible + 20%	Deductible + 40% Deductible + 40% Deductible + 40% Deductible + 40%
*Therapeutic Services - Therapeutic treatments include, but are not limited to dialysis, intravenous chemotherapy, intravenous infusion, hyperbaric oxygen therapy and radiation oncology.	Deductible + 25%	Deductible + 40%
Important: Diagnostic or therapeutic services rendered in physician offices, testing centers or other outpatient locations that are owned and operated by a hospital system are considered by the hospital system to be departments of the hospital. As a result, FHCP will be billed by the hospital for such services, and the member's outpatient hospital benefit will be applied to these claims. Therapeutic services will incur separate charges for the facility service, physician fee and medical pharmacy. FHCP's Provider Directories and online Provider Search application provides information regarding which provider offices are actually hospital outpatient departments. Members should contact FHCP's cost estimation center to determine if having the diagnostic test or service performed in a hospital or hospital owned facility will result in higher cost sharing.		
Delivery / Hospital / Surgical - *all services require prior authorization		
*Ambulatory Surgical Center Facility (ASC)	Deductible + 20%	Deductible + 40%
*Birthing Center	Deductible + 20%	Deductible + 40%
*Outpatient Hospital Facility Services (per visit)	Deductible + 20%	Deductible + 40%
*Inpatient Hospital Facility (per admit)	Deductible + 20%	Deductible + 40%
Mental Health / Substance Dependency - services with an asterisk * require prior authorization		
Outpatient Office Visit Primary Care Specialist Group Therapy	Deductible + 20% Deductible + 20% Deductible	Deductible + 40% Deductible + 40% Deductible + 40%
*Inpatient Hospital Facility (per admit)	Deductible + 20%	Deductible + 40%
*Partial Hospitalization (per day)	Deductible + 20%	Deductible + 40%
*Outpatient Facility Service (per day)	Deductible + 20%	Deductible + 40%
*Residential/Rehabilitation Facility (per day)	Deductible + 20%	Deductible + 40%
Other Provider Services		
Provider Services at ER	Deductible + 20%	In-Network Deductible + 20%
Provider Services at Hospital/Birthing Center Inpatient Outpatient	Deductible + 20% Deductible + 20%	Deductible + 40% Deductible + 40%
Provider Services at an Ambulatory Surgical Center (ASC)	Deductible + 20%	Deductible + 40%
Provider Services at Locations other than Office, Hospital and ER Primary Care Specialist	Deductible + 20% Deductible + 20%	Deductible + 40% Deductible + 40%

**Large Group HDHP POS (HSA Compatible)
Health Benefit Family Plan TF4**



Schedule of Benefits for Covered Services

Amount Member Pays
In-Network Out-of-Network

Other Special Services - services with an asterisk * require prior authorization		
Combined Limit for Outpatient Occupational, Physical and Speech Therapy (per visit)	Deductible + 20%	Deductible + 40%
*Combined Limit for Outpatient Cardiac and Pulmonary Rehabilitation Therapy (per visit)	Deductible + 20%	Deductible + 40%
Chiropractic Care (per visit)	Deductible + 20%	Deductible + 40%
*Durable Medical Equipment Motorized Wheelchair All Other	Deductible + 20% Deductible + 20%	Deductible + 40% Deductible + 40%
*Prosthetics and Medical Brace Device	Deductible + 20%	Deductible + 40%
*Home Health Care (per day)	Deductible + 20%	Deductible + 40%
*Skilled Nursing Facility (per day)	Deductible + 20%	Deductible + 40%
Hospice (per day)	Deductible + 20%	Deductible + 40%
*Enteral Formulas	Deductible + 20%	Deductible + 40%
Telehealth Services General Medicine visit rendered by a designated Telehealth Services Provider Mental Health/Behavioral Health visit rendered by a designated Telehealth Services Provider	Deductible Deductible + 20%	Not Covered Not Covered
Diabetes Care Management		
Diabetes Outpatient Self-Management Education	\$0	Not Covered
Glucometer (2 per year)	\$0	Not Covered
50 Test Strips (per box)	\$10 Copay	Not Covered
Lancets (per box)	\$4 Copay	Not Covered

***Prior Authorization is Required:** There are certain medical services, supplies and medications for which **members are required to obtain Prior Authorization** before receiving. If you don't obtain prior authorization from FHCP, you will have to **pay the entire cost** of the service, supply or medication. Before receiving a service, supply or medication you should visit www.fhcp.com or call toll-free 1-877-615-4022 to see if prior authorization is required.

Benefit Maximums – Combined Limit In-Network and Out-of-Network	
Home Health Care	60 Days PBP
OT, PT, ST Outpatient Rehabilitation Therapy	20 Visits PBP
Cardiac and Pulmonary Therapy	20 Visits PBP
Chiropractic Care	20 Visits PBP
Skilled Nursing/Rehabilitation Facility	20 Days PBP
Behavioral Health Residential Facility	20 Days PBP

**Large Group HDHP POS (HSA Compatible)
Health Benefit Family Plan TF4**

Schedule of Benefits for Covered Services

Amount Member Pays

Prescription Drug Program

Pharmacy Network: A Preferred Retail pharmacy is an FHCP owned and operated pharmacy. A Non-Preferred Retail Pharmacy is a participating network pharmacy that is listed in FHCP's Pharmacy Directory and is not owned and operated by FHCP. Members must use a Preferred FHCP pharmacy or a Non-Preferred Retail pharmacy to have a prescription filled or the member will have to pay the full cost of the drug (except in certain situations such as emergencies). Mail Order is only available through FHCP Mail Order Pharmacy. Members should log into their member account at www.fhcp.com and click Find a Pharmacy to locate a Network Provider pharmacy.

	Retail Network Pharmacies (1 month supply)		Mail Order (3 month supply)
	Preferred - FHCP	Non-Preferred	FHCP Only
Generic Drugs Preventive (e.g., oral contraceptives) Preferred Generic Non-Preferred Generic	\$0 Deductible + \$3 Copay Deductible + \$10 Copay	Not Covered Deductible + \$15 Copay Deductible + \$15 Copay	\$0 Deductible + \$6 Copay Deductible + \$27 Copay
Preferred Brand Drugs	Deductible + \$30 Copay	Deductible + \$35 Copay	Deductible + \$87 Copay
Non-Preferred Brand Drugs	Deductible + \$55 Copay	Deductible + \$60 Copay	Deductible + \$162 Copay
Specialty Drugs (Prior authorization is required)			
Preferred Specialty	Deductible + 15% Coinsurance	Not Covered	Not Covered
Non-Preferred Specialty	Deductible + 25% Coinsurance	Not Covered	Not Covered

If a Brand Name Prescription Drug is requested when there is a Generic Prescription Drug available, the member will be responsible for paying the Usual and Customary cash price for that prescription.

FHCP Pharmacy benefit provides coverage for Generic contraceptive medications or supplies (e.g., oral contraceptives, emergency contraceptive, and diaphragms) at no cost when obtained from a pharmacy owned and operated by FHCP. FHCP's Pharmacy Benefit also covers certain preventive medications at no cost in accordance with the United States Preventative Task Force (USPSTF) Affordable Care Act A and B recommendations as long as all criteria are met and the medication is obtained from a FHCP owned and operated pharmacy.

Amount Member Pays

Schedule of Benefits for Covered Services

Network Provider Out-of-Network Provider

Pediatric Vision

Network Provider Services: The services listed below must be received from a Network Provider or the member will have to pay the full cost of the service (except in certain situations such as emergencies). Members should log onto www.fhcp.com and click **Find a Provider/Facility** to locate a Network Provider near them.

Eyeglass Exam (1x per year)	Not Covered	Not Covered
Eyeglasses (includes frames & lenses - single vision, bifocal, trifocal or lenticular)	Not Covered	Not Covered
Contact Lenses Exam (1x per year) <i>(Instead of eyeglass exam)</i>	Not Covered	Not Covered
Contact Lenses (2 boxes, 1x per year) <i>(Instead of eyeglasses)</i>	Not Covered	Not Covered

Note: Anything over the allowance will not count toward your out-of-pocket maximum limitation.

Pediatric Dental

Preventive, Basic and Major Services	Not Covered
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Large Group HDHP POS (HSA Compatible) Health Benefit Family Plan TF4



Additional Benefits and Features

- In the event the allowable rate for a service rendered is less than the Member's contractual copayment amount for that service, the member will be responsible for the lesser charge.
- To find out more about their benefits and/or treatment options, members are encouraged to call the Member Services Department at 1-877-615-4022. This can help them save time and money.
- For a list of network providers, please visit <https://www.fhcp.com/our-provider-network> or call 1 (877) 615-4022 to request a printed provider directory.
- Members have online access to view their health benefit plan information as well as self-service tools through the Member Portal at www.fhcp.com.

This is not an insurance contract or Benefit Booklet. This Benefit Schedule is only a partial description of the many benefits and services provided or authorized by Florida Health Care Plans. This does not constitute a contract. For a complete description of benefits and exclusions, please see the Florida Health Care Plans Certificate of Coverage; its terms prevail.



City of Ormond Beach
City Commission Agenda
Staff Report

Agenda Date	November 4, 2025	Item No	7.H.
Section	CONSENT AGENDA	Category	Consent - Resolution
Subject	2026 Health Savings Account Funding		
Recommended Action	Staff recommends approval of HSA funding in the amount of \$1,450, with an additional \$450 in optional wellness incentives, for a total of up to \$1,900 per eligible employee.		
Strategic Goal	Governance - Attract, develop, and support the best talent for Ormond Beach to be recognized as an Employer of Choice.		
Department Staff Contact	Human Resources Samantha Potts, Human Resources Manager		

Summary

This is a request to approve funding of employee Health Savings Accounts (HSA) for the 2026 plan year.

After receiving significant premium increases for the 2015-2016 health insurance plan year renewal, the City transitioned from a traditional health maintenance organization (HMO) medical plan to a high deductible healthcare plan (HDHP). Based on the City Commission's recommendation and approval, the City established Health Savings Accounts (HSA) for eligible employees enrolled in the HDHP and funds those accounts annually in an amount equal to the increase in deductible from the previous HMO plan. These funds assist employees in meeting deductible and out of pocket expenses that would typically be covered under a HMO plan, while realizing the significant premium savings under the HDHP framework.

Beginning in 2018, the City Commission added a wellness incentive program with additional HSA funding opportunities. The program has fostered a strong culture of preventive health among our employees by promoting participation in pre-cancer screenings, annual physical exams, fitness activities, routine blood pressure checks, health assessments, and wellness education. These proactive measures help our employees maintain good health and, in turn, reduce the likelihood of high-cost medical claims that can contribute to increased healthcare premiums.

Annual HSA funding for the 2026 plan year, based on IRS mandated minimum deductible amounts, is \$1450, plus up to \$450 in wellness incentives, for a total of no more than \$1900 per

eligible employee.

Providing HSA funding for employees enrolled in the HDHP ensures access to quality and affordable healthcare, and offers opportunities for health and wellness incentives that positively influence employees' health. To date, the City has experienced great success with its wellness incentives by providing tools for employees to proactively monitor and resolve health-related issues, minimize larger claims, and avoid negative health impacts.

Financial Impact

Based on projected participation rates, the annual City cost is estimated not to exceed \$650,000 and is within the FY 2025-2026 budget.

Citizen Impact

The City's goal of offering quality and affordable healthcare to its employees supports a fair and competitive work environment, which enables the City to recruit and retain staff for successful delivery of services to its residents.

Attachments

1. 25-172 Health Savings Acct (P25-0140G)

RESOLUTION NO. 2025-172

A RESOLUTION AUTHORIZING FUNDING OF EMPLOYEE HEALTH SAVINGS ACCOUNTS FOR THE 2026 PLAN YEAR; AND SETTING FORTH AN EFFECTIVE DATE.

WHEREAS, in January 2026, the City of Ormond Beach will renew its high deductible healthcare plan for eligible employees where the individual deductible is \$1700.00, and

WHEREAS, in an effort to assist those employees in meeting the higher deductible, the City established Health Savings Accounts for eligible employees and desires to fund those accounts with \$1,450.00, and

WHEREAS, the City also desires to offer optional wellness incentives for employees who wish to earn an additional \$450.00, and

WHEREAS, the City Manager has certified that funding for the Health Savings Account in the amount of \$650,000.00 has been included in the FY 2025-2026 budget and has not been appropriated for any other purpose, now therefore,

BE IT RESOLVED BY THE CITY COMMISSION OF THE CITY OF ORMOND BEACH, FLORIDA, THAT:

SECTION ONE. The City Commission hereby authorizes funding Health Savings Accounts for eligible employees in the amount of \$1,450.00, the continuation of optional wellness incentives at \$450.00, all totaling \$650,000.00 which is within the FY2025-2026 budget.

SECTION TWO. This Resolution shall take effect immediately upon its adoption.

APPROVED AND AUTHENTICATED this 4th day of November, 2025.

JASON LESLIE
Mayor

ATTEST:

SUSAN CARROLL DAUDERIS
City Clerk



City of Ormond Beach
City Commission Agenda
Staff Report

Agenda Date	November 4, 2025	Item No	7.I.
Section	CONSENT AGENDA	Category	Consent - Resolution
Subject	2026 Mutual of Omaha Employee Dental Insurance Coverage		
Recommended Action	Staff recommends approval of a contract with Mutual of Omaha to provide dental insurance effective January 1, 2026.		
Strategic Goal	Governance - Attract, develop, and support the best talent for Ormond Beach to be recognized as an Employer of Choice.		
Department Staff Contact	Human Resources Samantha Potts, Human Resources Manager		

Summary

This is a request to approve a contract with Mutual of Omaha to provide dental insurance effective January 1, 2026.

In 2015, the City transitioned from BCBS Florida Combined Life to Standard Insurance Company (Standard) for its employee dental insurance coverage. Since that time, Standard has delivered exemplary service to the City and its employees. Each year during the renewal process, the City considers competitive quotes as well as the value of maintaining consistent service to employees when selecting coverage for the new plan year. Although Standard continues to offer quality service, Mutual of Omaha submitted a quote offering an increase in benefits with a significant premium rate reduction of 8%. Additionally, the proposal includes a two-year rate guarantee, ensuring there is no premium rate increase in 2027.

Like Standard, Mutual of Omaha provides benefits to many employers in the area and has a strong reputation for delivering quality service. This proposal maintains the City's commitment to fiscal responsibility while continuing to provide high-quality benefits to our employees.

The City currently provides dental insurance coverage to employees on a noncontributory basis and dependents are an additional cost to the employee.

Financial Impact

Based on current enrollment, the City's annual cost is estimated to be \$157,248 and is within the Fiscal Year 2025-2026 budget and represents a decrease to premium rates for the upcoming plan year.

Citizen Impact

The City's goal of providing a quality benefits package to its employees supports a fair and competitive work environment, which enables the City to recruit and retain staff for successful delivery of services to its residents.

Attachments

1. 25-173 Employee Dental-Mutual Omaha (P25-0140G)
2. MOO Dental Cost Summary

RESOLUTION NO. 2025-173

A RESOLUTION ACCEPTING A PROPOSAL FROM MUTUAL OF OMAHA FOR THE PROVISION OF EMPLOYEE DENTAL INSURANCE BENEFITS SERVICES; AUTHORIZING THE EXECUTION OF A CONTRACT AND PAYMENT THEREFOR; REJECTING ALL OTHER PROPOSALS; AND SETTING FORTH AN EFFECTIVE DATE.

WHEREAS, the City, through its agent of record, solicited proposals for employee dental insurance benefits services (the "Project"), in accordance with Section 2-300, *Code of Ordinances*, and

WHEREAS, the city's professional staff and its agent of record evaluated the proposals received and determined that the proposal submitted by Mutual of Omaha for the provision of employee dental insurance benefits services at the premiums listed therein is in the best overall interest of the City, and has recommended that the said proposal (a copy of which is attached hereto and incorporated herein by reference) be accepted, and

WHEREAS, the City Manager has certified that the money for the payment of the services has been included in the FY2025-2026 budget and has not been appropriated for any other purpose, now therefore,

BE IT RESOLVED BY THE CITY COMMISSION OF THE CITY OF ORMOND BEACH, FLORIDA, THAT:

SECTION ONE. The proposal of Mutual of Omaha for the provision of employee dental insurance benefits services is hereby accepted.

SECTION TWO. All other proposals relative to the aforescribed Project shall be deemed rejected upon the execution of a contract with Mutual of Omaha.

SECTION THREE. The Mayor and the City Manager are hereby authorized and directed to execute a Contract, in a form to be reviewed and approved by the City Attorney, between the City and Mutual of Omaha for the provision of employee dental insurance benefits services, and to pay the premiums therefore from the FY 2025-2026 budget.

SECTION FOUR. This Resolution shall take effect immediately upon its adoption.

APPROVED AND AUTHENTICATED this 4th day of November, 2025.

JASON LESLIE
Mayor

ATTEST:

SUSAN CARROLL DAUDERIS
City Clerk

Dental Coverage

		CURRENT	RENEWAL	FINAL	
Vendor		Standard		Mutual Of Omaha	
Provider Network		PPO		PPO	
Plan Name		Dental		Dental	
Plan Type		PPO		PPO	
Benefits Comparison		In-Network	Out-of-Network	In-Network	Out-of-Network
Calendar or Policy Year Deductible		Calendar		Calendar	
Deductible (Individual)		\$50	\$50	\$50	\$50
Deductible (Family)		\$150	\$150	\$150	\$150
Deductible Waived for Preventive Services		Yes	Yes	Yes	Yes
Annual Benefit Maximum		\$1,500	\$1,500	\$1,750	\$1,750
Reimbursement Schedule		Contracted Rates	90th	Contracted Rates	90th
Orthodontia Lifetime Maximum		\$1,000	\$1,000	\$1,000	\$1,000
Orthodontia Eligibility		Child only		Child only	
Coinsurance		In-Network	Out-of-Network	In-Network	Out-of-Network
Preventive		100%	100%	100%	100%
Basic		80%	80%	80%	80%
Major		80%	80%	80%	80%
Orthodontia		50%	50%	50%	50%
Schedule of Benefits		In-Network	Out-of-Network	In-Network	Out-of-Network
Routine Exams & Cleaning		100%	100%	100%	100%
X-Ray - Full Mouth		100%	100%	100%	100%
Sealants		100%	100%	100%	100%
Fillings - Amalgam		80%	80%	80%	80%
Fillings - Composite		80%	80%	80%	80%
Endodontics		80%	80%	80%	80%
Extractions - Simple		80%	80%	80%	80%
Extractions - Surgical		80%	80%	80%	80%
Periodontics - Non-Surgical		80%	80%	80%	80%
Periodontics - Surgical		50%	50%	50%	50%
Crowns		50%	50%	50%	50%
Bridges		50%	50%	50%	50%
Dentures		50%	50%	50%	50%
Implants		50%	50%	50%	50%
Policy Provisions					
Waiting Periods		No waiting period		No waiting period	
Late Entrant Penalties		12 Months (Except exams, cleanings, fluoride)		No waiting period	
Included Rollover		Included		Included	
Employer Contribution		100%		0%	
Participation Requirements		83%		Greater of 5 lives or 91%	
Admin/Implementation Credit		Not included		Not included	
Packaged Discount		--		Not included	
Rate Guarantee		12 Months		24 Months	
Cost Comparison		CURRENT	RENEWAL	FINAL	
Employee	312	\$41.12	\$42.76	\$36.00	
Employee + Family	119	\$116.55	\$121.20	\$112.00	
Estimated Monthly Premium	431	\$26,699	\$27,764	\$24,560	
Estimated Annual Premium		\$320,387	\$333,167	\$294,720	
Rate Change from Current (%)			4.0%	-8.0%	
Rate Change from Current (\$)			\$12,780	-\$25,667	



City of Ormond Beach
City Commission Agenda
Staff Report

Agenda Date	November 4, 2025	Item No	7.J.
Section	CONSENT AGENDA	Category	Consent - Resolution
Subject	2026 Mutual of Omaha Vision Insurance Coverage		
Recommended Action	Staff recommends approval to contract with Mutual of Omaha to provide vision insurance effective January 1, 2026.		
Strategic Goal	Governance - Attract, develop, and support the best talent for Ormond Beach to be recognized as an Employer of Choice.		
Department Staff Contact	Human Resources Samantha Potts, Human Resources Manager		

Summary

This is a request to approve a contract with Mutual of Omaha to provide vision insurance effective January 1, 2026.

In 2019, the City transitioned from Humana to Standard Insurance Company (Standard) for its employee vision insurance coverage. Since that time, Standard has delivered exemplary service to the City and its employees. Each year during the renewal process, the City considers competitive quotes as well as the value of maintaining consistent service to employees when selecting coverage for the new plan year. Although Standard continues to offer quality service, Mutual of Omaha submitted a quote offering comparable coverage with a slight increase in benefits and lower renewal rate compared to Standard. Additionally, the proposal includes a two-year rate guarantee, ensuring there is no premium rate increase in 2027.

Like Standard, Mutual of Omaha provides benefits to many employers in the area and has a strong reputation for delivering quality service. This proposal maintains the City's commitment to fiscal responsibility while continuing to provide high-quality benefits to our employees.

The City currently provides vision insurance coverage to employees on a noncontributory basis and dependents are an additional cost to the employee.

Financial Impact

Based on current enrollment, the City's annual cost is estimated to be \$19,393 and is within the Fiscal Year 2025-2026 budget and represents no increase to premium rates for the upcoming plan year.

Citizen Impact

The City's goal of providing a quality benefits package to its employees supports a fair and competitive work environment, which enables the City to recruit and retain staff for successful delivery of services to its residents.

Attachments

1. 25-174 Employee Vision-Mutual Omaha (P25-0140G)
2. MOO Vision Cost Summary Report

RESOLUTION NO. 2025-174

A RESOLUTION ACCEPTING A PROPOSAL FROM MUTUAL OF OMAHA FOR THE PROVISION OF EMPLOYEE VISION INSURANCE BENEFITS; AUTHORIZING THE EXECUTION OF A CONTRACT AND PAYMENT THEREFOR; REJECTING ALL OTHER PROPOSALS; AND SETTING FORTH AN EFFECTIVE DATE.

WHEREAS, the City, through its agent of record, solicited proposals for employee vision insurance benefits (the "Project"), in accordance with Section 2-300, *Code of Ordinances*, and

WHEREAS, the city's professional staff and its agent of record evaluated the proposals received and determined that the proposal submitted by Mutual of Omaha for the provision of employee vision insurance benefits at the premiums listed therein is in the best overall interest of the City, and has recommended that the said proposal (a copy of which is attached hereto and incorporated herein by reference) be accepted, and

WHEREAS, the City Manager has certified that the money for the payment of the services has been included in the FY 2025-2026 budget and has not been appropriated for any other purpose, now therefore,

BE IT RESOLVED BY THE CITY COMMISSION OF THE CITY OF ORMOND BEACH, FLORIDA, THAT:

SECTION ONE. The proposal of Mutual of Omaha for the provision of employee vision insurance benefits services is hereby accepted.

SECTION TWO. All other proposals relative to the aforescribed Project shall be deemed rejected upon the execution of a contract with Mutual of Omaha.

SECTION THREE. The Mayor and the City Manager are hereby authorized and directed to execute a Contract, in a form to be reviewed and approved by the City Attorney, between the City and Mutual of Omaha for the provision of employee vision insurance benefits services, and to pay the premiums therefore from the FY 2025-2026 budget.

SECTION FOUR. This Resolution shall take effect immediately upon its adoption.

APPROVED AND AUTHENTICATED this 4th day of November, 2025.

JASON LESLIE
Mayor

ATTEST:

SUSAN CARROLL DAUDERIS
City Clerk

Vision Coverage

		CURRENT	RENEWAL	FINAL	
Vendor		Standard		Mutual Of Omaha	
Provider Network		PPO		EyeMed Insight	
Benefits Comparison		In-Network	Out-of-Network	In-Network	Out-of-Network
Eye Exam		100% after \$10 copay	Up to \$45	100% after \$10 copay	Up to \$37
Single Lenses		100% after \$25 copay	Up to \$30	100% after \$25 copay	Up to \$20
Bifocal Lenses		100% after \$25 copay	Up to \$50	100% after \$25 copay	Up to \$36
Trifocal Lenses		100% after \$25 copay	Up to \$65	100% after \$25 copay	Up to \$64
Frames		Up to \$105	Up to \$105	Up to \$200	Up to \$79
Discount Beyond Allowance		20%	N/A	20%	N/A
Contacts (Elective)*		Up to \$105	Up to \$105	Up to \$200	Up to \$160
Contacts (Medically Necessary)*		Covered in full	Up to \$210	Covered in full	Up to \$210
Frequencies					
Exams		1 per 12 mo		1 per 12 mo	
Lenses/Contacts		1 per 12 mo		1 per 12 mo	
Frames		1 per 24 mo		1 per 24 mo	
Policy Provisions					
Employer Contribution		100%		100%	
Participation Requirements		60%		100%	
Admin/Implementation Credit		Not included		Not included	
Packaged Discount		--		Not included	
Rate Guarantee		12 Months		24 Months	
Cost Comparison		CURRENT	RENEWAL	FINAL	
Employee	311	\$4.44	\$4.56	\$4.44	
Employee + Family	122	\$13.20	\$13.56	\$13.20	
Estimated Monthly Premium	433	\$2,991	\$3,072	\$2,991	
Estimated Annual Premium		\$35,895	\$36,870	\$35,895	
Rate Change from Current (%)			2.7%	0.0%	
Rate Change from Current (\$)			\$975	\$0	

Notes



City of Ormond Beach
City Commission Agenda
Staff Report

Agenda Date	November 4, 2025	Item No	7.K.
Section	CONSENT AGENDA	Category	Consent - Resolution
Subject	2026 Mutual of Omaha Employee Life Insurance Coverage		
Recommended Action	Staff recommends approval of the contract with Mutual of Omaha to provide employee life and AD&D insurance effective January 1, 2026.		
Strategic Goal	Governance - Attract, develop, and support the best talent for Ormond Beach to be recognized as an Employer of Choice.		
Department Staff Contact	Human Resources Samantha Potts, Human Resources Manager		

Summary

This is a request to approve a contract with Mutual of Omaha to provide employee life and accidental death and dismemberment (life and AD&D) insurance effective January 1, 2026.

In 2015, the City transitioned from BCBS Florida Combined Life to Standard Insurance Company (Standard) for its employee life and AD&D insurance coverage. Since that time, Standard has delivered exemplary service to the City and its employees. Each year during the renewal process, the City considers competitive quotes as well as the value of maintaining consistent service to employees when selecting coverage for the new plan year. Mutual of Omaha submitted a quote offering an increase in benefits with a significant premium rate reduction of 7.2%. As a result, the Standard further reduced its renewal premium. Overall, however, Mutual of Omaha provided a more favorable package, with a two-year rate guarantee, ensuring there is no premium rate increase in 2027.

Like Standard, Mutual of Omaha provides benefits to many employers in the area and has a strong reputation for delivering quality service. This proposal maintains the City's commitment to fiscal responsibility while continuing to provide high-quality benefits to our employees.

The City currently provides life and AD&D insurance coverage to employees on a noncontributory basis.

Financial Impact

Based on current enrollment, the City's annual cost is estimated to be \$45,417 and is within the Fiscal Year 2025-2026 budget and represents a decrease to premium rates for the upcoming plan year.

Citizen Impact

The City's goal of providing a quality benefits package to its employees supports a fair and competitive work environment, which enables the City to recruit and retain staff for successful delivery of services to its residents.

Attachments

1. 25-175 Employee Life Ins-Mutual Omaha (P25-0140G)
2. Group Life and AD&D Cost Comparison

RESOLUTION NO. 2025-175

A RESOLUTION ACCEPTING A PROPOSAL FROM MUTUAL OF OMAHA FOR THE PROVISION OF EMPLOYEE LIFE INSURANCE BENEFITS SERVICES; AUTHORIZING THE EXECUTION OF A CONTRACT AND PAYMENT THEREFOR; REJECTING ALL OTHER PROPOSALS; AND SETTING FORTH AN EFFECTIVE DATE.

WHEREAS, the City, through its agent of record, solicited proposals for employee life insurance benefits services (the "Project"), in accordance with Section 2-300, *Code of Ordinances*, and

WHEREAS, the city's professional staff and its agent of record evaluated the proposals received and determined that the proposal submitted by Mutual of Omaha for the provision of employee life insurance benefits services at the premiums listed therein is in the best overall interest of the City, and has recommended that the said proposal (a copy of which is attached hereto and incorporated herein by reference) be accepted, and

WHEREAS, the City Manager has certified that the money for the payment of the services has been included in the FY 2025-2026 budget and has not been appropriated for any other purpose, now therefore,

BE IT RESOLVED BY THE CITY COMMISSION OF THE CITY OF ORMOND BEACH, FLORIDA, THAT:

SECTION ONE. The proposal of Mutual of Omaha for the provision of employee life insurance benefits services is hereby accepted.

SECTION TWO. All other proposals relative to the aforescribed Project shall be deemed rejected upon the execution of a contract with Mutual of Omaha.

SECTION THREE. The Mayor and the City Manager are hereby authorized and directed to execute a Contract, in a form to be reviewed and approved by the City Attorney, between the City and Mutual of Omaha for the provision of employee life insurance benefits services, and to pay the premiums therefore from the FY 2025-2026 budget.

SECTION FOUR. This Resolution shall take effect immediately upon its adoption.

APPROVED AND AUTHENTICATED this 4th day of November, 2025.

JASON LESLIE
Mayor

ATTEST:

SUSAN CARROLL DAUDERIS
City Clerk

Group Life & AD&D Coverage

Vendor	CURRENT REVISED RENEWAL				FINAL			
	Standard				Mutual Of Omaha			
Schedule of Benefits								
Class Definition	Active City Commissioners and Mayor	Active Department Heads & Division Managers	All Other Active Members, other than Active City Commissioners & Mayor and Active Department Heads & Division Managers	Retired Members (Basic Life only)	Active City Commissioners and Mayor	Active Department Heads & Division Managers	All Other Active Members, other than Active City Commissioners & Mayor and Active Department Heads & Division Managers	Retired Members (Basic Life only)
Life/AD&D Benefit Schedule	Flat benefit	1 x salary	1 x salary	Flat benefit	Flat benefit	1 x salary	1 x salary	Flat benefit
Life/AD&D Benefit Maximum	\$15,000	\$100,000	\$100,000	\$15,000	\$15,000	\$100,000	\$100,000	\$15,000
Guarantee Issue	Full Amount	Full Amount	Full Amount	Full Amount	Full amount	Full amount	Full amount	Full amount
Age Reduction Schedule	By 70% at 70, by 50% at 75	By 70% at 70, by 50% at 75	By 70% at 70, by 50% at 75	By 70% at 70, by 50% at 75	To 70% at 70, to 50% at 75+	To 70% at 70, to 50% at 75+	To 70% at 70, to 50% at 75+	To 70% at 70, to 50% at 75+
Life Benefit Schedule - Spouse	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000
Life Benefit Schedule - Child	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000
Policy Provisions								
Waiver of Premium - Eligibility	Age 60	Age 60	Age 60	Not included	Age 60	Age 60	Age 60	Not included
Waiver of Premium - Elimination Period	6 mo	6 mo	6 mo	Not included	6 mo	6 mo	6 mo	Not included
Waiver of Premium - Duration	Age 65	Age 65	Age 65	Not included	SSNRA	SSNRA	SSNRA	Not included
Conversion	Included; EOI is not required	Included; EOI is not required	Included; EOI is not required	Included; EOI is not required	Included; EOI is not required	Included; EOI is not required	Included; EOI is not required	Included; EOI is not required
Portability	Included	Included	Included	Not included	Included	Included	Included	Included
Accelerated Death Benefit	Included	Included	Included	Not included	Included	Included	Included	Included
Seatbelt/ Safe Driver Benefit	Included	Included	Included	Not included	Included	Included	Included	Not Included
Employer Contribution	Noncontributory	Noncontributory	Noncontributory	Contributory	Noncontributory	Noncontributory	Noncontributory	Contributory
Participation Requirements	100%	100%	100%	0%	100%	100%	100%	0%
Admin/Implementation Credit	Not included	Not included	Not included	Not included	Not included	Not included	Not included	Not included
Packaged Discount	--	--	--	--	Included	Included	Included	Included
Rate Guarantee	24 Months				24 Months	24 Months	24 Months	24 Months
Cost Comparison	CURRENT		REVISED RENEWAL		FINAL			
	Class 1 Class 2 Class 3	Class 4	Class 1 Class 2 Class 3	Class 4	Class 1 Class 2 Class 3			Class 4
Estimated Volume	\$21,218,201	\$1,548,000	\$21,218,201	\$1,548,000	\$21,256,200			\$1,548,000
Life Rate (per \$1,000)	\$0.165	\$2.040	\$0.140	\$2.040	\$0.143			\$2.000
AD&D Rate (per \$1,000)	\$0.030	\$0.000	\$0.030	\$0.000	\$0.030			\$0.000
Dependent Rate per Unit (Not Included in Premium)	\$1.610	\$1.610	\$1.610	\$1.610	\$1.500			\$1.500
Estimated Monthly Premium	\$4,138	\$3,158	\$3,607	\$3,096	\$3,677			\$3,096
Estimated Annual Premium	\$49,651	\$37,895	\$43,285	\$37,152	\$44,128			\$37,152
Combined Estimated Annual Premium	\$87,546		\$80,437		\$81,280			
Rate Change from Current (%)				-8.1%			-7.2%	
Rate Change from Current (\$)				-\$7,109			-\$6,266	
			Original renewal was 0%					



City of Ormond Beach
City Commission Agenda
Staff Report

Agenda Date	November 4, 2025	Item No	7.L.
Section	CONSENT AGENDA	Category	Consent - Resolution
Subject	2026 Mutual of Omaha Long Term Disability Insurance Coverage		
Recommended Action	Staff recommends approval of a contract with Mutual of Omaha to provide long term disability insurance effective January 1, 2026.		
Strategic Goal	Governance - Attract, develop, and support the best talent for Ormond Beach to be recognized as an Employer of Choice.		
Department Staff Contact	Human Resources Samantha Potts, Human Resources Manager		

Summary

This is a request to approve a contract with Mutual of Omaha to provide long term disability (LTD) insurance effective January 1, 2026.

In 2015, the City transitioned from BCBS Florida Combined Life to Standard Insurance Company (Standard) for its LTD insurance coverage. Since that time, Standard has delivered exemplary service to the City and its employees. Each year during the renewal process, the City considers competitive quotes as well as the value of maintaining consistent service to employees when selecting coverage for the new plan year.

Although Standard continues to offer quality service, Mutual of Omaha submitted a quote offering an increase in benefits with a significant premium rate reduction of 30%. Additionally, the proposal includes a two-year rate guarantee, ensuring there is no premium rate increase in 2027.

Like Standard, Mutual of Omaha provides benefits to many employers in the area and has a strong reputation for delivering quality service. This proposal maintains the City's commitment to fiscal responsibility while continuing to provide high-quality benefits to our employees.

The City currently provides LTD insurance coverage to employees on a noncontributory basis.

Financial Impact

Based on current enrollment, the annual cost to the City is estimated to be \$30,648, is within the Fiscal Year 2025-2026 budget, and provides a decrease in premium rates for the upcoming plan year.

Citizen Impact

The City's goal of providing a quality benefits package to its employees supports a fair and competitive work environment, which enables the City to recruit and retain staff for successful delivery of services to its residents.

Attachments

1. 25-176 Long Term Disability (P25-0140G)
2. LTD Cost Comparisons

RESOLUTION NO. 2025-176

A RESOLUTION ACCEPTING A PROPOSAL FROM MUTUAL OF OMAHA FOR THE PROVISION OF EMPLOYEE LONG TERM DISABILITY INSURANCE BENEFITS SERVICES; AUTHORIZING THE EXECUTION OF A CONTRACT AND PAYMENT THEREFOR; REJECTING ALL OTHER PROPOSALS; AND SETTING FORTH AN EFFECTIVE DATE.

WHEREAS, the City, through its agent of record, solicited proposals for employee long term disability insurance benefits services (the "Project"), in accordance with Section 2-300, *Code of Ordinances*, and

WHEREAS, the city's professional staff and its agent of record evaluated the proposals received and determined that the proposal submitted by Mutual of Omaha for the provision of employee long term disability insurance benefits services at the premiums listed therein is in the best overall interest of the City, and has recommended that the said proposal (a copy of which is attached hereto and incorporated herein by reference) be accepted, and

WHEREAS, the City Manager has certified that the money for the payment of the services has been included in the FY 2025-2026 budget and has not been appropriated for any other purpose, now therefore,

BE IT RESOLVED BY THE CITY COMMISSION OF THE CITY OF ORMOND BEACH, FLORIDA, THAT:

SECTION ONE. The proposal of Mutual of Omaha for the provision of employee long term disability insurance benefits services is hereby accepted.

SECTION TWO. All other proposals relative to the aforementioned Project shall be deemed rejected upon the execution of a contract with Mutual of Omaha.

SECTION THREE. The Mayor and the City Manager are hereby authorized and directed to execute a Contract, in a form to be reviewed and approved by the City Attorney, between the City and Mutual of Omaha for the provision of employee long term disability insurance benefits services, and to pay the premiums therefore from the FY 2025-2026 budget.

SECTION FOUR. This Resolution shall take effect immediately upon its adoption.

APPROVED AND AUTHENTICATED this 4th day of November, 2025.

JASON LESLIE
Mayor

ATTEST:

SUSAN CARROLL DAUDERIS
City Clerk

Long Term Disability Coverage

Vendor	CURRENT REVISED RENEWAL			FINAL		
	Standard			Mutual Of Omaha		
Schedule of Benefits						
Class Definition	Elected Officials, Department Heads & Division Managers	Safety Members	All Other Members	Elected Officials, Department Heads & Division Managers	Safety Members	All Other Members
Elimination Period	180 day	180 day	180 day	180 day	180 day	180 day
Benefit Percentage	50%	50%	50%	50%	50%	50%
Maximum Monthly Benefit	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000
Maximum Annual Compensation Covered	\$120,000	\$120,000	\$120,000	\$120,000	\$120,000	\$120,000
Benefit Duration	SSNRA or ADEA-I	SSNRA or ADEA-I	SSNRA or ADEA-I	SSNRA or RBD Loss of duties and income (income loss not required during elimination period)	SSNRA or RBD Loss of duties and income (income loss not required during elimination period)	SSNRA or RBD Loss of duties and income (income loss not required during elimination period)
Definition of Disability	Loss of duties and income	Loss of duties and income	Loss of duties and income	Loss of duties and income (income loss not required during elimination period)	Loss of duties and income (income loss not required during elimination period)	Loss of duties and income (income loss not required during elimination period)
Earnings Test	80%/60%	80%/60%	80%/60%	99%/85%	99%/85%	99%/85%
Earnings Definition	Base salary excluding commissions, bonuses, overtime	Base salary excluding commissions, bonuses, overtime	Base salary excluding commissions, bonuses, overtime	Base salary excluding commissions, bonuses, overtime	Base salary excluding commissions, bonuses, overtime	Base salary excluding commissions, bonuses, overtime
Policy Provisions						
Social Security Integration	Family	Family	Family	Family	Family	Family
Pre-Existing Condition Limitation	3/12	3/12	3/12	3/12	3/12	3/12
Mental & Nervous Limitations	24 mo	24 mo	24 mo	24 mo	24 mo	24 mo
Substance Abuse Limitations	24 mo	24 mo	24 mo	24 mo	24 mo	24 mo
Self-Reported Limitations	24 mo	24 mo	24 mo	Treated same as any other sickness Full duration	Treated same as any other sickness Full duration	Treated same as any other sickness Full duration
Return to Work Incentive	12 mo	12 mo	12 mo	10% increase	10% increase	10% increase
Rehabilitation Benefit	10% increase	10% increase	10% increase	10% increase	10% increase	10% increase
Worksite Modification	Up to \$25,000	Up to \$25,000	Up to \$25,000	Based on medical necessity	Based on medical necessity	Based on medical necessity
EAP Benefit	Included	Included	Included	Included	Included	Included
Actively at Work Provision	Included	Included	Included	Included	Included	Included
Employer Contribution	Noncontributory	Noncontributory	Noncontributory	Noncontributory	Noncontributory	Noncontributory
Participation Requirements	100%	100%	100%	100%	100%	100%
Admin/Implementation Credit	--	--	--	Not included	Not included	Not included
Packaged Discount	--	--	--	Included	Included	Included
Rate Guarantee		24 Months		24 Months	24 Months	24 Months
Cost Comparison	CURRENT	REVISED RENEWAL		FINAL		
Estimated Covered Payroll	\$1,794,645	\$1,794,645		\$1,794,645		
Rate per \$100 of Covered Payroll	\$0.243	\$0.210		\$0.170		
Estimated Monthly Premium	\$4,361	\$3,769		\$3,051		
Estimated Annual Premium	\$52,332	\$45,225		\$36,611		
Rate Change from Current (%)		-13.6%		-30.0%		
Rate Change from Current (\$)		-\$7,107		-\$15,721		

Original Renewal was 0%



City of Ormond Beach
City Commission Agenda
Staff Report

Agenda Date	November 4, 2025	Item No	7.M.
Section	CONSENT AGENDA	Category	Consent - Resolution
Subject	2026 Mutual of Omaha Voluntary Life Insurance Coverage		
Recommended Action	Staff recommends approval of a contract with Mutual of Omaha to provide voluntary life insurance effective January 1, 2026.		
Strategic Goal	Governance - Attract, develop, and support the best talent for Ormond Beach to be recognized as an Employer of Choice.		
Department Staff Contact	Human Resources Samantha Potts, Human Resources Manager		

Summary

This is a request to approve a contract with Mutual of Omaha to provide voluntary life insurance effective January 1, 2026.

In 2015, the City transitioned from BCBS Florida Combined Life to Standard Insurance Company (Standard) for its voluntary life insurance coverage. Since that time, Standard has delivered exemplary service to the City and its employees. Each year during the renewal process, the City considers competitive quotes as well as the value of maintaining consistent service to employees when selecting coverage for the new plan year. Although Standard continues to offer quality service, overall, Mutual of Omaha provided a more favorable package, offering comparable benefits, no increase in premiums, and a two-year rate guarantee, ensuring there is no premium rate increase in 2027.

Like Standard, Mutual of Omaha provides benefits to many employers in the area and has a strong reputation for delivering quality service. This proposal maintains the City's commitment to fiscal responsibility while continuing to provide high-quality benefits to our employees.

Voluntary life insurance coverage is offered to City employees as a supplemental option to the basic life insurance provided for and paid by the City. This coverage is offered on a voluntary basis only and, if elected, is purchased at the employee's cost.

Financial Impact

There is no budget impact to the City as the premiums will be fully paid by the employees through payroll deduction and represents a decrease to premium rates for the upcoming plan year.

Citizen Impact

Offering convenient and affordable supplemental insurance coverage supports the City's goal of providing a quality benefits package to its employees, which contributes to a fair and competitive work environment, which enables the City to recruit and retain staff for successful delivery of services to its residents.

Attachments

1. 25-177 Voluntary Life-Mutual Omaha (P25-0140G)
2. Voluntary Life Cost Summary

RESOLUTION NO. 2025-177

A RESOLUTION ACCEPTING A PROPOSAL FROM MUTUAL OF OMAHA FOR THE PROVISION OF EMPLOYEE VOLUNTARY LIFE INSURANCE BENEFITS SERVICES; AUTHORIZING THE EXECUTION OF A CONTRACT AND PAYMENT THEREFOR; REJECTING ALL OTHER PROPOSALS; AND SETTING FORTH AN EFFECTIVE DATE.

WHEREAS, the City, through its agent of record, solicited proposals for employee voluntary life insurance benefits services (the "Project"), in accordance with Section 2-300, *Code of Ordinances*, and

WHEREAS, the city's professional staff and its agent of record evaluated the proposals received and determined that the proposal submitted by Mutual of Omaha for the provision of employee voluntary life insurance benefits services at the premiums listed therein is in the best overall interest of the City, and has recommended that the said proposal (a copy of which is attached hereto and incorporated herein by reference) be accepted, and

WHEREAS, the City Manager has certified that the money for the payment of the services has been included in the FY 2025-2026 budget and has not been appropriated for any other purpose, now therefore,

BE IT RESOLVED BY THE CITY COMMISSION OF THE CITY OF ORMOND BEACH, FLORIDA, THAT:

SECTION ONE. The proposal of Mutual of Omaha for the provision of employee voluntary life insurance benefits services is hereby accepted.

SECTION TWO. All other proposals relative to the aforescribed Project shall be deemed rejected upon the execution of a contract with Mutual of Omaha.

SECTION THREE. The Mayor and the City Manager are hereby authorized and directed to execute a Contract, in a form to be reviewed and approved by the City Attorney, between the City and Mutual of Omaha for the provision of employee voluntary life insurance benefits services, and to pay the premiums therefore from the FY 2025-2026 budget.

SECTION FOUR. This Resolution shall take effect immediately upon its adoption.

APPROVED AND AUTHENTICATED this 4th day of November, 2025.

JASON LESLIE
Mayor

ATTEST:

SUSAN CARROLL DAUDERIS
City Clerk

Voluntary Life & AD&D Coverage

Vendor	CURRENT			FINAL		
	Standard			Mutual Of Omaha		
Schedule of Benefits - Employee						
Class Description	Active City Commissioners and Mayor	Active Department Heads & Division Managers	All other active members	Active City Commissioners and Mayor	Active Department Heads & Division Managers	All other active members
Eligibility Hours	35.9	35.9	35.9	35.9	35.9	35.9
Benefit Schedule (Increments)	\$10,000 increments	\$10,000 increments	\$10,000 increments	\$10,000 increments	\$10,000 increments	\$10,000 increments
Benefit Maximum	\$300,000	\$300,000	\$300,000	\$500,000	\$500,000	\$500,000
Guarantee Issue	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000
Age Reductions	By 70% at 70, by 50% at 75	By 70% at 70, by 50% at 75	By 70% at 70, by 50% at 75	To 70% at 70, to 50% at 75	To 70% at 70, to 50% at 75	To 70% at 70, to 50% at 75
Schedule of Benefits - Spouse						
Spouse Life Benefit Schedule (Increments)	\$5,000 increments	\$5,000 increments	\$5,000 increments	\$5,000 increments	\$5,000 increments	\$5,000 increments
Spouse Benefit Maximum	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
Spouse Guarantee Issue	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000
Spouse Age Reductions	By 70% at 70, by 50% at 75	By 70% at 70, by 50% at 75	By 70% at 70, by 50% at 75	Terms at 70	Terms at 70	Terms at 70
Spouse Maximum % of Employee Coverage	100%	100%	100%	100%	100%	100%
Schedule of Benefits - Dependent Child(ren)						
Dependent Child Benefit Schedule (Increments)	\$5,000 increments	\$5,000 increments	\$5,000 increments	\$5,000 increments	\$5,000 increments	\$5,000 increments
Dependent Child Benefit - Birth to 2 weeks	Full benefit	Full benefit	Full benefit	Not covered	Not covered	Not covered
Dependent Child Benefit - 2 weeks to 6 months	Full benefit	Full benefit	Full benefit	Full benefit	Full benefit	Full benefit
Dependent Child Max Benefit	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000
Dependent Child Maximum % of Employee Coverage	100%	100%	100%	100%	100%	100%
Policy Provisions						
Waiver of Premium - Eligibility	Age 60	Age 60	Age 60	Age 60	Age 60	Age 60
Waiver of Premium - Elimination Period	6 mo	6 mo	6 mo	6 mo	6 mo	6 mo
Waiver of Premium - Duration	Age 65	Age 65	Age 65	SSNRA	SSNRA	SSNRA
Conversion	Included; EOI is not required	Included; EOI is not required	Included; EOI is not required	Included; EOI is not required	Included; EOI is not required	Included; EOI is not required
Portability	Included	Included	Included	Included	Included	Included
Accelerated Death Benefit	Included	Included	Included	Included	Included	Included
Seatbelt/Safe Driver Benefit	Not included	Not included	Not included	Not included	Not included	Not included
Employer Contribution	0%	0%	0%	0%	0%	0%
Participation Requirements	32%	32%	32%	Greater of 5 lives or 46%	Greater of 5 lives or 46%	Greater of 5 lives or 46%
Admin/Implementation Credit	Not included	Not included	Not included	Not included	Not included	Not included
Packaged Discount	--	--	--	Included	Included	Included
Rate Guarantee		24 Months		24 Months	24 Months	24 Months
Cost Comparison	CURRENT			FINAL		
Life Rate - Age Banded (per \$1,000)	Employee		Spouse	Employee		Spouse
Age 0 - 19	\$0.100		\$0.100	\$0.100		\$0.100
Age 20 - 24	\$0.100		\$0.100	\$0.100		\$0.100
Age 25 - 29	\$0.100		\$0.100	\$0.100		\$0.100
Age 30 - 34	\$0.110		\$0.110	\$0.110		\$0.110
Age 35 - 39	\$0.130		\$0.130	\$0.130		\$0.130
Age 40 - 44	\$0.190		\$0.190	\$0.190		\$0.190
Age 45 - 49	\$0.290		\$0.290	\$0.290		\$0.290
Age 50 - 54	\$0.420		\$0.420	\$0.420		\$0.420
Age 55 - 59	\$0.620		\$0.620	\$0.620		\$0.620
Age 60 - 64	\$1.130		\$1.130	\$1.130		\$1.130
Age 65 - 69	\$1.940		\$1.940	\$1.940		\$1.940
Age 70 - 74	\$2.150		\$2.150	\$2.150		\$2.150
Age 75 - 79	\$4.100		\$4.100	\$4.100		\$4.100
Age 80+	\$4.100		\$4.100	\$4.100		\$4.100
Child(ren)		\$0.200			\$0.200	
		No Rate Change				



City of Ormond Beach
City Commission Agenda
Staff Report

Agenda Date	November 4, 2025	Item No	7.N.
Section	CONSENT AGENDA	Category	Consent - Resolution
Subject	2026 Mutual of Omaha Voluntary Short Term Disability Insurance Coverage		
Recommended Action	Staff recommends approval of a contract with Mutual of Omaha to provide voluntary short-term disability insurance effective January 1, 2026.		
Strategic Goal	Governance - Attract, develop, and support the best talent for Ormond Beach to be recognized as an Employer of Choice.		
Department Staff Contact	Human Resources Samantha Potts, Human Resources Manager		

Summary

This is a request to approve a contract with Mutual of Omaha to provide voluntary short term disability insurance effective January 1, 2026.

In 2018, the City began offering a voluntary short term disability policy through the Standard Insurance Company (Standard). Since that time, Standard has delivered exemplary service to the City and its employees. Each year during the renewal process, the City considers competitive quotes as well as the value of maintaining consistent service to employees when selecting coverage for the new plan year. Although Standard continues to offer quality service, overall, Mutual of Omaha provided a more favorable package with comparable coverage and premium rate, and a two-year rate guarantee, ensuring there is no premium rate increase in 2027.

Like Standard, Mutual of Omaha provides benefits to many employers in the area and has a strong reputation for delivering quality service. This proposal maintains the City's commitment to fiscal responsibility while continuing to provide high-quality benefits to our employees.

Voluntary short term disability insurance coverage is offered to City employees as a supplemental option to the long term disability provided for and paid by the City. This coverage is offered on a voluntary basis only and, if elected, is purchased at the employee's cost.

Financial Impact

There is no budget impact to the City as the premiums will be fully paid by the employees through payroll deduction.

Citizen Impact

Offering convenient and affordable supplemental insurance coverage supports the City's goal of providing a quality benefits package to its employees, which contributes to a fair and competitive work environment, which enables the City to recruit and retain staff for successful delivery of services to its residents.

Attachments

1. 25-178 Vol ShortTerm Disability (P5-0140G).docx
2. STD Cost Comparison

RESOLUTION NO. 2025-178

A RESOLUTION ACCEPTING A PROPOSAL FROM MUTUAL OF OMAHA FOR THE PROVISION OF EMPLOYEE VOLUNTARY SHORT-TERM DISABILITY INSURANCE BENEFITS; AUTHORIZING THE EXECUTION OF A CONTRACT AND PAYMENT THEREFOR; REJECTING ALL OTHER PROPOSALS; AND SETTING FORTH AN EFFECTIVE DATE.

WHEREAS, the City, through its agent of record, solicited proposals for employee voluntary short-term disability insurance benefits (the "Project"), in accordance with Section 2-300, *Code of Ordinances*, and

WHEREAS, the city's professional staff and its agent of record evaluated the proposals received and determined that the proposal submitted by Mutual of Omaha for the provision of employee voluntary short-term disability insurance benefits at the premiums listed therein is in the best overall interest of the City, and has recommended that the said proposal (a copy of which is attached hereto and incorporated herein by reference) be accepted, and

WHEREAS, the City Manager has certified that the money for the payment of the services has been included in the FY 2025-2026 budget and has not been appropriated for any other purpose, now therefore,

BE IT RESOLVED BY THE CITY COMMISSION OF THE CITY OF ORMOND BEACH, FLORIDA, THAT:

SECTION ONE. The proposal of Mutual of Omaha for the provision of employee voluntary short term disability insurance benefits is hereby accepted.

SECTION TWO. All other proposals relative to the aforescribed Project shall be deemed rejected upon the execution of a contract with Mutual of Omaha.

SECTION THREE. The Mayor and the City Manager are hereby authorized and directed to execute a Contract, in a form to be reviewed and approved by the City Attorney, between the City and Mutual of Omaha for the provision of employee voluntary short-term disability insurance benefits, and to pay the premiums therefore from the FY 2025-2026 budget.

SECTION FOUR. This Resolution shall take effect immediately upon its adoption.

APPROVED AND AUTHENTICATED this 4th day of November, 2025.

JASON LESLIE
Mayor

ATTEST:

SUSAN CARROLL DAUDERIS
City Clerk

Short Term Disability Coverage

	CURRENT RENEWAL	FINAL
Vendor	Standard	Mutual Of Omaha
Schedule of Benefits		
Class Definition	City Commissioners and Mayor	City Commissioners and Mayor
Elimination Period - Accident	7 day	7 day
Elimination Period - Sickness	7 day	7 day
Percent of Salary	60%	60%
Maximum Weekly Benefit	\$1,500	\$1,500
Maximum Weekly Compensation Covered	\$2,500	\$2,500
Maximum Annual Compensation Covered	\$130,000	\$130,000
Duration of Benefits	180 days	25 week
Policy Provisions		
Pre-Existing Condition Limitation	None	3/6*
Actively at Work Provision	Included	Included
Portability	Not included	Included
Employer Contribution	0%	0%
Participation Requirements	Greater of 10 lives or 25%	47%
Admin/Implementation Credit	Not included	Not included
Packaged Discount	--	Included
Rate Guarantee	24 Months	24 Months
Cost Comparison		
	Age-Banded Rate per \$10 of Weekly Benefit	Composite Rate
Age 0 - 19	\$0.624	\$0.500
Age 20 - 24	\$0.624	
Age 25 - 29	\$0.624	
Age 30 - 34	\$0.695	
Age 35 - 39	\$0.548	
Age 40 - 44	\$0.513	
Age 45 - 49	\$0.617	
Age 50 - 54	\$0.715	
Age 55 - 59	\$0.981	
Age 60 - 64	\$1.202	
Age 65 - 69	\$1.202	
Age 70 - 74	\$1.202	
Age 75 - 79	\$1.202	
Age 80+	\$1.202	
	No Rate Change	

Notes:

*Pre-Existing Condition only applies to late entrants (does not apply to EEs who apply when initially eligible as new hires).



City of Ormond Beach
City Commission Agenda
Staff Report

Agenda Date	November 4, 2025	Item No	7.O.
Section	CONSENT AGENDA	Category	Consent - Resolution
Subject	Real Property Conveyance from VCS, Seminole Avenue Lift Station		
Recommended Action	Staff recommends acceptance of the property associated with the address 205 Seminole Avenue.		
Strategic Goal	Water Quality & The Environment - Protect and enhance our environment and invest in infrastructure projects and assets that build resilience benefits to reduce flooding risk and increase sustainability.		
Department Staff Contact	Public Works - Engineering Alex Schumann, City Engineer		

Summary

The purpose of this item is accept real property conveyed from the School Board of Volusia County.

The City currently maintains sanitary sewer station 4P (#104) located at 205 Seminole Avenue. The pump station is outdated and the equipment is reaching the end of its service life. This will require an underground utility contractor to complete the necessary renovations.

Prior to the start of construction, the property needs to be conveyed to the City in order to retain ownership and complete future maintenance. The acceptance of this property will allow for a more efficient pump station and improved odor control.

This agenda item serves as recognition of the acceptance of this property conveyance. This item is related to another item on this agenda titled, Intent to Bid - Lift Station 4P Rehabilitation.

Financial Impact

None

Citizen Impact

The acceptance of this parcel will allow the City to continue to maintain high quality sewer service.

Attachments

1. 25-179 Accept QC Deed - Sch Bd (P24-0123G)
2. Recorded Quit Claim Deed Lift Station-Volusia County School Board-City of Ormond Beach
3. Resolution-2024-09_Declaring-Property-as-Surplus

RESOLUTION NO. 2025-179

A RESOLUTION AUTHORIZING THE ACCEPTANCE OF A QUIT CLAIM DEED FROM THE SCHOOL BOARD OF VOLUSIA COUNTY, FOR PROPERTY LOCATED AT 205 SEMINOLE AVENUE; AND SETTING FORTH AN EFFECTIVE DATE.

BE IT RESOLVED BY THE CITY COMMISSION OF THE CITY OF ORMOND BEACH, FLORIDA, THAT:

SECTION ONE. The City Commission hereby approves and accepts that Quit Claim Deed from the School Board of Volusia County, the owner of property located at 205 Seminole Avenue, Ormond Beach, Volusia County, Florida, more particularly described on the Quit Claim Deed which is attached hereto and incorporated herein by reference.

SECTION TWO. This Resolution shall take effect immediately upon its adoption.

APPROVED AND AUTHENTICATED this 4th day of November, 2025.

JASON LESLIE
Mayor

ATTEST:

SUSAN CARROLL DAUDERIS
City Clerk

9/24/2025 8:58:00 AM
Doc stamps \$0.70
(Transfer Amt \$10.00)
Instrument# 2025178608 2 pages
Book: 8757 Page: 2790
Electronically Recorded By
Volusia County Clerk of the Court

Prepared by and return to:
Frank A. (Alex) Ford, Jr.
Attorney at Law
Landis Graham French, P.A.
145 E. Rich Avenue Suite C
DeLand, FL 32724
386-734-3451
File Number: 47108-020

[Space Above This Line For Recording Data]

Quit Claim Deed

This Quit Claim Deed made this 13 day of August 2024 between The School Board of Volusia County, Florida, a political subdivision of the State of Florida whose post office address is 200 N. Clara Avenue, DeLand, FL 32720, grantor, and The City of Ormond Beach, Florida whose post office address is 22 South Beach Street, Ormond Beach, FL 32174, grantee:

(Whenever used herein the terms "grantor" and "grantee" include all the parties to this instrument and the heirs, legal representatives, and assigns of individuals, and the successors and assigns of corporations, trusts and trustees)

Witnesseth, that said grantor, for and in consideration of the sum TEN AND NO/100 DOLLARS (\$10.00) and other good and valuable consideration to said grantor in hand paid by said grantee, the receipt whereof is hereby acknowledged, does hereby remise, release, and quitclaim to the said grantee, and grantee's heirs and assigns forever, all the right, title, interest, claim and demand which grantor has in and to the following described land, situate, lying and being in **Volusia County, Florida** to-wit:

**LOT 16, AND THE EASTERLY 15 FEET OF LOT 15, BLOCK B, SEMINOLE PARK
SUBDIVISION, PER MAP BOOK 10, PAGE 94, OFFICIAL RECORDS OF VOLUSIA
COUNTY, FLORIDA.**

Further, Grantor does hereby release the automatic reservations in said lands, as provided for by virtue of Section 270.11 of the Florida Statutes.

To Have and to Hold, the same together with all and singular the appurtenances thereto belonging or in anywise appertaining, and all the estate, right, title, interest, lien, equity and claim whatsoever of grantors, either in law or equity, for the use, benefit and profit of the said grantee forever.

In Witness Whereof, grantor has hereunto set grantor's hand and seal the day and year first above written.

Signed, sealed and delivered in our presence:

Celeste C. Gilmore
Witness Name: Celeste C. Gilmore
Address: 200 N Clara Ave
Delad FL 32720

Cynthia Lopez
Witness Name: Cynthia Lopez
Address: 200 N Clara Ave
Delad FL 32720

Vicki Marpole
Witness Name: Vicki Marpole
Address: 200 N Clara Ave
Delad FL 32720

Socorro Matovich
Witness Name: Socorro Matovich
Address: 200 N Clara Ave
Delad FL 32720

School Board of Volusia County, Florida, a political subdivision of the State of Florida

By:

Jamie M. Haynes
Jamie M. Haynes, Chair

Attested by:

Dr. Carmen J. Balgobin
Dr. Carmen J. Balgobin, Superintendent

State of Florida
County of Volusia

The foregoing instrument was acknowledged before me by means of [X] physical presence or [] online notarization, this 13th day of July, 2024 by Jamie M. Haynes, Chairman and Dr. Carmen J. Balgobin, Superintendent of the School Board of Volusia County, Florida, a political subdivision of the State of Florida, on behalf of the political subdivision of the State of Florida. They ☒ are personally known to me or [] have produced a driver's license as identification.

[Notary Seal]



Karen A. Bishop

Notary Public

Printed Name: Karen A. Bishop

My Commission Expires: 7/17/27

RESOLUTION 2024-09

A RESOLUTION PURSUANT TO FLORIDA STATUTES, CHAPTER 1013.28(1),
DECLARING CERTAIN PROPERTIES UNNECESSARY FOR SCHOOL PURPOSES.

WHEREAS, the following described property, to wit:

LOT 16, AND THE EASTERLY 15 FEET OF LOT 15, BLOCK B, SEMINOLE PARK
SUBDIVISION, PER MAP BOOK 10, PAGE 94, OFFICIAL RECORDS OF VOLUSIA
COUNTY, FLORIDA,

Located along Seminole Avenue in Ormond Beach, Florida, adjacent to the Osceola
Elementary School property, more specifically described in attached Exhibit "A,"

IS believed by the School Board of Volusia County, Florida, to be unnecessary for school
purposes.

**NOW, THEREFORE, BE IT RESOLVED BY THE SCHOOL BOARD OF
VOLUSIA COUNTY, FLORIDA, AT A REGULAR SESSION HELD THIS 9TH DAY OF
APRIL 2024, AT DELAND, FLORIDA AS FOLLOWS:**

Section 1. That, pursuant to Chapter 1013.28(1) Florida Statutes, the above described
vacant and undeveloped real property is hereby declared to be unnecessary for school purposes.

Section 2. That the automatic reservations provided for in Section 270.11 Florida
Statutes are to be released in the deed of conveyance.

Section 3. That the said Board shall proceed, pursuant to the requirements of Florida
Statute 1013 and the Florida State Board of Education Rules, to dispose of said property.

PASSED AND ADOPTED this 9th day of April, 2024.

THE SCHOOL BOARD OF VOLUSIA COUNTY FLORIDA

BY: _____


Ms. Jamie M. Haynes, Chair

ATTEST: _____

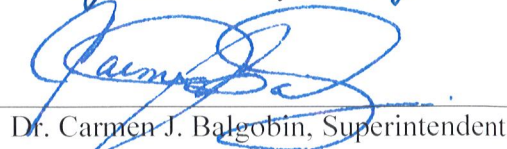

Dr. Carmen J. Balgobin, Superintendent

EXHIBIT "A"

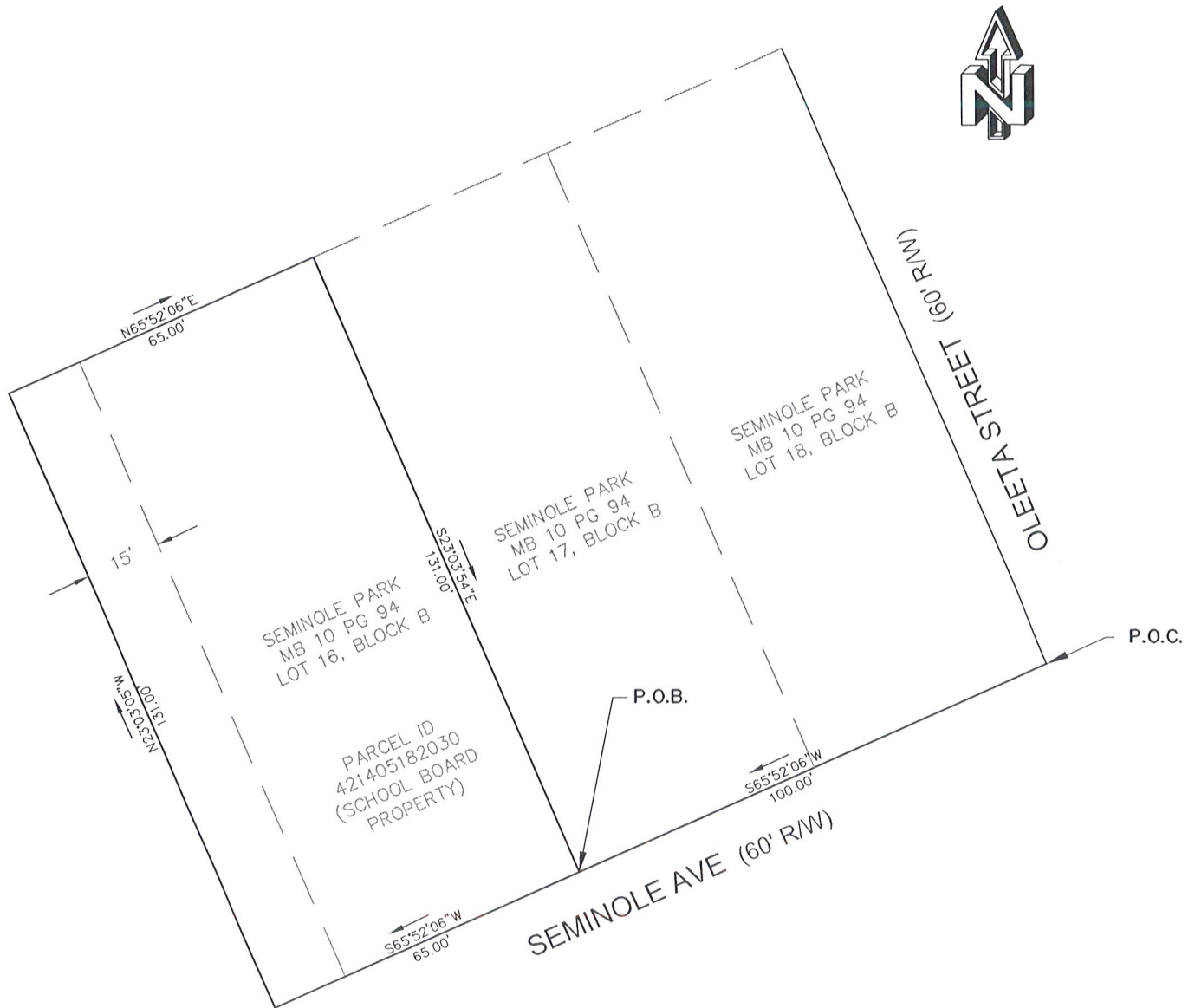
LIFT STATION 4P

LEGAL DESCRIPTION

LOT 16, AND THE EASTERLY 15 FEET OF LOT 15, BLOCK B, SEMINOLE PARK SUBDIVISION, PER MAP BOOK 10, PAGE 94, OFFICIAL RECORDS OF VOLUSIA COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

AS A POINT OF REFERENCE, COMMENCE AT THE INTERSECTION OF THE WESTERLY LINE OF OLEETA STREET (A 60 FOOT RIGHT-OF-WAY AS PLATTED) AND THE NORTHERLY LINE OF SEMINOLE AVENUE (A 60 FOOT RIGHT-OF-WAY AS PLATTED); THENCE S65°52'06"W ALONG SAID NORTHERLY LINE A DISTANCE OF 100.00 FEET TO A POINT OF INTERSECTION WITH THE SOUTHEAST CORNER OF SAID LOT 16, SAID POINT ALSO KNOWN AS THE POINT OF BEGINNING FOR THIS DESCRIPTION; THENCE CONTINUING ALONG SAID NORTHERLY LINE S65°52'06"W A DISTANCE OF 65.00 FEET; THENCE DEPARTING SAID NORTHERLY LINE, RUN N23°03'05"W A DISTANCE OF 131.00 FEET TO A POINT OF INTERSECTION WITH THE NORTHERLY LINE OF SAID LOT 15; THENCE N65°52'06"E ALONG SAID NORTHERLY LINE A DISTANCE OF 65.00 FEET TO A POINT OF INTERSECTION WITH THE NORTHEAST CORNER OF SAID LOT 16; THENCE DEPARTING SAID NORTHERLY LINE, RUN S23°03'54"E ALONG THE EASTERLY LINE OF SAID LOT 16, A DISTANCE OF 131.00 FEET TO THE POINT OF BEGINNING

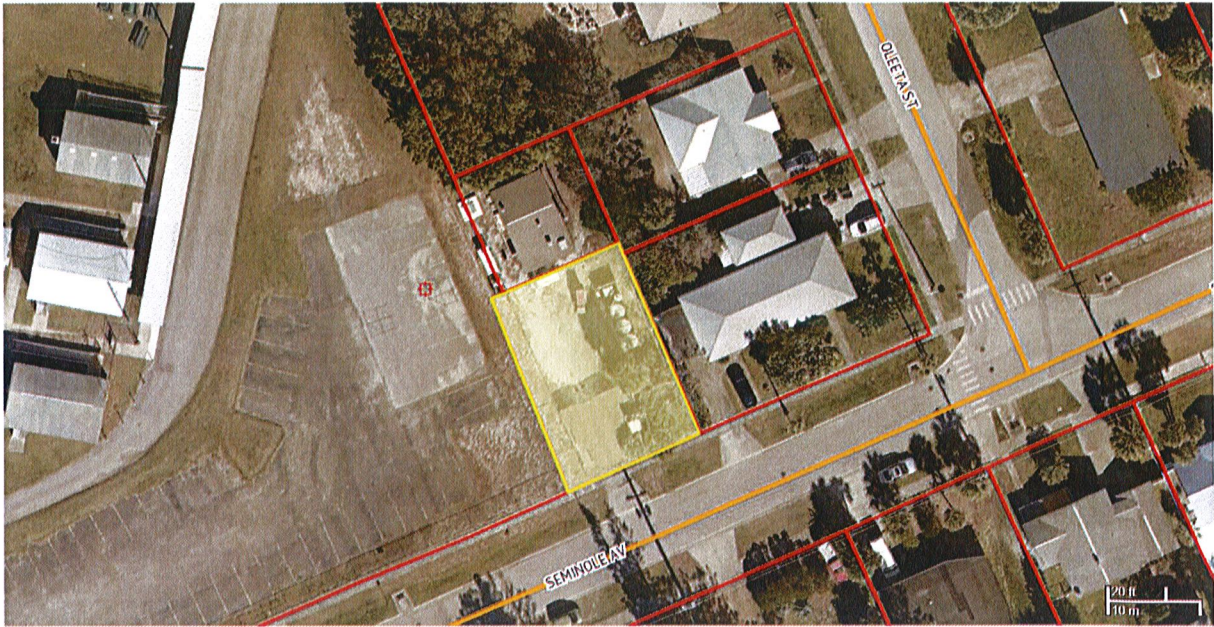
CONTAINING 8,515 SQ.FT. OR 0.20 ACRES MORE OR LESS



City of Ormond Beach
Engineering Division

DATE: 7/21/23	PROJECT NO.:
SCALE: N.T.S.	FILE NAME:
SHEET: 1 OF 1	DRAWN BY: CO

Exhibit "A"





City of Ormond Beach
City Commission Agenda
Staff Report

Agenda Date	November 4, 2025	Item No	7.P.
Section	CONSENT AGENDA	Category	Consent - Disposition Item
Subject	Intent to Bid - Lift Station 4P Rehabilitation		
Recommended Action	The City intends to publicly advertise this project for competitive bidding, unless otherwise directed by the Commission.		
Strategic Goal	Water Quality & The Environment - Other		
Department Staff Contact	Public Works - Engineering Alex Schumann, City Engineer		

Summary

This is a request to advertise a bid for underground utility construction regarding Lift Station 4P located at 205 Seminole Avenue. On February 21st, 2023, the City Commission approved execution of a contract with McKim & Creed for design services relating to the rehabilitation of Lift Station 4P.

The execution of this project primarily involves upgrades to existing components, which includes replacement of pumps and controls with standard Xylem - Flygt pump assemblies, SCADA integration, equipment rack and electrical components. Staff recommends rehabilitation of Lift Station 4P due to its outdated components affecting maintenance and efficient functionality.

This item is related to another item on this agenda titled, Real Property Conveyance from VCS, Seminole Avenue Lift Station.

Financial Impact

Funding is allocated in the FY 2025-26 budget in the amount of \$1,383,362, Fund 409 Water and Wastewater Renewal and Replacement, Lift Station Rehab.

Citizen Impact

Scheduling priority-based repairs for utility infrastructure provides reliable sanitary sewer treatment systems and regulatory operations.

Attachments

1. Lift Station 4P Rehab Bid Manual
2. Lift Station 4P Rehab Plan Set

PROJECT MANUAL LIFT STATION 4P IMPROVEMENTS

BID NO. 2026-04



CITY OF ORMOND BEACH

PREPARED BY:

McKim & Creed, Inc.
139 Executive Circle, Suite 201
Daytona Beach, FL 32114

M&C Project No. 010260138
NOVEMBER 2025

ISSUED FOR BID SUBMITTAL

**LIFT STATION 4P IMPROVEMENTS
Ormond Beach, Florida**

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ADVERTISEMENT FOR BIDS

Sealed bids for furnishing all labor, materials and equipment necessary for constructing the **LIFT STATION 4P IMPROVEMENTS Bid No. 2026-04** for the City of Ormond Beach, Florida, will be received at the Office of the Purchasing Coordinator, City Hall, Ormond Beach, Florida, until **December 16, 2025 at 2:00 p.m. EST** at which time bids will be opened and publicly read aloud in the Training Room located in the breezeway between City Hall and the Public Library. Bids received after the above time and date will be returned unopened.

The work consists of: Convert an existing wet pit/dry pit sewage lift station to a submersible lift station by removing all the block and frame construction, and a portion of the cast-in-place concrete construction; removing all equipment and material from within the generator room; the HVAC equipment room; all piping material/equipment from within the dry pit pump area; all electrical equipment from within the electrical room; installing Owner-supplied new submersible pumps in the wet well; site improvements and restoration.

The work is shown on the Drawings and specified in the Project Manual. The project Drawings, Specifications and related Bidding documents are available on-line at **www.demandstar.com**, or by calling DemandStar at (206) 940-0305. If you have difficulty obtaining these documents, please contact the City's purchasing office at (386) 610-0470.

A **pre-bid conference** to discuss the details and requirements of the contract will be held on **December 3, 2025 at 2:00 p.m. EST**, in the Training Room at City Hall. All prospective bidders are strongly encouraged to attend. The deadline for submitting questions is **December 8, 2025 at 5:00 p.m. EST** at 5:00pm.

END OF SECTION

SECTION 00100 INSTRUCTION TO BIDDERS

00101. Defined Terms

Terms used in these Instructions to Bidders are defined in the General Conditions of the Construction Contract and have the meanings assigned to them in the General Conditions. The term "Successful Bidder" means the lowest, qualified, responsible Bidder to whom OWNER (on the basis of OWNER's evaluation as hereinafter provided) makes an award.

The OWNER for this project is:

The City of Ormond Beach
22 South Beach Street
Ormond Beach, Florida 32174

The ENGINEER for this project is:

McKim & Creed, Inc.
139 Executive Circle, Suite 201
Daytona Beach, FL 32114

00102. Copies of Bidding Documents

2.1 The City uses the services of DemandStar (www.demandstar.com) to advertise/distribute its bids and RFP's via the internet.

2.2 Complete sets of the Bidding Documents may be obtained from the issuing office designated in the Advertisement for Bids.

2.3 Complete sets of Bidding Documents shall be used in preparing Bids; neither OWNER nor ENGINEER assume any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.

2.4 OWNER and ENGINEER in making copies of Bidding Documents available, on the above terms, do so only for the purpose of obtaining Bids on the Work and do not confer a license or grant for any other use.

00102.1 COMPLIANCE WITH FLORIDA PUBLIC RECORDS LAW

Contractor expressly agrees that it shall comply with the public records law provided in Florida Statutes, Chapter 119, and specifically to:

(a) Keep and maintain public records required by the City to perform the contracted service.

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INSTRUCTION TO BIDDERS

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(b) Upon request from the City Clerk, provide the City with a copy of the requested records or allow the records to be inspected or copied within a reasonable time at a cost that does not exceed the cost provided in Chapter 119, Florida Statutes, or as otherwise provided by law.

(c) Ensure that public records that are exempt or confidential and exempt from public records disclosure requirements are not disclosed except as authorized by law for the duration of the contract term and following completion of the contract if the contractor does not transfer the records to the City.

(d) Upon completion of the contract, transfer at no cost, to the City all public records in possession of the contractor or keep and maintain public records required by the City to perform the service. If the contractor transfers all public records to the City upon completion of the contract, the contractor shall destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. If the contractor keeps and maintains public records upon the completion of the contract, the contractor shall meet all applicable requirements for retaining public records. All records stored electronically must be provided to the City, upon request from the City Clerk, in a format that is compatible with the information technology systems of the City.

(e) Failure of the Contractor to comply with Public Records Law as provided by Florida Statutes, Chapter 119, shall subject the Contractor to penalties under Chapter 119.10 and subject this Agreement to termination for cause by the City.

IF THE CONTRACTOR HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO THE CONTRACTOR'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS CONTRACT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT:

**CITY CLERK
22 SOUTH BEACH STREET
ORMOND BEACH, FLORIDA 32174 (386) 610-0400
CITYCLERK@ORMONDBEACH.ORG**

Ref: Fla. Stat. §119.0701(2016)

00102.2 Public Records/Non-Confidentiality of Bids

The City of Ormond Beach cannot and does not warrant the confidentiality of any information submitted in response to this bid solicitation. Florida law provides that municipal records shall at all times be open for personal inspection by any person, Section 119, F.S., the Public Records Act. Information and materials received by the City of Ormond Beach in connection with responsive bids

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shall be deemed to be public records subject to public inspection upon award, recommendation of award, or 30 days after bid opening, whichever occurs first.

00103. Qualifications of Bidders

To demonstrate qualifications to perform the Work, each Bidder must be prepared to submit, within seven days after the OWNER's request, written evidence of his ability to perform the work, such as financial data, previous experience, and evidence of authority to conduct business in the jurisdiction where the Project is located. Each Bid must contain evidence of Bidder's qualification to do business in the state where the Project is located or covenant to obtain such qualification prior to award of the contract.

00104. Public Entity Crimes:

A person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a Proposal on a contract to provide any goods or services to a public entity, may not submit a Proposal on a contract with a public entity for the construction or repair of a public building or public work, may not submit Proposals on leases or real property to a public entity, may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity, and may not transact business with any public entity in excess of the threshold amount provided in Section 287.017, for CATEGORY TWO for a period of 36 months from the date of being placed on the convicted vendor list.

4.1 Discrimination Pursuant to Section 287.134(2)(a), Florida Statutes, an entity or affiliate who has been placed on the discriminatory vendor list may not submit a bid on a contract to provide any goods or services to a public entity, may not submit a bid on a contract with a public entity for the construction or repair of a public building or public work, may not submit bids on leases of real property to a public entity, may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity, and may not transact business with any public entity.

00105. Examination of Contract Documents and Site

5.1 Before submitting a Bid, each Bidder must (a) examine the Contract Documents thoroughly, (b) visit the site to familiarize himself with local conditions that may in any manner affect cost, progress or performance of the Work, (c) familiarize himself with federal, state and local laws, ordinances, rules and regulations that may in any manner affect cost, progress or performance of the Work; and (d) study and carefully correlate Bidder's observations with the Contract Documents.

5.2 Reference is made to the Supplementary Conditions for the identification of those reports of investigations and tests for subsurface and latent physical conditions at the site or otherwise affecting cost, progress or performance of the Work which have been relied upon by ENGINEER in preparing the Drawings and Specifications. OWNER will make such reports available for inspection to any Bidder or copies may be obtained from the ENGINEER by the Bidder at reproduction cost.

These reports are not guaranteed as to accuracy or completeness, nor are they part of the Contract Documents. Before submitting his Bid each Bidder will, at his own expense, make such additional investigations and tests as the Bidder may deem necessary to determine his Bid for performance of the Work in accordance with the time, price and other terms and conditions of the Contract Documents.

5.3 On request OWNER will provide each Bidder access to the site to conduct such investigations and tests as each Bidder deems necessary for submission of his Bid. Bidders making such investigations shall return site to original condition and shall pay for any damages resulting therefrom.

5.4 The lands upon which the Work is to be performed, rights-of-way for access thereto and other lands designated for use by CONTRACTOR in performing the Work are identified in the Supplementary Conditions, General Requirements, or Drawings.

5.5 The submission of a Bid will constitute an incontrovertible representation by the Bidder that he has complied with every requirement of this Article 4 and that the Contract Documents are sufficient in Scope and detail to indicate and convey understanding of all terms and conditions for performance of the Work.

00106. Clarification/Correction of Proposal

The City of Ormond Beach reserves the right to allow for the clarification of questionable entries and for the correction of obvious mistakes.

00107. Interpretations

7.1 All questions about the meaning or intent of the Contract Documents shall be submitted in writing to the Purchasing Coordinator via email to procurement@ormondbeach.org. Replies will be issued by Addenda mailed or delivered to all parties recorded by ENGINEER as having received the Bidding Documents. Only questions answered by formal written Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.

7.2 To protect the integrity of the procurement process, respondents, suppliers, contractors, sub-contractors or persons acting on behalf of any of the above, are prohibited from all communications regarding the solicitation with City staff, City consultants, City legal counsel, City agents, or elected officials, unless such communication is specifically authorized in the City's solicitation or addenda. Violation of this provision may be grounds for rejecting a response.

00108. Minority Policies

The City of Ormond Beach, Florida, encourages the full participation of Disadvantaged and Women Business Enterprises (D&WBE) in the provision of goods and services.

00109. Bid Security

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9.1 Bids shall be accompanied by a Bid Security. The Security shall be made payable to OWNER, in the amount of five percent (5%) of the total bid, and in the form of a certified or cashier's check or a Bid Bond issued by a Surety meeting the requirements of paragraph 5.1 of the General Conditions. The Bid Security shall be irrevocable after the time and date set for the opening of bids, and for a period of ninety (90) days thereafter.

9.2 The Bid Security of the Successful Bidder will be retained until such Bidder has executed the Agreement and furnished the required Contract Security, whereupon it will be returned; if the successful Bidder fails to execute and deliver the Agreement and furnish the required Contract Security within fifteen (15) days of the Notice of Award, OWNER may annul the Notice of Award and the Bid Security of that Bidder will be forfeited. The Bid Security of any Bidder whom OWNER believes to have a reasonable chance of receiving the award may be retained by OWNER until the seventh day after the "effective date of the Agreement" or the first day after the expiration of the period that Bids are specified to remain open in the Advertisement for Bids. Bid Security of other Bidders will be returned within seven (7) days of the Bid opening.

00110. Contract Time

The number of days within which, or the date by which, the Work is to be completed (the Contract Time) is set forth in the Bid Form and will be included in the Agreement.

00111. Liquidated Damages

Provisions for liquidated damages, if any, are set forth in the Bid Form and Agreement.

00112. Subcontractors

12.1 If the Supplementary Conditions, Bid Form and/or Specifications require the identity of certain subcontractors to be submitted to the OWNER with the bid, the bidder will list in his bid all subcontractors proposed for those portions of the work for which such identification is so required. When requested, an experience statement, pertinent information as to similar projects satisfactorily completed and other evidence of qualifications for each listed subcontractor shall be submitted within seven (7) days after the bid. If the OWNER after due investigation has reasonable objection to any proposed subcontractor, OWNER may before giving the Notice of Award request the apparent low bidder to submit an acceptable substitute without an increase in his bid price. If the apparent Successful Bidder declines to make any such substitution, the contract shall not be awarded to such Bidder, but his declining to make any such substitution will not constitute grounds for sacrificing his Bid Security. Any Subcontractor so listed and to whom OWNER does not make written objection prior to the giving of the Notice of Award will be deemed acceptable to OWNER.

12.2 In contracts where the Contract Price is on the basis of Cost-of-the-Work Plus a Fee, the apparent Successful Bidder, prior to the Notice of Award, shall identify in writing to OWNER those portions of the Work that such Bidder proposes to subcontract and after the Notice of Award may only subcontract other portions of the Work with OWNER's written consent.

00113. Material and Equipment List (Manufacturers)

If the Supplementary Conditions, Bid Form and/or Specifications require the identity of certain material and equipment manufacturers be submitted to the OWNER with the bid, the bidder will list in his bid all material and equipment manufacturers proposed for those portions of the work for which such identification is so required. Such list shall be supplemented by product descriptions for each listed material and equipment item. Supplemental information will be submitted with the bid unless it has been prefiled with the ENGINEER. In this latter case, the bid shall state that the information has been prefiled. Equipment manufacturers/suppliers must agree to OWNER'S terms of purchase. In no event will OWNER accept terms of sale that limit OWNER'S ability to reasonably recover in the event of equipment failure/defect such as, but not limited to; mandatory arbitration clauses, venue of court proceedings and applicable law outside of Volusia County, Florida, or damage limitations that preclude recovery for failed or defective equipment that would be less than full compensation for OWNER's loss. If the OWNER after due investigation has reasonable objection to any proposed material or equipment item, OWNER may before giving the Notice of Award request the apparent low bidder to submit an acceptable substitute without an increase in his bid price. If the apparent Successful Bidder declines to make any such substitution, the contract may not be awarded to such Bidder, but his declining to make any such substitution will not constitute grounds for sacrificing his Bid Security. Any material or equipment manufacturer so listed and to whom OWNER does not make written objection prior to the giving of the Notice of Award will be deemed acceptable to OWNER. This acceptance of a material or equipment manufacturer does not relieve the CONTRACTOR from the responsibility of submitting shop drawings in accordance with Section 01300 before incorporating said material and/or equipment into the Work.

00114. Material and Equipment Substitutions

Excluding items called for in the bidders Equipment and Subcontractors List in the Bid, Section 00300, whenever it is indicated on the Drawings or specified in the Specifications that a substitute or "or equivalent" item of material or equipment may be furnished or used by CONTRACTOR if acceptable to ENGINEER, application for such acceptance will not be considered by ENGINEER until after the "effective date of the Agreement". The procedure for submittal of any such application by CONTRACTOR and consideration by ENGINEER is set forth in Section 01630 - Substitutions and Product Options.

00115. Bid Form

15.1 Bids shall be submitted on standard forms which are furnished in this Project Manual.

15.2 Bid Forms must be completed in ink or by typewriter. All blank spaces must be filled. Where indicated on the Bid Form, the Bid price of each item on the form must be stated in words and numerals; in case of a conflict, words will take precedence.

15.3 The estimate of the various quantities of work applicable to unit price items as shown on the Bid Form is approximate and is intended solely to provide the basis of comparison upon which the award of contract is made. Final payment will be made on the basis of the actual completed quantities of each item.

15.4 Bids by corporations must be executed in the corporate name by the president or a vice president (or other corporate officer accompanied by evidence of authority to sign) and the corporate seal must be affixed and attested by the secretary or an assistant secretary. The corporate address and state of incorporation shall be shown below the signature.

15.5 Bids by partnerships must be executed in the partnership name and signed by a partner, whose title must appear under the signature and the official address of the partnership must be shown below the signature.

15.6 Bids by a Joint Venture must be executed by all individuals, Partners, or Corporations interested in the Joint Venture in the same manner that bids by these separate entities are required to be executed.

15.7 All names must be typed or printed below the signature.

15.8 The Bid shall contain an acknowledgment of receipt of all Addenda (the numbers of which shall be filled in on the Bid Form).

15.9 The address to which communications regarding the Bid are to be directed must be shown.

15.10 Only one bid from any individual, firm, partnership or corporation under the same or different names, will be considered. Should it appear to the OWNER that any Bidder is interested in more than one bid, all bids in which such Bidder is interested will be rejected.

00116. Submission of Bids

Bids shall be submitted at the time and place indicated in the Advertisement for Bids and shall be included in an opaque sealed envelope, marked with the Bid Number, Project Title, and Bidder's Name and Address, accompanied by the Bid Security and other required documents. Include one (1) original bid form and (1) electronic file (thumb/flash drive or CD). If the Bid is sent through the mail or other delivery system, the sealed Bid shall be sent in a separate envelope with the notation "BID ENCLOSED" as well as the Bid Number, Project Title, and Bid Opening Date clearly displayed on the shipping envelope/package.

Submit bids to:

City of Ormond Beach
Purchasing Coordinator
22 South Beach Street, Room 102
Ormond Beach, FL 32174

00117. Modification and Withdrawal of Bids

Bids may be modified or withdrawn by an appropriate document duly executed (in the manner that a Bid must be executed) and delivered to the place where Bids are to be submitted at any time prior to the opening of Bids.

00118. Opening of Bids

Bids will be opened publicly and read aloud and an abstract of the amounts of the base Bids and major alternates (if any) will be made available after the opening of Bids.

00119. Bids to Remain Open

All Bids shall remain open for ninety (90) days after the day of the Bid opening, but OWNER may, in his sole discretion, release any Bid and return the Bid Security prior to that date.

00120. Award of Contract

20.1 OWNER reserves the right to reject any and all Bids, to waive any and all informalities and to negotiate contract terms with the Successful Bidder, and the right to disregard all nonconforming, nonresponsive or conditional Bids. Discrepancies between words and figures will be resolved in favor of words. Discrepancies between the indicated product of quantities and unit prices and the correct product thereof will be resolved in favor of the correct product. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum.

20.2 In evaluating Bids, OWNER shall consider the qualifications of the Bidders, whether or not the Bids comply with the prescribed requirements, and alternates and unit prices if requested in the Bid forms. It is OWNER's intent to accept alternates (if any are accepted) in the order in which they are listed in the Bid form but OWNER may accept them in any order or combination.

20.3 OWNER may consider the qualifications and experience of Subcontractors and other persons and organizations (including those who are to furnish the principal items or material or equipment) proposed for those portions of the Work as to which the identity of Subcontractors and other persons and organizations must be submitted as provided in the Supplementary Conditions. Operating costs, maintenance considerations, performance data and guarantees of materials and equipment may also be considered by OWNER.

20.4 Irregular bids may be rejected. Irregular bids are defined as those containing serious omissions, unauthorized alternative bids, incomplete bids or unbalanced bids. Failure to provide all of the information required to accompany the bid will be considered to be a serious omission.

20.5 OWNER may conduct such investigations as he deems necessary to assist in the evaluation of any Bid.

20.6 OWNER reserves the right to reject the Bid of any Bidder who does not pass any such evaluation to OWNER's satisfaction.

20.7 If the contract is to be awarded it will be awarded to the lowest responsible Bidder whose evaluation by OWNER indicates that the award will be in the best interests of the Project. Pursuant to the provisions of Florida Statutes Chapter 287.05701, the City does not request, or consider, a Vendor's social, political, or ideological interests in making a responsibility determination. The low bid will be based on the total cost of the Base Bid and, when applicable, any Additive or Deductive Alternates that are to be included in the Contract, as decided by the OWNER.

20.8 If the contract is to be awarded, OWNER will give the Successful Bidder a Notice of Award within the number of days after the day of the Bid opening specified in the Advertisement for Bids to remain open.

00121. Performance and Other Bonds

Paragraph 5.1 of the General Conditions and the Supplementary Conditions set forth OWNER's requirements as to performance and other Bonds. When the Successful Bidder delivers the executed Agreement to OWNER it shall be accompanied by the required Contract Security.

00122. Signing of Agreement

When OWNER gives a Notice of Award to the Successful Bidder, it will be accompanied by at least two (2) unsigned counterparts of the Agreement and all other Contract Documents. Within fifteen (15) days thereafter CONTRACTOR shall sign all and deliver at least two (2) counterparts of the Agreement to OWNER with other Contract Documents attached. Within fifteen (15) days thereafter OWNER will deliver fully signed counterparts to CONTRACTOR.

00123. Special Requirements

23.1 Financing. Funds will be available for payment of estimate draws as they become due.

23.2 Prohibited Interests. No official of the OWNER who is authorized in such capacity, and on behalf of the OWNER to negotiate, make, accept or approve, or to take part in negotiating, making, accepting, or approving any architectural, engineering, inspection, construction or material supply contract or any subcontract in connection with the construction of the project shall become directly or indirectly interested, personally, in this Contract or in any part thereof. No officer, employee, architect, attorney, engineer, or inspector of or for the OWNER who is authorized in such

capacity and on behalf of the OWNER to exercise legislative, executive, supervisory, or other similar functions in connection with the construction of the project, shall become directly or indirectly interested personally, in this Contract or in any part thereof, any material supply contract, subcontract, insurance contract, or any other contract pertaining to the project.

23.3 Performance of Work by CONTRACTOR:

Contract Assignment. The successful Bidder (or Bidders) will be required to perform the work as a prime contractor.

The CONTRACTOR shall not sublet, sell, transfer, assign or otherwise dispose of the contract or any portion thereof, or of his right, title or interest therein, without written consent of the OWNER.

END OF INSTRUCTION TO BIDDERS

**SECTION 00300
BID**

CONTRACTORS NAME _____ LICENSE NO. _____

PROJECT IDENTIFICATION: LIFT STATION 4P IMPROVEMENTS

CONTRACT IDENTIFICATION AND NUMBER: Bid No. 2026-04

THIS BID IS SUBMITTED TO:
(Name and Address of Owner)

City of Ormond Beach
22 South Beach Street
Ormond Beach, Florida 32174

1. The undersigned BIDDER proposes and agrees, if this Bid is accepted, to enter into an Agreement with OWNER in the form included in the Contract Documents to complete all Work as specified or indicated in the Contract Documents for the Contract Price and within the Contract Time indicated in this Bid and in accordance with the Contract Documents.

2. BIDDER certifies that he has investigated the requirements to do business in the jurisdiction where the project is located, and that he is either qualified to do business or will obtain such prequalification prior to award of the contract.

3. BIDDER accepts all of the terms and conditions of the Instructions to Bidders (Section 00100) including, without limitation, those dealing with the disposition of Bid Security, Public Entity Crimes, and Minority Policies. This Bid will remain open for 90 days after the day of Bid opening. BIDDER will sign the Agreement and submit the Contract security and other documents required by the Contract Documents within ten (10) days after the date of OWNER'S Notice of Award.

4. In submitting this Bid, BIDDER represents, as more fully set forth in the Agreement, that:

(a) BIDDER has examined copies of all the Contract Documents and of the following addenda:

<u>Date</u>	<u>Number</u>
_____	_____
_____	_____
_____	_____
_____	_____

(receipt of all of which is hereby acknowledged) and also copies of the Advertisement to Bid and the Instructions to Bidders;

BID (Cont'd.)
LIFT STATION 4P IMPROVEMENTS
ORMOND BEACH, FLORIDA

(b) BIDDER has examined the site and locality where the Work is to be performed, the legal requirements (federal, state and local laws, ordinances, rules and regulations) and the conditions affecting cost, progress or performance of the Work and has made such independent investigations as BIDDER deems necessary.

(c) This Bid is genuine and not made in the interest of or on behalf of any undisclosed person, firm or corporation and is not submitted in conformity with any agreement or rules of any group, association, organization or corporation; BIDDER has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid; BIDDER has not solicited or induced any person, firm or a corporation to refrain from bidding; and BIDDER has not sought by collusion to obtain for himself any advantage over any other Bidder or over OWNER; and

5. BIDDER will complete the Work for the following price(s):

BID SCHEDULE

ITEM NO.	DESCRIPTION	QTY	UNIT	UNIT COST	AMOUNT
BASE BID					
General					
1	Mobilization / Demobilization (Maximum 5% of Bid)	1	LS		
2	Survey and Layout	1	LS		
3	Erosion and Sedimentation Control	1	LS		
4	Submit Certified As-Built Drawings	1	LS		
5	Permit Fees and Allowances	1	LS	\$50,000.00	\$50,000.00
Demolition/Relocation					
6	Remove Existing Odor Control Equipment, Concrete Slab and Wood Privacy Fence	1	LS		
7	Relocate Generator and Fuel Tank to New Location	1	LS		
8	Remove Generator Baffle Wall, Concrete Stairs, Metal Door, Retaining Wall and Handrail	1	LS		

BID (Cont'd.)
LIFT STATION 4P IMPROVEMENTS
ORMOND BEACH, FLORIDA

ITEM NO.	DESCRIPTION	QTY	UNIT	UNIT PRICE	TOTAL PRICE
9	Remove All Equipment, Material, Piping, Conduit, Wiring, Lighting and Ventilation Equipment from within the Generator Room, Electrical Room, Pump Pit Area and Area Above the Electrical Room	1	LS		
10	Remove All Building Material/Structure Above Elevation 13.00.	1	LS		
11	Remove Cast-In-Place Concrete Roof Slab and Walls Down to Elevation 13.00 and 9.50.	1	LS		
New Construction					
12	Construct New Asphalt Driveway	1	LS		
13	Furnish & Install New Generator Day Tank	1	LS		
14	Install (3) New Submersible Pumps	1	LS		
15	Furnish & Install Flygt Pump Control Panel and All Accessories	1	LS		
16	Construct New Cast-In-Place Concrete at Lift Station	1	LS		
17	Furnish & Install New Ductile Iron Pump Discharge Piping, Fittings, Valves, ARV and Flow Meter	1	LS		
18	Connection to Existing 10" Force Main	1	LS		
19	Furnish & Install 10-inch Line Stop	1	EA		
20	Furnish & Install Tapping Sleeve and Valve	1	LS		
21	Provide Temporary Sewage By-Pass Pumping System	1	LS		
22	Furnish & Install New Electrical Equipment Rack, Disconnect Switch, RTU Panel, ATS , Meter and Accessories	1	LS		

TOTAL BASE BID (Item Nos. 1-22)

\$ _____
(Figures)

(Words)

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BID

00300-3

LIFT STATION 4P IMPROVEMENTS

BID (Cont'd.)
LIFT STATION 4P IMPROVEMENTS
ORMOND BEACH, FLORIDA

ALTERNATE BID

17A	Additional Cost to Furnish & Install New 316 SS Pump Discharge Pipe and Fittings in place of Ductile Iron Pipe and Fittings in Bid Item No. 17	1	LS		
-----	--	---	----	--	--

TOTAL ALTERNATE BID (Item No. 17A) \$ _____
(Figures)

(Words)

BIDDER acknowledges that the quantities are not guaranteed and final payment will be based on actual quantities determined as provided in the Contract Documents.

BIDDER agrees that the Work will be substantially completed within 240 calendar days after the date when the Contract Time commences to run, and completed within 270 calendar days after the date when the Contract Time commences to run.

BIDDER recognizes that time is of the essence to complete this Project and that OWNER will suffer financial loss if the Work is not substantially complete within the time specified above, plus any extensions thereof allowed in accordance with Article 12 of the General Conditions. The BIDDER also recognize the delays, expense and difficulties involved in proving, in a legal or arbitration proceeding, the actual loss suffered by OWNER if the Work is not substantially complete on time. Accordingly, instead of requiring any such proof, OWNER has determined and BIDDER agrees to accept that as liquidated damages for delay (but not as a penalty) CONTRACTOR shall pay OWNER FIVE HUNDRED AND 00/100 Dollars (\$ 500.00) for each calendar day that expires after the time specified above for substantial completion until the Work is substantially complete. After substantial completion, if CONTRACTOR shall neglect, refuse or fail to complete the remaining Work within the time specified above for completion and readiness for final payment or any proper extension thereof granted by OWNER, CONTRACTOR shall pay the OWNER an amount equal to all actual expenses incurred by the OWNER as a direct result of the CONTRACTOR'S negligence, refusal, or failure to so complete the remaining work. In the event the CONTRACTOR is terminated or abandons the work prior to the scheduled date for final completion, the CONTRACTOR may be liable for both liquidated damages attributable to delay and for excess completion costs.

6. The following documents are attached to and made a condition of this Bid:

(a) Required Bid Security in the form of

(1) a certified check drawn in favor of the City of Ormond Beach in the amount of 5 percent of the total bid; or

(2) a Bid Bond in the amount of 5 percent of the total bid.

BID (Cont'd.)
LIFT STATION 4P IMPROVEMENTS
ORMOND BEACH, FLORIDA

- (b) Equipment, Material, and Subcontractors List
- (c) All information required by the Trench Safety Act (Part VI, Chapter 553, Florida Statutes).
- (d) Drug Free Workplace Certificate
- (e) Conflict, Non-Conflict of Interest, Litigation Statement
- (f) Local Vendor Preference
- (g) Verification of Employment Status Using E-Verify System
- (h) Affidavit of Compliance F.S. 287.138 Contracting With Foreign Entities of Concern
- (i) Human Trafficking Affidavit, Section 787.06, Florida Statutes

7. Communications to the BIDDER concerning this Bid shall be addressed to:

Mailing Address: _____
Street Address: _____
City, State, Zip Code: _____
Email: _____
Telephone No.: _____ Fax No.: _____

8. The terms used in this Bid which are defined in the General Conditions of the Construction Contract included as part of the Contract DOCUMENTS have the meanings assigned to them in the General Conditions.

SUBMITTED on _____, 20__.

BID (Cont'd.)
LIFT STATION 4P IMPROVEMENTS
ORMOND BEACH, FLORIDA

If BIDDER is:

An Individual

By _____
(Individual's Name - Signature)

_____ (SEAL)
(Individual's Name - Typed or Printed)

doing business as _____

Business address: _____

Phone No.: _____

Fax No.: _____

BID (Cont'd.)
LIFT STATION 4P IMPROVEMENTS
ORMOND BEACH, FLORIDA

If BIDDER is:

A Corporation

By _____
(Corporation Name)

(State of Incorporation)

By _____
(Name of Person Authorized to Sign - Signature)

(Name of Person Authorized to Sign - Typed or Printed)

(Title)

(Corporate Seal)

Attest _____

Business address: _____

Phone No.: _____

Fax No.: _____

BID (Cont'd.)
LIFT STATION 4P IMPROVEMENTS
ORMOND BEACH, FLORIDA

If BIDDER is:

A Joint Venture

By _____
(Name - Signature)

(Name - Typed or Printed)

Address: _____

Phone No.: _____

Fax No.: _____

By _____
(Name - Signature)

(Name - Typed or Printed)

Address: _____

Phone No.: _____

Fax No.: _____

(Each joint venturer must sign. The manner of signing for each individual, partnership and corporation that is a party to the joint venture should be in the manner indicated above.)

BID (Cont'd.)
LIFT STATION 4P IMPROVEMENTS
ORMOND BEACH, FLORIDA

EQUIPMENT AND SUBCONTRACTORS LIST

List the names of the manufacturers whose product is proposed for use. No more than one manufacturer's name shall be inserted for each item of material and/or equipment listed. Failure to list materials and equipment supplier may result in the Bid being rejected as incomplete and nonresponsive. If any Subcontractors are proposed to be used for any portions of the Work, the names, addresses, phone numbers and work classifications of each such Subcontractor must be listed. The failure to list all Subcontractors proposed for the work may result in the Bid being rejected as incomplete and nonresponsive. If more than one manufacturer or subcontractor is listed, selection will be made by the OWNER. If none is listed, those listed as the "Basis for Design" will be used.

Materials and Equipment:

<u>SECTION</u>	<u>ITEM</u>	<u>MANUFACTURER</u>
02616	Ductile Iron Pipe	
02616	Ductile Iron Fittings	
02623	PVC Pipe	
15066	Stainless Steel Pipe and Fittings	
15101	Gate Valves	
15110	Check Valves	
15122	Air Release Valves	ARI
15155	Magnetic Flow Meter	Rosemount

Subcontractors:

Work Classification: _____

Name: _____

Address: _____

Phone Number: _____ Fax Number: _____

BID (Cont'd.)
LIFT STATION 4P IMPROVEMENTS
ORMOND BEACH, FLORIDA

Subcontractors:

Work Classification: _____

Name: _____

Address: _____

Phone Number: _____ Fax Number: _____

Work Classification: _____

Name: _____

Address: _____

Phone Number: _____ Fax Number: _____

Work Classification: _____

Name: _____

Address: _____

Phone Number: _____ Fax Number: _____

Work Classification: _____

Name: _____

Address: _____

Phone Number: _____ Fax Number: _____

Work Classification: _____

Name: _____

Address: _____

Phone Number: _____ Fax Number: _____

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BID

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LIFT STATION 4P IMPROVEMENTS

BID (Cont'd.)
LIFT STATION 4P IMPROVEMENTS
ORMOND BEACH, FLORIDA
TRENCH SAFETY STANDARDS

If this project includes trench excavation in excess of five (5) feet in depth, the following trench safety standards will be in effect during the period of construction of the project:

The Occupational Safety and Health Administration's excavation safety standards, 29 C.F.R.s. 1926.650 Subpart P, and any regulation promulgated there under are hereby incorporated as the standard for this project.

The Bidder hereby certifies that the Contractor performing the trench excavation will comply with the applicable trench safety standards.

The Bidder further certifies that the cost (which is included in his unit cost) of compliance with applicable trench safety standards is:

	<u>Estimated Quantity</u>	<u>Units</u>	<u>Unit Price</u>	<u>Total Estimated Price</u>
<u>ITEM</u>				
1. Trench Excavation	_____	L.F.	_____	_____
2. Sheeting/Shoring	_____	S.F.	_____	_____

Name (signature) Date

Name (typed or printed)

Title

BID (Cont'd.)
LIFT STATION 4P IMPROVEMENTS
ORMOND BEACH, FLORIDA

DRUG-FREE WORKPLACE CERTIFICATION

Identical Or “Tie” Bids: Preference shall be given to businesses with drug-free workplace programs. Whenever two or more proposals which are equal in respect to price, quality, and service are received by the State or by any political subdivision for the procurement of commodities or contractual services, a bid received from a business that certifies that it has implemented a drug-free workplace program shall be given preference in the award process. Established procedures for processing tie bids will be followed if none of the tied vendors have a drug-free workplace program. In order to have a drug-free workplace program, a business shall:

- 1) Publish a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the workplace and specifying the actions that will be taken against employees for violations of such prohibition.
- 2) Inform employees about the dangers of drug abuse in the workplace, the business’s policy of maintaining a drug-free workplace, any available drug counseling, rehabilitation, and employee assistance programs, and the penalties that may be imposed upon employees for drug abuse violation.
- 3) Give each employee that engages in providing the commodities or contractual services that are under bid a copy of the statement specified in subsection (1).
- 4) In the statement specified in subsection (1), notify the employees that, as a condition of working on the commodities or contractual services that are under bid, the employee will abide by the terms of the statement and will notify the employer of any conviction of, or plea of guilty or nolo contendere to, any violation of Chapter 893 or of any controlled substance law of the United States or any state, for a violation occurring in the workplace no later than five (5) calendar days after such conviction.
- 5) Impose sanctions on, or require the satisfactory participation in a drug abuse assistance or rehabilitation program if such is available in the employee’s community, by any employee who is so convicted.
- 6) Make a good faith effort to continue to maintain a drug-free workplace through implementation of this section.

Name (signature)

Date

Name (typed or printed)

Title

BID (Cont'd.)
LIFT STATION 4P IMPROVEMENTS
ORMOND BEACH, FLORIDA

CONFLICT, NON-CONFLICT OF INTEREST STATEMENT
LITIGATION STATEMENT

1.

- [] To the best of our knowledge, the undersigned firm has no potential conflicts of interest due to any other clients or contracts for this project.
- [] The undersigned firm, by attachment to this form, submits information which may be a potential conflict of interest due to other clients or contracts for this project.

2.

- [] The undersigned firm has had no litigation on any project in the last five (5) years.
- [] The undersigned firm, by attachment to this form, submits a summary and disposition of individual cases of litigation during the past five (5) years.

COMPANY NAME

AUTHORIZED SIGNATURE

NAME (PRINT OR TYPE)

TITLE

DATE

BID (Cont'd.)
LIFT STATION 4P IMPROVEMENTS
ORMOND BEACH, FLORIDA

LOCAL VENDOR PREFERENCE

The following is taken from the Code of Ordinances, City of Ormond Beach, Chapter 2, Financial Matters, Division 3, Purchasing, Article IX, Section 2-304:

Except where otherwise provided by federal or state law or other funding source restrictions, purchases of goods and services under the Purchasing Code shall give preference to local businesses as follows:

- (a) Under a competitive bid solicitation, the City *may* give a local preference in the amount of three percent (3%) of the bid price or \$25,000, whichever is less. The bid price shall include not only the base bid price but all alternatives which are part of the bid and actually purchased or awarded.
- (b) A *local business* shall mean a vendor that has a valid occupational license issued by the City of Ormond Beach at least one year prior to bid opening, with a physical business address located within the municipal boundaries of the City of Ormond Beach from which the vendor operates or performs business on a day-to-day basis that is a substantial component of the goods or services being offered and has provided a Local Vendor Affidavit of Eligibility at the time the bid is submitted.
- (c) A *Local Vendor Affidavit of Eligibility* shall accompany the bid submittal to be considered valid and shall include, but not be limited to, the following information:
 - (1) A physical business and location address;
 - (2) A copy of current City of Ormond Beach Local Business Tax Receipt (occupational license) to verify the business location;
 - (3) Proof of payment of business tax and real property tax due to the City of Ormond Beach;
 - (4) A copy of the firm's most recent annual corporation report to the Florida Division of Corporations;
 - (5) Any additional information necessary to verify local status.
- (d) *Exemptions:* Goods or services provided under a cooperative purchasing agreement, contracts for professional services subject to Consultants' Competitive Negotiation Act, purchases or contracts funded in whole or part by a governmental entity that does not allow local preferences, purchases made under another agency's agreements or contracts (piggybacking), purchases under emergency or sole source situations and procurements subject to formal proposals including but not limited to request for proposals (RFP) or continuing contract, and request for quotes (RFQ) versus straight competitive bids.
- (e) This section shall not be deemed to require the granting of a local preference, and nothing herein prohibits the award of a contract to a non-local vendor where such award is in the public interest.

BID (Cont'd.)
LIFT STATION 4P IMPROVEMENTS
ORMOND BEACH, FLORIDA

LOCAL VENDOR AFFIDAVIT OF ELIGIBILITY

I certify that my company meets all of the following qualifications to be eligible for the local vendor preference:

- a. My company has a physical business address located within the municipal boundaries of the City of Ormond Beach which is used to perform business on a day-to-day basis.
- b. My company holds any business (occupational) or contractor license required by the City of Ormond Beach at least one year prior to bid opening.
- c. Payment of business tax and real property tax due to the City of Ormond Beach is current
- d. My company is in compliance with annual reporting to the Florida Division of Corporations

Company Name: _____

Address: _____

Business or Contractor License Number: _____

Phone Number: _____ Fax Number: _____

Owner's Name: _____ Signature: _____

Sworn to before me this _____ day of _____

Notary Public for the State of _____ My Commission Expires _____

Notary Public Signature: _____

Printed Name: _____

To be approved as a local bidder and receive bid preference on an eligible local project, this affidavit of eligibility, a copy of your local business or contractor license, copy of business tax/real property tax and a copy of the firm's most recent annual corporation report must be submitted with your bonafide BID package. Bid preference is provided at the City's sole discretion.

VENDOR DO NOT COMPLETE BELOW

To be verified and completed by an authorized representative of the City of Ormond Beach's Purchasing Department:

Vendor Certified by: _____ Date: _____

BID (Cont'd.)
LIFT STATION 4P IMPROVEMENTS
ORMOND BEACH, FLORIDA

VERIFICATION OF EMPLOYMENT STATUS USING E-VERIFY SYSTEM

1. Undersigned firm warrants it **IS** currently registered with the U.S. Department of Homeland Security's E-Verify system, **and** is compliant with the requirements of Sections 448.09 and 448.095, *Florida Statutes*.
2. Undersigned firm warrants it **has not** had any contracts terminated as a result of violations of Sections 448.09 or 448.095, *Florida Statutes*, that prohibit it from contracting with a public agency.
3. Undersigned firm warrants that if it enters into an agreement with a subcontractor, an express provision shall be included in all of its subcontracts requiring subcontractors, who perform work or provide services pursuant to the contract, to use the E-Verify system to verify employment eligibility of all new employees hired by the subcontractor during the contract term.
4. Undersigned firm understands that any subcontractor must provide the contractor with an affidavit stating that the subcontractor does not employ, contract with, or subcontract with an unauthorized alien, and the contractor understands it shall maintain any such affidavits for the duration of the contract, and the contract with the subcontractor must be immediately terminated if the City has a good faith belief that the subcontractor knowingly violated Section 448.09 (1), *Florida Statutes*.
5. Undersigned firm understands that in the event the City has a good faith belief that the contractor has knowingly violated Section 448.09 (1), *Florida Statutes*, the City shall terminate the contract, and the contractor may not be awarded a public contract for a period of at least one (1) year after the date of termination. The contractor may be held liable for any additional costs incurred by the City as a result of termination of the contract.

COMPANY NAME

AUTHORIZED SIGNATURE

NAME (PRINT OR TYPE)

TITLE

DATE

BID (Cont'd.)
LIFT STATION 4P IMPROVEMENTS
ORMOND BEACH, FLORIDA

**AFFIDAVIT OF COMPLIANCE WITH SECTION 287.138, FLORIDA STATUTES
CONTRACTING WITH FOREIGN ENTITIES OF CONCERN**

The undersigned ("Affiant"), on behalf of the entity listed below ("Entity"), hereby attests under penalty of perjury as follows:

1. Affiant is the _____ of _____
(Title) (Business Name)
which does business in the State of Florida, hereinafter called the "Entity".
2. Entity is not owned by the government of a foreign country of concern, as defined in Section 287.138 (1) (c), Florida Statutes.
3. The government of a foreign country of concern does not have a controlling interest in Entity, as defined in Section 287.138 (1)(a), Florida Statutes.
4. Entity is not organized under the laws of, and does not have a principal place of business in, a foreign country of concern.
5. Entity is not owned or controlled by the government of a foreign country of concern.
6. For purposes of this affidavit, a foreign country of concern means the People's Republic of China, the Russian Federation, the Islamic Republic of Iran, the Democratic People's Republic of Korea, the Republic of Cuba, the Venezuelan regime of Nicolas Maduro, or the Syrian Arab Republic, including any agency of or any other entity of significant control of such foreign country of concern, as defined in Section 287.138(1)(c), Florida Statutes.

The undersigned is authorized to execute this affidavit on behalf of the Entity.

Date: _____, 20____ Signed: _____

Title: _____ Print Name: _____

Entity: _____

STATE OF: _____ COUNTY OF: _____

The foregoing instrument was acknowledged before me by means of ☐ physical presence or

☐ online notarization, this _____ day of _____, 20____,
by _____ and who:

☐ Is personally known to me; or ☐ has produced _____
as identification.

Notary Public, State of Florida at Large:
Printed Name/Seal of Notary, Commission

(seal)

My commission expires: _____

This page must be completed & notarized.

HUMAN TRAFFICKING AFFIDAVIT
(SECTION 787.06, FLORIDA STATUTES)

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SWORN STATEMENT UNDER SECTION 287.133(3) (a),
FLORIDA STATUTES, ON PUBLIC ENTITY CRIMES

THIS FORM MUST BE SIGNED AND SWORN TO IN THE PRESENCE OF A NOTARY PUBLIC OR OTHER OFFICIAL AUTHORIZED TO ADMINISTER OATHS.

1. This sworn statement is submitted to _____
[print name of public entity]

by _____
[print individual's name and title]

for _____
[print name of entity submitting sworn statement]

whose business address is _____

and if applicable, its Federal Employer Identification Number (FEIN) is _____

(If the entity has no FEIN, include the Social Security Number of the individual signing this sworn statement: _____.)

2. I understand that a "public entity crime" as defined in Paragraph 287.133(1)(g), FLORIDA STATUTES, means a violation of any state or federal law by a person with respect to and directly related to the transaction of business with any public entity or with an agency or political subdivision of any other state or with the United States, including, but not limited to, any proposal or contract for goods or services to be provided to any public entity or an agency or political subdivision of any other state or of the United States involving antitrust, fraud, theft, bribery, collusion, racketeering, conspiracy, or material misrepresentation.

3. I understand that "convicted" or "conviction" as defined in Paragraph 287.122(1)(b), FLORIDA STATUTES, means a finding of guilt or a conviction of a public entity crime, with or without an adjudication of guilt, in any federal or state trial court of record relating to charges brought by indictment or information after July 1, 1989, as a result of a jury verdict, nonjury trial, or entry of a plea of guilty or nolo contendere.

4. I understand that "affiliate" as defined in Paragraph 287.133(1)(a), FLORIDA STATUTES, means:

1. A predecessor or successor of a person convicted of a public entity crime; or
2. An entity under the control of any natural person who is active in the management of the entity and who has been convicted of a public entity crime. The term "affiliate" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in the management of an affiliate. The ownership by one person of shares constituting a controlling interest in another person, or a pooling of equipment or income among persons when not for fair market value under an arm's length agreement, shall be a prima facie case that one person controls another person. A person who knowingly enters into a joint venture with a person who has been convicted of a public entity crime in Florida during the preceding 36 months shall be considered an affiliate.

2a. A person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a proposal on a contract to provide any goods or services to a public entity, may not submit a proposal on a contract with a public entity for the construction or repair of a public building or public work, may not submit proposals on leases of real property to a public entity, may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity, and may not transact business with any public entity in excess of the threshold amount provided in Section 287.017, for CATEGORY TWO for a period of 36 months from the date of being placed on the convicted vendor list.

5. I understand that a "person" as defined in Paragraph 287.133(1)(e), FLORIDA STATUTES, means any natural person or any entity organized under the laws of any state or of the United States with the legal power to enter into a binding contract and which proposals or applies to proposal on contracts for the provision of goods

or services let by a public entity, or which otherwise transacts or applies to transact business with a public entity. The term "person" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in management of an entity.

6. Based on information and belief, the statement which I have marked below are true in relation to the entity submitting this sworn statement. **[Please indicate which statement applies.]**

_____ Neither the entity submitting this sworn statement, nor any of its officers, directors, executives, partners, shareholders, employees, members or agents who are active in management of the entity, nor any affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July 1, 1989.

_____ The entity submitting this sworn statement, or one or more of the officers, directors, executives, partners, shareholders, employees, members, or agents who are active in management of the entity, or an affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July 1, 1989.

_____ The entity submitting this sworn statement, or one or more of the officers, directors, executives, partners, shareholders, employees, members, or agents who are active in management of the entity, or an affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July 1, 1989. However, there has been a subsequent proceeding before a Hearing Officer of the State of Florida, Division of Administrative Hearings and the Final Order entered by the Hearing Officer determined that it was not in the public interest to place the entity submitting this sworn statement on the convicted vendor list. **[Attach a copy of the final order.]**

I UNDERSTAND THAT THE SUBMISSION OF THIS FORM TO THE CONTRACTING OFFICER FOR THE PUBLIC ENTITY IDENTIFIED IN PARAGRAPH 1 (ONE) ABOVE IS FOR THAT PUBLIC ENTITY ONLY AND, THAT THIS FORM IS VALID THROUGH DECEMBER 31 OF THE CALENDAR YEAR IN WHICH IT IS FILED. I ALSO UNDERSTAND THAT I AM REQUIRED TO INFORM THE PUBLIC ENTITY PRIOR TO ENTERING INTO A CONTRACT IN EXCESS OF THE THRESHOLD AMOUNT PROVIDED IN SECTION 287.017, FLORIDA STATUTES FOR CATEGORY TWO OF ANY CHANGE IN THE INFORMATION CONTAINED IN THIS FORM.

[signature]

[date]

STATE OF _____

COUNTY OF _____

The foregoing instrument was acknowledged before me this _____ **[date]**

by _____ **[name and title]** of

_____ **[name of corporation]**, a _____

[state or place of incorporation] corporation, on behalf of the corporation. He/she is personally known to me or has produced _____ **[type of identification]** as identification and did (did not) take an oath.

[notary]

**SECTION 00410
BID BOND**

KNOW ALL MEN BY THESE PRESENTS, that we _____

(hereinafter called *Principal*) and

(hereinafter called the *Surety*) a corporation chartered and existing under the Laws of the State _____ of with its principal offices in the County of _____ and authorized to do business in the State of Florida, in the full and just sum of _____ Dollars (\$ _____) good and lawful money of the United States of America, to be paid upon demand of the _____, Florida, to which payment well and truly to be made we bind ourselves, our heirs, executors, administrators, and assigns, jointly and severally and firmly by these presents,

WHEREAS, the Principal is about to submit, or has submitted to the City of Ormond Beach, Florida, a bid for work to be done on the **LIFT STATION 4P IMPROVEMENTS (Bid No. 2026-04)** in, and for the City and

WHEREAS, the Principal desires to file this bond in accordance with law, in lieu of a certified or cashier's check otherwise required to accompany this Bid.

NOW, THEREFORE: the conditions of this obligation are such that if the Bid be accepted the Principal shall within ten (10) days after the receipt of notification of the acceptance thereof execute a contract in accordance with the Bid and upon the terms, conditions and unit or lump sum prices set forth therein, in the form and manner required by the Owner, and execute a sufficient and satisfactory Contract Bond payable to the Owner, in an amount not less than the total contract price, as indicated by the approximate quantities shown in the Bid, in form and with security satisfactory to the said City, then this obligation to be void; otherwise to be and remain in full force and virtue in law; and the Surety shall upon the failure of the Principal to comply with any or all of the foregoing requirements within the time specified above, immediately pay to the aforesaid City upon demand the amount hereof in good and lawful money of the United States of America, not as a penalty, but as liquidated damages.

IN TESTIMONY WHEREOF, the Principal and Surety have caused these presents to be duly signed and sealed this _____ day _____, 20 ____.

(Principal)

By: _____

ATTEST:

(Surety)

By: _____

(SEAL)

END OF SECTION

**SECTION 00500
FORM OF AGREEMENT**

THIS AGREEMENT is by and between City of Ormond Beach, a Municipal Corporation in the State of Florida (hereinafter called OWNER) and

(hereinafter called CONTRACTOR)

The bid for this contract was approved by the City Commission on _____, 20__.

Article 1. WORK

CONTRACTOR shall complete all Work as specified or indicated in the Contract Documents.

The Work is generally described as follows:

Convert an existing wet pit/dry pit sewage lift station to a submersible lift station by removing all the block and frame construction, and a portion of the cast-in-place concrete construction; removing all equipment and material from within the generator room; the HVAC equipment room; all piping material/equipment from within the dry pit pump area; all electrical equipment from within the electrical room; installing Owner-supplied new submersible pumps in the wet well; site improvements and restoration.

The Project for which the Work under the Contract Documents may be the whole or only a part is generally described as follows:

**LIFT STATION 4P IMPROVEMENTS
BID NO. 2026-04**

Article 2. ENGINEER

The Project has been designed by McKim & Creed, Inc., 139 Executive Circle, Suite 201, Daytona Beach, FL 32114 who is hereinafter called ENGINEER and who will assume all duties and responsibilities and will have the rights and authority assigned to ENGINEER in the Contract Documents in connection with completion of the Work in accordance with the Contract Documents.

Article 3. CONTRACT TIME

3.1 The Work will be substantially completed within **240** calendar days after the date when the Contract Time commences to run as provided in paragraph 2.3 of the General Conditions, and completed and ready for final payment in accordance with paragraph 14.10 of the General Conditions within **270** calendar days after the date when the Contract Time commences to run.

3.2 Liquidated Damages. OWNER and CONTRACTOR recognize that time is of the essence of this Agreement and that OWNER will suffer financial loss if the Work is not substantially complete within the time specified in paragraph 3.1 above, plus any extensions

thereof allowed in accordance with Article 12 of the General Conditions. They also recognize the delays, expense and difficulties involved in proving in a legal or arbitration proceeding the actual loss suffered by OWNER if the Work is not substantially complete on time. Accordingly, instead of requiring any such proof, OWNER and CONTRACTOR agree that as liquidated damages for delay (but not as a penalty) CONTRACTOR shall pay OWNER FIVE HUNDRED AND 00/100 Dollars (\$500.00) for each calendar day that expires after the time specified in paragraph 3.1 for Substantial Completion until the Work is substantially complete. After Substantial Completion, if CONTRACTOR shall neglect, refuse or fail to complete the remaining Work within the time specified in paragraph 3.1 for completion and readiness for final payment or any proper extension thereof granted by OWNER, CONTRACTOR shall pay the OWNER an amount equal to all actual expenses incurred by the OWNER as a direct result of the CONTRACTOR'S negligence, refusal, or failure to so complete the remaining work. In the event the Contractor is terminated or abandons the Work prior to the scheduled date for final completion, the Contractor may be liable for both liquidated damages attributable to delay and for excess completion costs.

Article 4. CONTRACT PRICE

OWNER shall pay CONTRACTOR for completion of the Work, in accordance with the Contract Documents, an amount in current funds equal to the unit price TOTAL BID of \$_____, as listed in the Bid Form. Payment shall be for the actual completed work, as specified in the Measurement and Payment section of the project Manual and in accordance with Article 14 of the General Conditions.

Article 5. PAYMENT PROCEDURES

CONTRACTOR shall submit Applications for Payment in accordance with Article 14 of the General Conditions. Applications for Payment will be processed by ENGINEER as provided in the General Conditions.

5.1 Progress Payments. OWNER shall make progress payments on account of the Contract Price on the basis of CONTRACTOR'S Applications for Payment as recommended by ENGINEER, on or about the 15th day of each month during construction as provided below, provided Applications for Payment are timely delivered pursuant to Article 14.1 of the General Conditions. All progress payments will be on the basis of the progress of the Work measured by the schedule of values provided for in paragraph 14.1 of the General Conditions.

5.1.1 When applicable, all progress payments shall be in an amount equal to:

Ninety-Five percent (95%) of the Work completed.

Ninety-Five percent (95%) of materials and equipment not incorporated in the Work but delivered and suitably stored, less in each case the aggregate of payments previously made and less such amounts as ENGINEER shall determine in accordance with paragraph 14.4 of the General Conditions.

5.2 Final Payment. Upon final completion and acceptance of the Work in accordance with paragraph 14.10 of the General Conditions, OWNER shall pay the remainder of the Contract Price as recommended by ENGINEER as provided in said paragraph 14.10.

Article 6. CONTRACTOR'S REPRESENTATIONS

In order to induce OWNER to enter into this Agreement CONTRACTOR makes the following representations:

6.1 CONTRACTOR has familiarized himself with the nature and extent of the Contract Documents, Work, locality, and with all local conditions and federal, state and local laws, ordinances, rules and regulations that in any manner may affect cost, progress or performance of the Work.

6.2 CONTRACTOR has studied carefully all reports of investigations and tests of subsurface and latent physical conditions at the site or otherwise affecting cost, progress or performance of the Work which were relied upon by ENGINEER in the preparation of the Drawings and Specifications and which have been identified in the Supplementary Conditions.

6.3 CONTRACTOR has made or caused to be made examinations, investigations and tests and studies of such reports and related data in addition to those referred to in paragraph 6.2 as he deems necessary for the performance of the Work at the Contract Price, within the Contract Time and in accordance with the other terms and conditions of the Contract Documents, and no additional examinations, investigations, tests, reports or similar data are or will be required by CONTRACTOR for such purposes.

6.4 CONTRACTOR has correlated the results of all such observations, examinations, investigations, tests, reports and data with the terms and conditions of the Contract Documents.

6.5 CONTRACTOR has given ENGINEER written notice of all conflicts, errors or discrepancies that he has discovered in the Contract Documents and the written resolution thereof by ENGINEER is acceptable to CONTRACTOR.

Article 7. CONTRACT DOCUMENTS

The Contract Documents which comprise the entire agreement between OWNER and CONTRACTOR are attached to this Agreement, made a part hereof and consists of the following:

7.1 This Agreement (pages 1 to 5, inclusive).

7.2 Exhibits to this Agreement (pages 1 to , inclusive).

7.3 Performance and other Bonds, identified as exhibits 00610 and 00615 and consisting of 4 pages.

7.4 Notice of Award.

- 7.5 General Conditions (pages 1 to 36, inclusive).
- 7.6 Supplementary Conditions (pages 1 to 8, inclusive).
- 7.7 Specifications bearing the title:

LIFT STATION 4P IMPROVEMENTS

and consisting of 16 divisions, as listed in table of contents thereof.

- 7.8 Drawings, consisting of 35 sheets, numbered G1 thru G4; C01 thru C03; M01 thru M07; D01 thru D03; S01 thru S05; E01, E10, E20, E30, E40, I01, I02, I10, I11, I20, I21, I22, inclusive and bearing the following general title:

LIFT STATION 4P IMPROVEMENTS

- 7.9 Addenda numbers ___ to ___, inclusive.
- 7.10 CONTRACTOR'S Bid (pages 1 to 19, inclusive) marked exhibit _____ (Attach Bid Form only in special circumstances).
- 7.11 Documentation submitted by CONTRACTOR prior to Notice of Award (pages ___ to ___, inclusive).
- 7.12 Any Modification, including Change Orders, duly delivered after execution of Agreement.

There are no Contract Documents other than those listed above in this Article 7. The Contract Documents may only be altered, amended or repealed by a Modification (as defined in Section 1 of the General Conditions).

Article 8. MISCELLANEOUS

- 8.1 Terms used in this Agreement which are defined in Article 1 of the General Conditions shall have the meanings indicated in the General Conditions.
- 8.2 No assignment by a party hereto of any rights under or interests in the Contract Documents will be binding on another party hereto without the written consent of the party sought to be bound; and specifically but without limitation, moneys that may become due and moneys that are due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.
- 8.3 OWNER and CONTRACTOR each binds himself, his partners, successors, assigns and legal representatives to the other party hereto, his partners, successors, assigns and legal representatives in respect to all covenants, agreements and obligations contained in the Contract Documents.

IN WITNESS WHEREOF, the parties hereto have signed this Agreement. One counterpart each has been delivered to OWNER and CONTRACTOR, and to ENGINEER as applicable. All portions of the Contract Documents have been signed by OWNER and CONTRACTOR or identified by ENGINEER on their behalf.

This Agreement will be effective on _____, 20__.

OWNER City of Ormond Beach

CONTRACTOR _____

By _____

Jason Leslie
Mayor

By _____

(Title)

[CITY SEAL]

[SEAL]

Attest _____

Joyce A. Shanahan
City Manager

Attest _____

(Title)

Address for giving notices:

City of Ormond Beach

PO Box 277

Ormond Beach, FL 32175-0277

Address for giving notices:

License No. _____

Registered Agent for service process:

(Name)

(Title)

END OF AGREEMENT

**SECTION 00610
PERFORMANCE BOND**

KNOW ALL MEN BY THESE PRESENTS: that

(Name of Contractor)

(Address of Contractor)

a(n) _____, hereinafter called Principal, and
(Corporation, Partnership or Individual)

(Name of Surety)

(Address of Surety)

hereinafter called Surety, are held and firmly bound unto

(Name of Owner)

(Address of Owner)

hereinafter called OWNER, in the penal sum of _____

_____ Dollars, (\$ _____) in lawful money of the United States, for the payment of which sum will and truly to be made, we bind ourselves, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the Principal entered into a certain contract with OWNER, dated _____ day of _____, 20____, for the construction of:

**LIFT STATION 4P IMPROVEMENTS
Bid No. 2026-04**

NOW, THEREFORE, if the Principal shall well, truly and faithfully perform its duties, all the undertakings, covenants, terms, conditions, and agreements of said contract during the original term thereof, and any extensions thereof which may be granted by the OWNER, with or without notice to the Surety and during the one-year guaranty period, and if he shall satisfy all claims and demands incurred under such contract, and shall fully indemnify and save harmless the OWNER from all costs and damages which it may suffer by reason of failure to do so, and shall reimburse and repay the OWNER all outlay and expense which the OWNER may incur in making good any default, then this obligation shall be void; otherwise to remain in full force and effect.

PROVIDED, FURTHER, that the said Surety, for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to WORK to be performed thereunder or the SPECIFICATIONS accompanying the same shall in any wise affect its obligation on this BOND, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the WORK or to the SPECIFICATIONS. The Surety agrees that modifications and changes to the terms and conditions of the Contract that increase the total amount to be paid the Principal shall automatically increase the obligation of the Surety on this bond and notice to Surety is not required for such increased obligation.

PERFORMANCE BOND

00610-1

LIFT STATION 4P IMPROVEMENTS

PROVIDED, FURTHER, that no final settlement between the OWNER and the CONTRACTOR shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in _____ counterparts, each one of which shall be
(number)
deemed an original, this _____ day of _____, 20_____.

ATTEST:

Principal

By _____ (s)

(Principal) Secretary

(SEAL)

(Witness to Principal)

(Address)

(Address)

(Surety)

ATTEST:

(Surety) Secretary

(SEAL)

Witness to Surety

Attorney-In-Fact

(Address)

(Address)

NOTE: Date of BOND must not be prior to date of Contract. If CONTRACTOR is Partnership, all partners should execute BOND. All BONDS signed by an agent must be accompanied by a certified copy of the authority to act.

IMPORTANT: Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the state where the PROJECT is located.

END OF SECTION

**SECTION 00615
PAYMENT BOND**

KNOW ALL MEN BY THESE PRESENTS: that

(Name of Contractor)

(Address of Contractor)

a(n) _____, hereinafter called Principal, and
(Corporation, Partnership or Individual)

(Name of Surety)

(Address of Surety)

hereinafter called Surety, are held and firmly bound unto

(Name of Owner)

(Address of Owner)

hereinafter called OWNER, in the penal sum of _____

_____ Dollars, (\$_____) in lawful money of the United States, for the payment of which sum will and truly to be made, we bind ourselves, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the Principal entered into a certain contract with OWNER, dated ____ day of _____, 20____, for the construction of:

**LIFT STATION 4P IMPROVEMENTS
Bid No. 2026-04**

NOW, THEREFORE, if the Principal shall promptly make payment to all persons, firms, SUBCONTRACTORS, and corporations furnishing materials for or performing labor in the prosecution of the WORK provided for in such contract, and any authorized extension or modification thereof, including all amounts due for materials, lubricants, oil, gasoline, coal and coke, repairs on machinery, equipment and tools, consumed or used in connection with the construction of such WORK, and all insurance premiums on said WORK, and for all labor, performed in such WORK whether by SUBCONTRACTOR or otherwise, then this obligation shall be void; otherwise to remain in full force and effect.

PROVIDED, FURTHER, that the said Surety, for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to WORK to be performed thereunder or the SPECIFICATIONS accompanying the same shall in any wise affect its obligation on this BOND, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the WORK or to the SPECIFICATIONS. The Surety agrees that modifications and changes to the terms and conditions of the Contract that increase the total amount to be paid the Principal shall automatically increase the obligation of the Surety on this bond and notice to Surety is not required for such increased obligation.

PAYMENT BOND

00615-1

PROVIDED, FURTHER, that no final settlement between the OWNER and the CONTRACTOR shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in _____ counterparts, each one of which shall be
(number)
deemed an original, this _____ day of _____, 20_____.

ATTEST:

Principal

By _____ (s)

(Principal) Secretary

(SEAL)

(Witness to Principal)

(Address)

(Address)

(Surety)

ATTEST:

(Surety) Secretary

(SEAL)

Witness to Surety

Attorney-In-Fact

(Address)

(Address)

NOTE: Date of BOND must not be prior to date of Contract. If CONTRACTOR is Partnership, all partners should execute BOND. All BONDS signed by an agent must be accompanied by a certified copy of the authority to act.

IMPORTANT: Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the state where the PROJECT is located.

END OF SECTION

OPINION OF ATTORNEY

This is to certify that I have examined the attached Contract Documents, and that I am of the opinion that such documents conform to the Laws of the State of Florida, and that the execution of the Contract is in due and proper form, and that the foregoing agreements constitute valid and binding obligations on such parties.

Attorney for Owner

This the _____ day of _____, _____

END OF SECTION

SECTION 00700
GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

ARTICLE 1 - DEFINITIONS

Whenever used in these General Conditions or in the other Contract Documents, the following terms have the meanings indicated which are applicable to both the singular and plural thereof.

1.01. Addenda - Written or graphic instruments issued prior to the opening of Bids which clarify, correct or change the bidding documents of the Contract Documents.

1.02. Agreement - The written agreement between OWNER and CONTRACTOR covering the Work to be performed; other Contract Documents are attached to the Agreement and made a part thereof as provided therein.

1.03. Application for Payment - The form accepted by ENGINEER which is to be used by CONTRACTOR in requesting progress or final payment and which is to include such supporting documentation as required by the Contract Documents.

1.04. Approve - The word approve is defined to mean review of the material, equipment or methods for general compliance with the design concepts and with the information given in the Contract Documents. It does not imply a responsibility on the part of the ENGINEER to verify in every detail conformance with the Drawings and Specifications.

1.05. Bid - The offer or proposal of the Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.

1.06. Bonds - Bid, Performance and Payment Bonds and other instruments of security.

1.07. Change Order - A written order to CONTRACTOR signed by OWNER authorizing an addition, deletion or revision in the Work, or an adjustment in the Contract Price or the Contract Time issued after the effective date of the Agreement.

1.08. Contract - The Agreement.

1.09. Contract Documents - The Agreement, Addenda (which pertain to the Contract Documents), CONTRACTOR's Bid (including documentation accompanying the bid and any post-Bid documentation submitted prior to the Notice of Award) when attached as an exhibit to the Agreement, Notice of Award, the Bonds, these General Conditions, the Supplementary Conditions, the Specifications and the Drawings as the same are more specifically identified in the Agreement, any other exhibits identified in the Agreement, together with all Modifications issued after the execution of the Agreement.

1.10. Contract Price - The Contract Price constitutes the total compensation (subject to authorized adjustments) payable by OWNER to CONTRACTOR for performing the Work.

- 1.11. Contract Time - The number of days (computed as provided in paragraph 16.2) or the date stated in the Agreement for the completion of the Work.
- 1.12. CONTRACTOR - The person, firm or corporation with whom OWNER has entered into the Agreement.
- 1.13. Day - A calendar day of twenty-four hours measured from midnight to the next midnight.
- 1.14. Defective - Work that is unsatisfactory, faulty or deficient, or does not conform to the Contract Documents or does not meet the requirements of any inspection, test or approval referred to in the Contract Documents, or has been damaged prior to ENGINEER's recommendation of final payment.
- 1.15. Drawings - The drawings, which will be identified in the Agreement, which show the character and scope of the Work to be performed and which have been prepared or approved by ENGINEER and are referred to in the Contract Documents.
- 1.16. Effective Date of the Agreement - The date indicated in the Agreement on which it becomes effective, but if no such date is indicated it means the date on which the Agreement is signed and delivered by the last of the two parties to sign and deliver.
- 1.17. ENGINEER - The City Engineer of the City of Ormond Beach, Florida, or the designee of such Engineer.
- 1.18. Engineering Order - A written request issued by ENGINEER to CONTRACTOR requesting a cost for certain modifications to the Work. An Engineering Order is not an authorization to perform the modifications.
- 1.19. Field Order - A written order issued by ENGINEER which clarifies or interprets the Contract Documents or orders minor changes in the Work in accordance with paragraph 10.2, but which does not involve a change in the Contract Price or the Contract Time.
- 1.20. Furnish - The words "furnish", "furnish and install", "install", and "provide" or words with similar meaning shall be interpreted, unless otherwise specifically stated, to mean "furnish and install complete in place and ready for service".
- 1.21. General Requirements - Sections of Division 1 of the Specifications.
- 1.22. Inspection - The term "Inspection" and the act of inspecting as used in these Contract Documents is defined to mean examination of construction to ensure that it conforms to the design concept expressed in the Drawings and Specifications. These terms shall not be construed to mean supervision, superintending and/or overseeing.
- 1.23. Modification - (a) A written amendment of the Contract Documents signed by both parties, (b) a Change Order, or (c) a Field Order. A modification may only be issued after the

effective date of the Agreement and must be in writing to be effective.

1.24. Notice of Award - The written notice by OWNER to the apparent successful Bidder stating that upon compliance by the apparent successful Bidder with the conditions precedent enumerated therein, within the time specified, OWNER will sign and deliver the Agreement.

1.25. Notice to Proceed - A written notice given by OWNER to CONTRACTOR (with a copy to ENGINEER) fixing the date on which the Contract Time will commence to run and on which CONTRACTOR shall start to perform his obligation under the Contract Documents.

1.26. OWNER - The City of Ormond Beach, Florida.

1.27. Product - Materials, systems, and equipment provided by the CONTRACTOR.

1.28. Project - The total construction of which the Work to be provided under the Contract Documents may be the whole, or a part as indicated elsewhere in the Contract Documents.

1.29. Project Manual - The term "Project Manual" includes Bidding Requirements, Conditions of the Contract, Specifications, and Drawings.

1.30. Project Representative - The authorized representative of ENGINEER who is assigned to the site or any part thereof.

1.31. Shop Drawings - All drawings, diagrams, illustrations, schedules and other data which are specifically prepared by CONTRACTOR, a Subcontractor, manufacturer, fabricator, supplier or distributor to illustrate some portion of the Work and all illustrations, brochures, standard schedules, performance charts, instructions, diagrams and other information prepared by a manufacturer, fabricator, supplier or distributor and submitted by CONTRACTOR to illustrate material or equipment for some portion of the Work.

1.32. Specifications - Those portions of the Contract Documents consisting of written technical descriptions of materials, equipment, construction systems, standards and workmanship as applied to the Work and certain administrative details applicable thereto.

1.33. Subcontractor - An individual, firm or corporation having a contract with CONTRACTOR or with any other Subcontractor for the performance of a part of the Work at the site.

1.34. Substantial Completion - The point reached when the Work (or a specified part thereof), in the opinion of ENGINEER as evidenced by his final certificate of Substantial Completion, is sufficiently complete, in accordance with the Contract Documents, so that the Work (or specified part) can be utilized for the purposes for which it was intended; or if there be no such certificate issued, when final payment is due in accordance with paragraph 14.10. The terms "substantially complete" and "substantially completed" as applied to any Work refer to Substantial Completion thereof.

1.35. Surety - Any person, firm or corporation which is bound with CONTRACTOR and which engages to be responsible for CONTRACTOR and his acceptable performance of the Work by a Performance or Payment Bond, or by a Public Construction Bond.

1.36. Work - The entire completed construction or the various separately identifiable parts thereof required to be furnished under the Contract Documents. Work is the result of performing services, furnishing labor and furnishing and incorporating materials and equipment into the construction, all as required by the Contract Documents.

ARTICLE 2 - PRELIMINARY MATTERS

Delivery of Bonds:

2.1. When CONTRACTOR delivers the executed Agreements to OWNER, CONTRACTOR shall also deliver to OWNER such Bonds as CONTRACTOR may be required to furnish in accordance with paragraph 5.1.

Copies of Documents:

2.2. OWNER shall furnish to CONTRACTOR, at OWNER's expense, up to three copies of the Contract Documents. Additional copies will be furnished, upon request, at the cost of reproduction.

Commencement of Contract Time; Notice to Proceed:

2.3. The Contract Time will commence on the day indicated in the Notice to Proceed.

Starting the Project:

2.4. CONTRACTOR shall start to perform the work on the date when the Contract Time commences to run, but no work shall be done at the site prior to the date on which the Contract Time commences to run, and no work shall be done at the site before the Payment and Performance Bond is executed, delivered to the OWNER, and recorded in the public records of Volusia County, Florida.

Before Starting Construction:

2.5. Before undertaking each part of the Work, CONTRACTOR shall carefully study and compare the Contract Documents and check and verify pertinent figures shown thereon and all applicable field measurements. CONTRACTOR shall promptly report in writing to ENGINEER any conflict, error or discrepancy which CONTRACTOR may discover; however, CONTRACTOR shall not be liable to OWNER for failure to report any conflict, error or discrepancy in the Drawings or Specifications, unless CONTRACTOR had actual knowledge thereof or should reasonably have known thereof. No verbal agreement or conversation with any officer, agent or employee of OWNER, either before or after the execution of this Contract, shall

affect or modify any of the terms or obligations herein contained.

2.6. Before any Work at the site is started, CONTRACTOR shall deliver to OWNER certificates (and other evidence of insurance requested by OWNER) which CONTRACTOR is required to purchase and maintain in accordance with paragraphs 5.3, 5.4, 5.6 and 5.7.

2.7. CONTRACTOR shall not allow any on-site Subcontractor to commence work on his subcontract until insurance required of the Subcontractor has been obtained and approved by the CONTRACTOR. Failure to obtain this insurance will be the sole responsibility of the CONTRACTOR.

ARTICLE 3 - CONTRACT DOCUMENTS; INTENT AND REUSE

3.1. The Contract Documents comprise the entire Agreement between OWNER and CONTRACTOR concerning the Work. They may be altered only by a Modification.

3.2. The Contract Documents are complementary; a requirement contained in one is applicable to all. If, during the performance of the Work, CONTRACTOR finds a conflict, error or discrepancy in the Contract Documents, he shall report it to ENGINEER in writing at once and before proceeding with the Work affected thereby; however, CONTRACTOR shall not be liable to OWNER for failure to report any conflict, error or discrepancy in the Specifications or Drawings unless CONTRACTOR had actual knowledge thereof or should reasonably have known thereof. The various Contract Documents shall be given precedence, in case of conflict, error or discrepancy, as follows: Modifications, Agreement, Addenda, Supplementary Conditions, General Conditions, Drawings and Specifications. In a series of Modifications or Addenda the latest will govern.

3.3. It is the intent of the Specifications and Drawings to describe a complete project (or part thereof) to be constructed in accordance with the Contract Documents. Any Work that may reasonably be inferred from the Specifications or Drawings as being required to produce the intended results shall be supplied whether or not it is specifically called for. When words which have well-known technical or trade meaning are used to describe Work, materials or equipment such words shall be interpreted in accordance with such meaning. Reference to standard specifications, manuals or codes of any technical society, organization or association, or to the code of any governmental authority, whether such reference be specific or by implication, shall mean the latest standard specification, manual or code in effect at the time of opening of Bids (or, on the effective date of the Agreement if there were no Bids), except as may be otherwise specifically stated. However, no provision of any referenced standard specification, manual or code (whether or not specifically incorporated by reference in the Contract Documents) shall change the duties and responsibilities of OWNER, CONTRACTOR or ENGINEER, or any of their agents or employees from those set forth in the Contract Documents. Clarifications and interpretations of the Contract Documents shall be issued by ENGINEER as provided for in paragraph 9.2.

3.4. The Contract Documents will be governed by the law of the State of Florida, and venue for any action brought thereunder shall lie solely and exclusively in the Circuit Court in and for Volusia County, Florida.

Reuse of Documents:

3.5. Neither CONTRACTOR nor any Subcontractor, manufacturer, fabricator, supplier or distributor shall have or acquire any title to or ownership rights in any of the Drawings, Specifications or other documents (or copies of any thereof) prepared by or bearing the seal of ENGINEER; and they shall not reuse any of them on extensions of the Project or any other project without written consent of OWNER and ENGINEER and specific written verification or adaptation by ENGINEER.

**ARTICLE 4 - AVAILABILITY OF LANDS; PHYSICAL CONDITIONS;
REFERENCE POINTS**

4.1. OWNER shall furnish, as indicated in the Contract Documents, the lands upon which the Work is to be performed, rights-of-way for access thereto, and such other lands which are designated for the use of CONTRACTOR. Easements for permanent structures or permanent changes in existing facilities will be obtained and paid for by OWNER, unless otherwise provided in the Contract Documents. If CONTRACTOR believes that any delay in OWNER's furnishing these lands or easements entitles him to an extension of the Contract Time, CONTRACTOR may make a claim therefor as provided in Article 12. CONTRACTOR shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

Physical Conditions - Investigations and Reports:

4.2. Reference is made to the Supplementary Conditions for identification of those reports of investigations and tests of subsurface and latent physical conditions at the site or otherwise affecting cost, progress or performance of the Work which have been relied upon by ENGINEER in preparation of the Drawings and Specifications. Such reports are not guaranteed as to accuracy or completeness and are not part of the Contract Documents.

Unforeseen Physical Conditions:

4.3. CONTRACTOR shall promptly, after becoming aware of and before further disturbing conditions affected thereby or performing any work in connection therewith, notify ENGINEER in writing of any subsurface or latent physical conditions at the site or in an existing structure differing materially from those indicated or referred to in the Contract Documents. CONTRACTOR, upon discovering and notifying OWNER of such subsurface or latent conditions, shall not perform work in the affected area until authorized to do so by OWNER. ENGINEER will promptly review those conditions and determine if further investigation or tests are necessary. If so determined by the ENGINEER, OWNER shall promptly obtain the necessary additional investigations and tests and furnish copies to CONTRACTOR. If ENGINEER finds that the results

of such investigations or tests indicate that there are subsurface or latent physical conditions which differ materially from those intended in the Contract Documents, and which could not reasonably have been anticipated by CONTRACTOR, a Change Order authorizing CONTRACTOR to perform the additional work may be issued incorporating the necessary revisions.

Reference Points:

4.4. OWNER shall provide engineering surveys for construction to establish reference points which in his judgment are necessary to enable CONTRACTOR to proceed with the Work. CONTRACTOR shall be responsible for laying out the Work (unless otherwise specified in the General Requirements), shall protect and preserve the established reference points and shall make no changes or relocations without the prior written approval of OWNER. CONTRACTOR shall report to ENGINEER whenever any reference point is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for replacement or relocation of such reference points by professionally qualified personnel.

ARTICLE 5 - BONDS AND INSURANCE

Performance and Other Bonds:

5.1. CONTRACTOR shall furnish Performance and Payment Bonds, each in an amount at least equal to the Contract Price as security for the faithful performance and payment of all CONTRACTOR's obligations under the Contract Documents. The City will record the bonds in the public records at the CONTRACTOR's expense. These Bonds shall remain in effect at least until one (1) year after the date of final payment, except as otherwise provided by law. All bonds shall be deemed to contain all of the Conditions of Section 255.05, Florida Statutes, even if such language is not directly contained within the bond. CONTRACTOR shall also furnish such other Bonds as are required by the Supplementary Conditions. All Bonds shall be in the forms prescribed by the bidding documents or Supplementary Conditions and be executed by such Sureties as (i) are licensed to conduct business in the State of Florida, and (ii) are named in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (amended) by the Audit Staff Bureau of Accounts, U.S. Treasury Department. All Bonds signed by an agent must be accompanied by a certified copy of the authority to act.

5.2. If the Surety on any Bond furnished by CONTRACTOR is declared bankrupt or becomes insolvent or its right to do business is terminated in the State of Florida or it ceases to meet the requirements of clauses (i) and (ii) of paragraph 5.1, CONTRACTOR shall within five (5) days after notice thereof, substitute another Bond and Surety, both of which shall meet the requirements of clauses (i) and (ii) of paragraph 5.1.

CONTRACTOR's Liability Insurance:

5.3. CONTRACTOR and on-site Subcontractors shall purchase and maintain such Commercial General Liability and other insurance as will provide protection from claims set forth

below which may arise out of or result from CONTRACTOR's performance of the Work and CONTRACTOR's other obligations under the Contract Documents, whether such performance is by CONTRACTOR, by any Subcontractor, by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable;

5.3.1. Claims under workers' compensation, disability benefits and other similar employee benefit acts;

5.3.2. Claims for damages because of bodily injury, occupational sickness or disease, or death of CONTRACTOR's employees;

5.3.3. Claims for damages because of bodily injury, sickness or disease, or death of any person other than CONTRACTOR's employees.

5.3.4. Claims for damages insured by personal injury liability coverage which are sustained (i) by any person as a result of an offense directly or indirectly related to the employment of such person by CONTRACTOR, or (ii) by any other person for any other reason.

5.3.5. Claims for damages, other than to the Work itself, because of injury to or destruction of tangible property, including loss of use resulting therefrom; and

5.3.6. Claims for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance or use of any motor vehicle.

The insurance required by this paragraph 5.3 shall include the specific coverages and be written for not less than the limits of liability and coverages provided in the **Supplementary Conditions**, or required by law, whichever is greater. The Commercial General Liability insurance shall include completed operations insurance. All such insurance shall contain a provision that the coverage afforded will not be canceled, materially changed or renewal refused until at least **sixty** (60) days prior written notice of such cancellation, non-renewal or change (except for nonpayment of premium, which shall be fifteen (15) days) has been given to OWNER. All such insurance shall remain in effect until final payment and at all times thereafter when CONTRACTOR may be correcting, removing or replacing defective Work in accordance with paragraph 13.12. In addition, CONTRACTOR shall maintain such completed operations insurance for at least two years after final payment and furnish OWNER with evidence of continuation of such insurance at final payment and one year thereafter.

Contractual Liability Insurance:

5.4. The Commercial General Liability insurance required by paragraph 5.3 will include contractual liability insurance applicable to CONTRACTOR's obligations under paragraphs 6.15 and 6.16. The OWNER shall be named as "Additionally Insured" under the CONTRACTOR's Commercial General Liability insurance policy.

Owner's Liability Insurance:

5.5. OWNER may, at its option, purchase and maintain its own liability insurance and, at its option, may purchase and maintain such insurance as will protect OWNER against claims which may arise from operations under the Contract Documents.

Property Insurance:

5.6. CONTRACTOR shall purchase and maintain property insurance upon the Work at the site to the full insurable value thereof (subject to such deductible amounts as may be provided in the Supplementary Conditions or required by law). This insurance shall include the interests of OWNER, CONTRACTOR, and Subcontractors in the Work, shall insure against the perils of fire and extended coverage and shall include "all risk" insurance for physical loss and damage including theft, vandalism and malicious mischief, collapse and water damage, and such other perils as may be provided in the Supplementary Conditions, and shall include damages, losses and expenses arising out of or resulting from any insured loss or incurred in the repair or replacement of any insured property (including fees and charges of engineers, architects, attorneys and other professionals). If not covered under the "all risk" insurance or otherwise provided in the Supplementary Conditions, CONTRACTOR shall purchase and maintain similar property insurance on portions of the Work stored on and off the site or in transit when such portions of the Work are to be included in the Application for Payment. The policies of insurance required to be purchased and maintained by CONTRACTOR in accordance with paragraphs 5.6 and 5.7 shall contain provisions that the coverage afforded will not be canceled or materially changed until at least **sixty (60)** days prior written notice has been given to OWNER.

5.7. CONTRACTOR shall purchase and maintain such boiler and machinery insurance as may be required by the Supplementary Conditions or by law. This insurance shall include the interests of OWNER, CONTRACTOR and Subcontractors in the Work.

5.8. OWNER shall not be responsible for purchasing and maintaining any property insurance to protect the interests of CONTRACTOR or Subcontractors in the Work to the extent of any deductible amounts that are provided in the Supplementary Conditions. If CONTRACTOR wishes property insurance coverage within the limits of such amounts, CONTRACTOR may purchase and maintain it at his own expense.

5.9. If CONTRACTOR requests in writing that other special insurance be included in the property insurance policy, OWNER shall, if possible, include such insurance, and the cost thereof shall be charged to CONTRACTOR by appropriate Change Order. Prior to commencement of the Work at the site, OWNER shall in writing advise CONTRACTOR whether or not such other insurance has been procured by OWNER.

Waiver of Rights:

5.10. OWNER and CONTRACTOR waive all rights against each other and the Subcontractors and their agents and employees and separate contractors (if any) and their subcontractors' agents and employees, for damages caused by fire or other perils to the extent covered by insurance provided under paragraphs 5.6 and 5.7, inclusive, or any other property

insurance applicable to the Work, except such rights as they may have to the proceeds of such insurance held by OWNER as trustee. OWNER shall require similar written waivers from each separate contractor, and CONTRACTOR shall require similar written waivers from each Subcontractor (in accordance with paragraph 6.8 as applicable); each such waiver will be in favor of all other parties enumerated in this paragraph 5.10.

Receipt and Application of Proceeds:

5.11. Any insured loss under the policies of insurance required by paragraphs 5.6 and 5.7 shall be adjusted with CONTRACTOR and made payable to CONTRACTOR as trustee for the insured, as their interests may appear, subject to the requirements of paragraph 5.12. CONTRACTOR shall deposit in a separate account any money so received, and shall distribute it in accordance with such agreement as the parties in interest may reach. If no other special agreement is reached the damaged Work shall be repaired or replaced, the moneys so received applied on account thereof and the Work and the cost thereof covered by an appropriate Change Order.

5.12. CONTRACTOR as trustee shall have power to adjust and settle any loss with the insurers unless one of the parties in interest shall object in writing within fifteen days after the occurrence of loss to CONTRACTOR's exercise of this power. If such objection be made, CONTRACTOR as trustee shall make settlement with the insurers in accordance with such agreement as the parties in interest may reach. If required in writing by any party in interest, CONTRACTOR as trustee shall upon the occurrence of an insured loss, give bond for the proper performance of his duties.

Acceptance of Bonds and Insurance:

5.13. If OWNER has any objection to the coverage afforded by or other provisions of the Bonds or Insurance required to be purchased and maintained by CONTRACTOR in accordance with Article 5 on the basis of non-conformance with the Contract Documents, OWNER shall so notify CONTRACTOR in writing within ten days after receipt of the certificates (or other evidence requested) required by paragraph 2.6. CONTRACTOR shall provide to OWNER such additional information in respect of insurance provided as OWNER may reasonably request. If CONTRACTOR does not purchase or maintain all of the Bonds and Insurance required of CONTRACTOR by the Contract Documents, CONTRACTOR shall notify OWNER in writing of such failure to purchase prior to the start of the Work, or such failure to maintain prior to any change in the required coverage. Without prejudice to any other right or remedy, OWNER may elect to obtain equivalent Bonds or Insurance to protect OWNER's interests at the expense of CONTRACTOR, and a Change Order shall be issued to adjust the Contract Price accordingly.

Partial Utilization - Property Insurance:

5.14. If OWNER finds it necessary to occupy or use a portion or portions of the Work prior to Substantial Completion of all the Work, such use or occupancy may be accomplished in accordance with paragraph 14.7; provided that no such use or occupancy shall commence before the insurers providing the property insurance have acknowledged notice thereof and in writing effected the changes in coverage necessitated thereby. The insurers providing the property

insurance shall consent by endorsement on the policy or policies that the property insurance shall not be canceled or lapse on account of any such partial use of occupancy.

ARTICLE 6 - CONTRACTOR'S RESPONSIBILITIES

Supervision and Superintendence:

6.1. CONTRACTOR shall supervise and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents. CONTRACTOR shall be solely responsible for the means, methods, techniques, sequences and procedures of construction. CONTRACTOR shall be responsible to see that the finished Work complies accurately with the Contract Documents.

6.2. CONTRACTOR shall keep on the Work at all times during its progress a competent resident superintendent, who shall not be replaced without written notice to OWNER except under extraordinary circumstances. The superintendent will be CONTRACTOR's representative at the site and shall have authority to act on behalf of CONTRACTOR. All communications given to the superintendent shall be as binding as if given to CONTRACTOR.

Materials and Equipment:

6.3. All materials and equipment installed in the Work shall be of good quality and new, except as otherwise provided in the Contract Documents. If required by ENGINEER, CONTRACTOR shall furnish satisfactory evidence (including reports of required tests) as to the kind and quality of materials and equipment.

Equipment manufacturers/suppliers must agree to OWNER'S terms of purchase. In no event will OWNER accept terms of sale that limit OWNER'S ability to reasonably recover in the event of equipment failure/defect such as, but not limited to; mandatory arbitration clauses, venue of court proceedings and applicable law outside of Volusia County, Florida, or damage limitations that preclude recovery for failed or defective equipment that would be less than full compensation for OWNER's loss.

6.4. All materials and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned in accordance with the instructions of the applicable manufacturer, fabricator, supplier or distributor, except as otherwise provided in the Contract Documents.

Concerning Subcontractors:

6.5. CONTRACTOR shall not employ any Subcontractor or other person or organization (including those who are to furnish the principal items of materials or equipment), whether initially or as a substitute, to which OWNER may have any reasonable objection. CONTRACTOR shall submit with his Bid in writing the names, mailing addresses, and work classifications of all Subcontractors proposed for the Work. The failure to list all Subcontractors proposed for the Work

may result in the Bid being rejected as incomplete and nonresponsive. A Subcontractor or other person or organization identified in writing to OWNER by CONTRACTOR prior to the Notice of Award and not objected to in writing by OWNER prior to the Notice of Award will be deemed acceptable to OWNER. Acceptance of any Subcontractor, other person or organization of OWNER shall not constitute a waiver of any right of OWNER to reject defective Work. If OWNER after due investigation has reasonable objection to any Subcontractor, other person or organization proposed by CONTRACTOR after the Notice of Award because the qualifications and experience of the Subcontractor, other person or organization indicate that he cannot perform or provide work, materials or equipment which will perform the specified functions, CONTRACTOR shall submit an acceptable substitute and the Contract Price shall be increased or decreased by the difference in cost occasioned by such substitution, and an appropriate Change Order may be issued. CONTRACTOR shall not be required to employ any Subcontractor, other person or organization to which CONTRACTOR has any reasonable objection. Whether objections are reasonable shall be determined as specified in paragraph 9.8.

6.6. CONTRACTOR shall be fully responsible for all acts and omissions of his Subcontractors and of persons and organizations directly or indirectly employed by them and of persons and organizations for whose acts any of them may be liable to the same extent that CONTRACTOR is responsible for the acts and omissions of persons directly employed by CONTRACTOR. Nothing in the Contract Documents shall create any contractual relationship between OWNER and any Subcontractor or other person or organization having a direct contact with CONTRACTOR, nor shall it create any obligation on the part of OWNER to pay or to see to the payment of any moneys due any Subcontractor or other person or organization, except as may otherwise be required by law. OWNER may furnish to any Subcontractor or other person or organization, to the extent practicable, evidence of amounts paid to CONTRACTOR on account of specific Work done.

6.7. The divisions and sections of the Specifications and the identifications of any Drawings shall not control CONTRACTOR in dividing the Work among Subcontractors or delineating the Work to be performed by any specific trade.

6.8. All Work performed for CONTRACTOR by a Subcontractor will be pursuant to an appropriate agreement between CONTRACTOR and the Subcontractor which specifically binds the Subcontractor to the applicable terms and conditions of the Contract Documents for the benefit of OWNER and contains waiver provisions as required by paragraph 5.10. CONTRACTOR shall pay each Subcontractor an appropriate share of any insurance proceeds received by CONTRACTOR on account of losses under policies issued pursuant to paragraphs 5.6 through 5.8.

6.9. Neither the OWNER nor the ENGINEER will undertake to settle any differences between CONTRACTOR and his Subcontractors or between Subcontractors.

Patent Fees and Royalties:

6.10. CONTRACTOR shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design,

process, product or device which is the subject of patent rights or copyrights held by others. If a particular invention, design, process, product or device is specified in the Contract Documents for use in the performance of the Work and if to the actual knowledge of OWNER its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights shall be disclosed by OWNER in the Contract Documents. CONTRACTOR shall **indemnify** and **hold harmless** OWNER and anyone directly or indirectly employed by either of them from and against all claims, damages, losses and expenses (including attorneys' fees) arising out of any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product or device not specified in the Contract Documents, and shall defend all such claims in connection with any alleged infringement of such rights. OWNER will promptly notify CONTRACTOR of any such allegation of infringement of such rights.

Safety and Protection:

6.11. Precaution shall be exercised at all times by the CONTRACTOR for the protection of all persons, including employees, and property. The CONTRACTOR shall comply with all laws, regulations or ordinances related to safety and health, shall make special effort to detect hazardous conditions, and shall take prompt action where loss control/safety measures are reasonably expected. The OWNER may order work to be stopped if conditions exist that present on immediate danger to persons or property. The CONTRACTOR acknowledges that such stoppage will not shift responsibility for any damages from the CONTRACTOR to the OWNER.

6.12. CONTRACTOR be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. CONTRACTOR shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss to:

6.12.1. All employees on the Work and other persons who may be affected thereby.

6.12.2. All the Work and all materials or equipment to be incorporated therein, whether in storage on or off the site, and

6.12.3. Other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of construction.

CONTRACTOR shall comply with all applicable laws, ordinances, rules, regulations and orders of any public body having jurisdiction for the safety of persons or property or to protect them from damage, injury or loss; and shall erect and maintain all necessary safeguards for such safety and protection. CONTRACTOR shall notify owners of adjacent property and utilities when prosecution of the Work may affect them. All damage, injury or loss to any property referred to in paragraph 6.12.2 or 6.12.3 caused, directly or indirectly, in whole or in part, by CONTRACTOR, any Subcontractor or anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, shall be remedied by CONTRACTOR. CONTRACTOR's duties and responsibilities for the safety and protection of the Work shall continue until such time as all

the Work is completed and ENGINEER has issued a notice to OWNER and CONTRACTOR in accordance with paragraph 14.12 that the Work is acceptable.

6.13. CONTRACTOR shall designate a responsible member of his organization at the site whose duty shall be the prevention of accidents. This person shall be CONTRACTOR's superintendent unless otherwise designated in writing by CONTRACTOR to OWNER.

Emergencies:

6.14. In emergencies affecting the safety or protection of persons or the Work or property at the site or adjacent thereto, CONTRACTOR, without special instruction or authorization from OWNER, is obligated to act to prevent threatened damage, injury or loss. CONTRACTOR shall give OWNER prompt written notice of any significant changes in the Work or deviations from the Contract Documents caused thereby.

Indemnification/Hold Harmless:

6.15 The parties recognize that the CONTRACTOR is an independent contractor. The CONTRACTOR agrees to assume liability for and indemnify, hold harmless, and defend the CITY, its commissioners, mayor, officers, employees, agents, and attorneys of, from, and against all liability and expense, including reasonable attorney's fees, in connection with any and all claims, demands, damages, actions, causes of action, and suits in equity of whatever kind or nature, including claims for personal injury, property damage, equitable relief, or loss of use, to the extent caused by the negligence, recklessness, or intentionally wrongful conduct of the CONTRACTOR, its agents, officers, contractors, subcontractors, employees, or anyone else utilized by the CONTRACTOR in the performance of this Agreement. The CONTRACTOR's liability hereunder shall include all attorney's fees and costs incurred by the CITY in the enforcement of this indemnification provision. This includes claims made by the employees of the CONTRACTOR against the CITY and the CONTRACTOR hereby waives its entitlement, if any, to immunity under Section 440.11, Florida Statutes. Such obligations contained in this provision shall survive termination of this Agreement and shall not be limited by the amount of any insurance required to be obtained or maintained under this Agreement.

In the event of any claim arising out of the paragraph above, the CITY will elect, in its sole discretion, that either:

- 1) The CONTRACTOR assume control of the defense of any claim asserted by a third party against the CITY and, in connection with such defense, shall appoint lead counsel, in each case at the CONTRACTOR's expense. The CITY shall have the right, at its option, to participate in the defense of any third party claim, without relieving CONTRACTOR of any of its obligations hereunder. If the CONTRACTOR assumes control of the defense of any third party claim in accordance with this paragraph, the CONTRACTOR shall obtain the prior written consent of the CITY before entering into any settlement of such claim. If the CONTRACTOR assumes control of the defense and the CONTRACTOR has failed or is failing to prosecute or defend vigorously the

third party claim, the CITY may assume the control of the defense as provided by sub (2); or

- 2) The CITY will assume control of the defense of any third party claim, but CONTRACTOR shall pay the fees of counsel retained by the CITY and all expenses, including experts' fees.

Each party shall cooperate, and cause its agents to cooperate, in the defense or prosecution of any third party claim and shall furnish or cause to be furnished such records and information, and attend such conferences, discovery proceedings, hearings, trials, or appeals, as may be reasonably requested in connection therewith. It is further the specific intent and agreement of said parties that all the Contract Documents on this Project are hereby amended to include the foregoing indemnification. CONTRACTOR expressly agrees that it will not claim, and waives any claim, that this indemnification violates Section 725.06, Florida Statutes or is unenforceable pursuant to Section 725.06, Florida Statutes.

Nothing contained in the foregoing indemnification shall be construed as a waiver of any immunity or limitation of liability the CITY may have under the doctrine of sovereign immunity or Section 768.28, Florida Statutes.

Precaution shall be exercised at all times by the CONTRACTOR for the protection of all persons, including employees and property. The CONTRACTOR shall comply with all applicable laws, regulation and ordinances related to safety and health, shall make special efforts to detect hazardous conditions, and shall take prompt action with loss control/safety measures as are reasonably necessary. The CITY may order work to be stopped if conditions exist that present an immediate danger to persons or property. The CONTRACTOR acknowledges that such work stoppage will not shift responsibility for any damages from the CONTRACTOR to the CITY.

Payment on Behalf of OWNER:

6.16. The CONTRACTOR agrees to pay on behalf of the OWNER, and to pay the cost of the OWNER's legal defense, as may be selected by the OWNER, for all claims described in 6.15 Indemnification/Hold Harmless. Such payment on behalf of the OWNER shall be in addition to any and all other legal remedies available to the OWNER and shall not be considered to be the OWNER's exclusive remedy.

ARTICLE 7 - WORK BY OTHERS

7.1. OWNER may perform additional work related to the Project by itself, or have additional work performed by utility service companies, or let other direct contracts therefor which shall contain General Conditions similar to these. CONTRACTOR shall afford the utility service companies and the other contractors who are parties to such direct contracts (or OWNER, if OWNER is performing the additional work with OWNER's employees) reasonable opportunity for the introduction and storage of materials and equipment and the execution of work, and shall properly connect and coordinate his Work with theirs.

7.2. If any part of CONTRACTOR's Work depends for proper execution or results upon the work of any such other contractor or utility service company (or OWNER), CONTRACTOR shall inspect and promptly report to ENGINEER in writing any patent or apparent defects or deficiencies in such work that render it unsuitable for such proper execution and results. CONTRACTOR's failure so to report shall constitute an acceptance of the work as fit and proper for integration with CONTRACTOR's Work except for latent or non-apparent defects and deficiencies in the other work.

7.3. If the performance of additional work by other contractors or utility service companies or OWNER was not noted in the Contract Documents, written notice thereof shall be given to CONTRACTOR prior to starting any such additional work. If CONTRACTOR believes that the performance of such additional work by OWNER or others involves additional expense to CONTRACTOR or requires an extension of the Contract Time, CONTRACTOR may make a claim therefor as provided in Articles 11 and 12.

7.4. Should any other contractor having, or who shall hereafter have, a contract with OWNER for the performance of work upon the site of the Work to be performed hereunder sustain any damage through any act or omission of CONTRACTOR hereunder or through any act or omission of any Sub-contractor of CONTRACTOR, CONTRACTOR agrees to reimburse such other contractor for all such damages and to indemnify, defend and hold OWNER harmless from all such claims.

ARTICLE 8 - OWNER'S RESPONSIBILITIES

8.1. OWNER shall issue all communications to CONTRACTOR through ENGINEER.

8.2. OWNER shall furnish the data required of OWNER under the Contract Documents promptly and shall make payments to CONTRACTOR promptly after they are due as provided in paragraphs 14.3 and 14.10.

8.3. OWNER's duties with respect to providing lands and easements and providing engineering surveys to establish reference points are set forth in paragraphs 4.1 and 4.4. Paragraph 4.2 refers to OWNER's identifying and making available to CONTRACTOR copies of reports of investigations and tests of subsurface and latent physical conditions at the site or otherwise affecting performance of the Work which have been relied upon by ENGINEER in preparing the Drawings and Specifications.

8.4. OWNER's responsibilities with respect to the purchase and maintenance of liability insurance are set forth in paragraph 5.5.

8.5. In connection with OWNER's rights to request changes in the Work in accordance with Article 10, OWNER (especially in certain instances as provided in paragraph 10.4) may execute Change Orders.

8.6. OWNER's responsibility with respect to certain inspections, tests and approvals is set forth in paragraph 13.4.

8.7. The provisions relative to the OWNER's right to stop Work or suspend Work are set forth in paragraphs 6.11, 13.10 and 15.1.

ARTICLE 9 - ENGINEER'S STATUS DURING CONSTRUCTION

9.1. ENGINEER will be OWNER's representative during the construction period. The authority of ENGINEER shall, under no circumstances, relieve CONTRACTOR from CONTRACTOR's responsibilities to perform the Work in accordance with this Contract.

Clarifications and Interpretations:

9.2. ENGINEER will issue with reasonable promptness such written clarifications or interpretations of the Contract Documents (in the form of Drawings or otherwise) as ENGINEER may determine necessary, which shall be consistent with or reasonably inferable from the overall intent of the Contract Documents. If CONTRACTOR believes that a written clarification or interpretation justifies an increase in the Contract Price or Contract Time, CONTRACTOR may make a claim therefor as provided in Article 11 or Article 12.

Rejecting Defective Work:

9.3. ENGINEER will have authority to disapprove or reject WORK which is defective, and will also have authority to require special inspection or testing of the Work as provided in paragraph 13.9, whether or not the Work is fabricated, installed or completed.

Change Orders and Payments:

9.4. In connection with ENGINEER's responsibilities as to Change Orders, see Articles 10, 11 and 12.

9.5. In connection with ENGINEER's responsibilities as to Applications for Payment, etc., see Article 14.

Project Representation:

9.6. ENGINEER may designate a Project Representative to assist ENGINEER in inspecting the performance of the Work. The duties, responsibilities and limitations of authority of any such Project Representative and assistants will be as provided in paragraphs 9.6.1 through 9.6.3.

9.6.1. General: Project Representative is ENGINEER's Agent. He shall have the authority to do anything which the ENGINEER could do. His dealings in matters pertaining to the on-site

work will in general be only with OWNER, ENGINEER and CONTRACTOR. His dealings with subcontractors will only be through or with the full knowledge of CONTRACTOR or his superintendent.

9.6.2. Duties and Responsibilities: Project Representative shall:

9.6.2.1. Schedules: Review the progress schedule, schedule of Shop Drawing submissions, schedule of values and other schedules prepared by CONTRACTOR and consult with ENGINEER concerning their acceptability.

9.6.2.2. Conferences: Attend preconstruction conferences.

9.6.2.3. Liaison: Serve as ENGINEER's liaison with CONTRACTOR, working principally through CONTRACTOR's superintendent, and assist him in understanding the intent of the Contract Documents. Assist in obtaining from OWNER additional details or information, when required at the job site for proper execution of the Work.

9.6.2.4. Shop Drawings and Samples: Receive and record date of receipt of Shop Drawings and samples which have been furnished by CONTRACTOR. Review the Shop Drawings for conformance with the information given in the Contract Documents. Provide office review and approval of Shop Drawings (as that term is defined in Article 1) and samples, the results of tests and inspections and other data which any contractor is required to submit, but only for conformance with the design concept of the project and compliance with the information given in the Contract Documents; determine the acceptability of substitute materials and equipment proposed by CONTRACTOR(S); and receive and review (for general content as required by the Specifications) maintenance and operating instructions, schedules, guarantees, bonds and certificates of inspection which are to be assembled by CONTRACTOR(S) in accordance with the Contract Documents.

9.6.2.5. Review of Work, Rejection of Defective Work, Inspections and Tests: Conduct on-site inspections of the Work in progress to assist ENGINEER in determining that the Project is proceeding in accordance with the Contract Documents and that completed Work will conform to the Contract Documents. Report to ENGINEER whenever he believes that any Work is unsatisfactory, faulty or defective or does not conform to the Contract Documents, or has been damaged, or does not meet the requirements of any inspections, tests or approvals required to be made; and advise ENGINEER when he believes Work should be corrected or rejected or should be uncovered for observation, or requires special testing or inspection. Verify that tests, equipment and systems start-ups and operating and maintenance instructions are conducted as required by the Contract Documents and in the presence of the required personnel, and that CONTRACTOR maintains adequate records thereof; observe, record and report appropriate details relative to the test procedures and start-ups.

9.6.2.6. Modifications: Consider and evaluate CONTRACTOR's suggestions for modifications in Drawings or Specifications and report them to ENGINEER with recommendations. Prepare change orders as required; he may, as OWNER's representative, require special inspection or testing of the work; he shall act as interpreter of the requirements of the Contract Documents, judge

of the performance thereunder by the parties thereto, and transmitter of clarification and interpretation of the Contract Documents. Process contract change orders to reflect final measured contract quantities and to reflect changes in the contract Drawings and Specifications.

9.6.2.7. Payment Requisitions: Based on his on-site observations and on his review of CONTRACTOR(S) applications for payment and the accompanying data and schedules, determine the amounts owed the CONTRACTOR(S). The ENGINEER will then approve in writing payments to CONTRACTOR(S) in such amounts; such approvals of payment will constitute a presentation to OWNER, based on such observations and review, that the Work has progressed to the point indicated and that, to the best of his knowledge, information and belief, the quality of the Work is in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning Project upon Substantial Completion, to the results of any subsequent tests called for in the Contract Documents, and to any qualifications stated in his approval).

9.6.2.8. Guarantees, Certificates, Maintenance and Operation Manuals: During the course of the Work verify that guarantees, certificates, maintenance and operation manuals and other data required to be assembled and furnished by CONTRACTOR are applicable to the items actually installed; and deliver this data to ENGINEER for his review prior to final acceptance of the Project.

9.6.2.9. Completion: Before ENGINEER issues a Certificate of Substantial Completion, submit to CONTRACTOR a list of observed items requiring correction. Conduct final inspection in the company of CONTRACTOR and prepare a final list of items to be corrected. Verify that all items on final list have been corrected and make recommendations to ENGINEER concerning acceptance.

9.6.3. Limitations of Authority: The Project Representative; shall not undertake any of the responsibilities of CONTRACTOR, subcontractors or CONTRACTOR's superintendent; shall not expedite Work for CONTRACTOR; shall not advise on or issue directions as to safety precautions and programs in connection with the Work; and shall not assist CONTRACTOR in maintaining up-to-date copies of Record Drawings.

Decisions on Disagreements:

9.7. ENGINEER will be the initial interpreter of the requirements of the Contract Documents and judge of the acceptability of the Work thereunder. Claims, disputes and other matters relating to the acceptability of the Work or the interpretation of the requirements of the Contract Documents pertaining to the execution and progress of the Work shall be referred initially to ENGINEER in writing with a request for a formal decision in accordance with this paragraph, which ENGINEER will render in writing within a reasonable time. Written notice of each such claim, dispute and other matter shall be delivered by the claimant to ENGINEER and the other party to the Agreement within fifteen days of the occurrence of the event giving rise thereto, and written supporting data will be submitted to ENGINEER and the other party within forty-five days of such occurrence unless ENGINEER allows an additional period of time to ascertain more accurate data. Failure to give the required notice constitutes a waiver of the claim.

9.8. The rendering of a decision by ENGINEER pursuant to paragraph 9.7 with respect to

any such claim, dispute or other matter (except any which have been waived by the making or acceptance of final payment as provided in paragraph 14.13) will be a condition precedent to any exercise by OWNER or CONTRACTOR of such rights or remedies as either may otherwise have under the Contract Documents or at law in respect of any such claim, dispute or other matter. If the Owner agrees to pay all or part of a claim for which notice was not timely made, such agreement shall not be deemed a waiver of the right to enforce notice requirements in connection with any other claim.

Limitations on ENGINEER's Responsibilities:

9.9. Neither ENGINEER's authority to act under this Article 9 or elsewhere in the Contract Documents nor any decision made by ENGINEER in good faith either to exercise or not exercise such authority shall give rise to any duty or responsibility of ENGINEER to CONTRACTOR, any Subcontractor, any manufacturer, fabricator, supplier or distributor, or any of their agents or employees or any other person performing any of the Work.

9.10. Whenever in the Contract Documents the terms "as ordered", "as directed", "as required", "as allowed" or terms of like effect or import are used, or the adjective "reasonable", "suitable", "acceptable", "proper" or "satisfactory" or adjectives of like effect or import are used, to describe requirements, decision, review or judgment of ENGINEER as to the Work, it is intended that such requirement, direction, review or judgment will be solely to evaluate the Work for compliance with the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective never indicates that ENGINEER shall have authority to supervise or direct performance of the Work or authority to undertake responsibility contrary to the provisions of paragraphs 9.11 or 9.12.

9.11. ENGINEER will not be responsible for CONTRACTOR's means, methods, techniques, sequences or procedures of construction, or the safety precautions and programs incident thereto, and ENGINEER will not be responsible for CONTRACTOR's failure to perform the Work in accordance with the Contract Documents.

9.12. ENGINEER will not be responsible for the acts or omissions of CONTRACTOR or of any Subcontractors, or of the agents or employees of any CONTRACTOR or Subcontractor, or of any other persons at the site or otherwise performing any of the Work.

ARTICLE 10 - CHANGES IN THE WORK

10.1. Without invalidating the Agreement, OWNER may, at any time or from time to time, order additions, deletions or revisions in the Work; these will be authorized by Change Orders. Upon receipt of a Change Order, CONTRACTOR shall proceed with the Work involved. All such Work shall be executed under the applicable conditions of the Contract Documents. If any Change Order causes an increase or decrease in the Contract Price or an extension or shortening of the Contract Time, an equitable adjustment will be made as provided in Article 11 or Article 12 on the basis of a claim made by either party.

10.2. ENGINEER may authorize minor changes in the Work not involving an adjustment in the Contract Price or the Contract Time, which are consistent with the overall intent of the Contract Documents. These may be accomplished by a Field Order and shall be binding on OWNER, and also on CONTRACTOR who shall perform the change promptly. If CONTRACTOR believes that a Field Order justifies an increase in the Contract Price or Contract Time, CONTRACTOR may make a claim therefor as provided in Article 11 or Article 12.

10.3. Additional Work performed without authorization of a Change Order will not entitle CONTRACTOR to an increase in the Contract Price or an extension of the Contract Time, except in the case of an emergency as provided in paragraph 6.14 and except as provided in paragraphs 10.2 and 13.9.

10.4. OWNER may execute appropriate Change Orders covering changes in the Work which are required by OWNER, or required because of unforeseen physical conditions or emergencies, or because of uncovering Work found not to be defective or as provided in paragraph 11.9, or because of any other claim of CONTRACTOR for a change in the Contract Time or the Contract Price which is recommended by ENGINEER.

10.5. If notice of any change affecting the general scope of the Work or change in the Contract Price is required by the provisions of any Bond to be given to the Surety, it will be CONTRACTOR's responsibility to so notify the Surety, and the amount of each applicable Bond shall be adjusted accordingly. CONTRACTOR shall furnish proof of such adjustment to OWNER.

ARTICLE 11 - CHANGE OF CONTRACT PRICE

11.1. The Contract Price constitutes the total compensation (subject to authorized adjustments) payable by OWNER to CONTRACTOR for performing the Work. All duties, responsibilities and obligations assigned to or undertaken by CONTRACTOR shall be at his expense without change in the Contract Price.

11.2. The Contract Price may only be changed by a Change Order. Any claim for an increase in the Contract Price shall be based on written notice delivered to ENGINEER within fifteen days of the occurrence of the event giving rise to the claim. Notice of the amount of the claim with supporting data shall be delivered within forty-five days of such occurrence unless ENGINEER allows an additional period of time to ascertain accurate cost data.

11.3. The value of any Work covered by a Change Order or of any claim for an increase or decrease in the Contract Price shall be determined in one of the following ways:

11.3.1. Where the Work involved is covered by unit prices contained in the Contract Documents, by application of unit prices to the quantities of the items involved (subject to the provisions of paragraph 11.9).

11.3.2. By mutual acceptance of a lump sum.

11.3.3. On the basis of the Cost of the Work (determined as provided in paragraphs 11.4 and 11.5) plus a Contractor's Fee for overhead and profit (determined as provided in paragraph 11.6).

Cost of the Work:

11.4. The term Cost of the Work means the sum of all costs necessarily incurred and paid by CONTRACTOR in the proper performance of the Work. Except as otherwise may be agreed to in writing by OWNER, such costs shall be in amounts no higher than those prevailing in the locality of the Project, shall include only the following items and shall not include any of the costs itemized in paragraph 11.5:

11.4.1. Payroll costs for employees in the direct employ of CONTRACTOR in the performance of the Work under schedules of job classifications agreed upon in advance by OWNER and CONTRACTOR. Payroll costs for employees not employed full time on the Work shall be apportioned on the basis for their time spent on the Work. Payroll cost shall include, but not be limited to, salaries and wages plus the cost of fringe benefits which shall include social security contributions, unemployment, excise and payroll taxes, workers' compensation, health and retirement benefits, sick leave, vacation and holiday pay applicable thereto. Such employees shall include superintendents and foremen at the site.

11.4.2. Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and manufacturers' field services required in connection therewith. All cash discounts shall accrue to CONTRACTOR unless OWNER deposits funds with CONTRACTOR with which to make payments, in which case the cash discounts shall accrue to OWNER. All trade discounts, rebates and refunds, and all returns from sale of surplus materials and equipment shall accrue to OWNER and CONTRACTOR shall make provisions so that they may be obtained.

11.4.3. Payments made by CONTRACTOR to the Subcontractors for Work performed by Subcontractors. CONTRACTOR shall obtain competitive bids from Subcontractors acceptable to CONTRACTOR and shall deliver such bids to OWNER who will then determine which bids will be accepted. If a subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work Plus a Fee, the Subcontractor's Cost of the Work shall be determined in the same manner as CONTRACTOR's Cost of the Work. All subcontracts shall be subject to the other provisions of the Contract Documents insofar as applicable.

11.4.4. Costs of special consultants (including, but not limited to, engineers, architects, testing laboratories, surveyors, lawyers and accountants) employed for services specifically related to the Work. Any such special consultants covered by the Consultants' Competitive Negotiations Act (Section 287.055, Florida Statutes), shall be selected in accordance with such Act.

11.4.5. Supplemental costs including the following:

11.4.5.1. The proportion of necessary transportation, travel and subsistence expenses of

CONTRACTOR's employees incurred in discharge of duties connected with the Work.

11.4.5.2. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office and temporary facilities at the site and hand tools not owned by the workmen, which are consumed in the performance of the Work, and cost less market value of such items used but not consumed which remain the property of CONTRACTOR.

11.4.5.3. Rentals of all construction equipment and machinery and the parts thereof whether rented from CONTRACTOR or others in accordance with rental agreements approved by OWNER, and the costs of transportation, loading, unloading, installation, dismantling and removal thereof - all in accordance with terms of said rental agreements. The rental of any such equipment, machinery or parts shall cease when the use thereof is no longer necessary for the Work.

11.4.5.4. Sales, use or similar taxes related to the Work, and for which CONTRACTOR is liable, imposed by any government authority.

11.4.5.5. Deposits lost for causes other than CONTRACTOR's negligence, royalty payments and fees for permits and licenses.

11.4.5.6. Losses and damages (and related expenses), not compensated by insurance or otherwise, to the Work or otherwise sustained by CONTRACTOR in connection with the execution of the Work, provided they have resulted from causes other than the negligence of CONTRACTOR, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses shall include settlements made with the written consent and approval of OWNER. No such losses, damages and expenses shall be included in the Cost of the Work for the purpose of determining Contractor's Fee. If, however, any such loss or damage requires construction and CONTRACTOR is placed in charge thereof, CONTRACTOR shall be paid for services a fee proportionate to that stated in paragraph 11.6.2.

11.4.5.7. The cost of utilities, fuel and sanitary facilities at the site.

11.4.5.8. Minor expenses such as telegrams, long distance telephone calls, telephone service at the site, expressage and similar petty cash items in connection with the Work.

11.4.5.9. Cost of premiums for additional Bonds and insurance required because of changes in the Work.

11.5. The term Cost of the Work shall not include any of the following:

11.5.1. Payroll costs and other compensation of CONTRACTOR's officers, executives, principals (of partnership and estimators, lawyers, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks and other personnel employed by CONTRACTOR whether at the site or in his principal or a branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in subparagraph 11.4.1. - all of which are to be considered administrative costs covered by the Contractor's Fee.

11.5.2. Expenses of CONTRACTOR's principal and branch offices other than CONTRACTOR's office at the site.

11.5.3. Any part of CONTRACTOR's capital expenses, including interest on CONTRACTOR's capital employed for the Work and charges against CONTRACTOR for delinquent payments.

11.5.4. Cost of premiums for all Bonds and for all insurance whether or not CONTRACTOR is required by the Contract Documents to purchase and maintain the same (except for additional Bonds and insurance required because of changes in the Work).

11.5.5. Costs, including damages, due to the negligence of intentional acts of CONTRACTOR, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective Work, disposal of materials or equipment wrongly supplied and making good any damage to property.

11.5.6. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in paragraph 11.4.

Contractor's Fee:

11.6. The Contractor's Fee allowed to CONTRACTOR for overhead and profit shall be determined as follows:

11.6.1. A mutually acceptable fixed fee; or if none can be agreed upon,

11.6.2. A fee based on the following percentages of the various portions of the Cost of the Work;

11.6.2.1. For costs incurred under paragraphs 11.4.1. and 11.4.2., the Contractor's Fee shall be ten percent,

11.6.2.2. For costs incurred under paragraph 11.4.3., the Contractor's Fee shall be five percent; and if a subcontract is on the basis of Cost of the Work Plus a Fee, the maximum allowable to the Subcontractor as a fee for overhead and profit shall be ten percent, and

11.6.2.3. No fee shall be payable on the basis of costs itemized under paragraphs 11.4.4., 11.4.5. and 11.5.

11.7. The amount of credit to be allowed by CONTRACTOR to OWNER for any such change which results in a net decrease in costs, will be the amount of the actual net decrease. When both additions and credits are involved in any one change, the combined overhead and profit shall be figured on the basis of the net increase, if any.

Adjustment of Unit Prices:

11.8. Whenever the cost of any Work is to be determined pursuant to paragraphs 11.4. and 11.5., CONTRACTOR will submit in form acceptable to ENGINEER an itemized cost breakdown together with supporting data.

11.9. Where the quantity of Work with respect to any item that is covered by a unit price differs materially and significantly from the quantity of such Work indicated in the Contract Documents, an appropriate Change Order may be issued on recommendation of ENGINEER to adjust the unit price.

ARTICLE 12 - CHANGE OF THE CONTRACT TIME

12.1. The Contract Time may only be changed by a written Change Order. Any claim for an extension in the Contract Time shall be based on written notice delivered to ENGINEER within fifteen days of the occurrence of the event giving rise to the claim. Notice of the extent of the claim with supporting data shall be delivered within forty-five days of such occurrence unless ENGINEER allows an additional period of time to ascertain more accurate data. All claims for adjustment in the Contract Time shall be determined by ENGINEER if OWNER and CONTRACTOR cannot otherwise agree. Any change in the Contract Time resulting from any such claim shall be incorporated in a written Change Order.

12.2. The Contract Time will be extended in an amount equal to time lost due to delays beyond the control of CONTRACTOR if a claim is made therefor as provided in paragraph 12.1. Such delays shall include, but not be limited to, acts or neglect by OWNER or others performing additional Work as contemplated by Article 7, or fires, floods, labor disputes, epidemics, abnormal weather conditions, or acts of God.

12.3. All time limits stated in the Contract Documents are of the essence of the Agreement. The CONTRACTOR shall not be entitled to any claim for damages on account of hindrances or delays from any cause whatsoever, but if occasioned by an act of God, or by any act or omission on the part of the Owner, such act, hindrance or delay may entitle the CONTRACTOR to an extension of time in which to complete the work which shall be determined by the ENGINEER, provided that the CONTRACTOR will give notice in writing of the cause of such act, hindrance or delay within ten (10) days after its occurrence.

ARTICLE 13 - WARRANTY AND GUARANTEE; TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK

Warranty and Guarantee:

13.1. CONTRACTOR warrants and guarantees to OWNER that all Work will be in accordance with the Contract Documents and will not be defective. Prompt notice of all defects shall be given to CONTRACTOR. All defective Work, whether or not in place, may be rejected, corrected or accepted as provided in this Article 13.

Access to Work:

13.2. ENGINEER and ENGINEER's representatives, other representatives of OWNER, testing agencies and governmental agencies with jurisdictional interests will have access to the Work at reasonable times for their observation, inspection and testing. CONTRACTOR shall provide proper and safe conditions for such access.

Tests and Inspections:

13.3. CONTRACTOR shall give ENGINEER timely notice of readiness of the Work for all required inspections, tests or approvals.

13.4. If any law, ordinance, rule, regulation, code, or order of any public body having jurisdiction requires any Work (or part thereof) to specifically be inspected, tested or approved, CONTRACTOR shall assume full responsibility therefor, pay all costs in connection therewith and furnish ENGINEER the required certificates of inspection, testing or approval. CONTRACTOR shall also be responsible for and shall pay all costs in connection with any inspection or testing required in connection with OWNER's acceptance of a manufacturer, fabricator, supplier, or distributor of materials or equipment proposed to be incorporated in the Work, or of materials or equipment submitted for approval prior to CONTRACTOR's purchase thereof for incorporation in the Work. The cost of all other inspections, tests and approvals required by the Contract Documents shall be paid by OWNER (unless otherwise specified).

13.5. All inspections, tests or approvals other than those required by law, ordinance, rule, regulation, code or order of any public body having jurisdiction shall be performed by organizations acceptable to OWNER and CONTRACTOR.

13.6. If any Work that is to be inspected, tested or approved is covered without written concurrence of ENGINEER, it must, if requested by ENGINEER, be uncovered for observation. Such uncovering shall be at CONTRACTOR's expense unless CONTRACTOR has given ENGINEER timely notice of CONTRACTOR's intention to cover such Work and ENGINEER has not acted with reasonable promptness in response to such notice.

13.7. Neither observations by ENGINEER, nor inspections, tests or approvals by others shall relieve CONTRACTOR from his obligations to perform the Work in accordance with the Contract Documents, and in all events in no less than a workmanlike manner.

Uncovering Work:

13.8. If any Work is covered contrary to the written request of ENGINEER, it must, if requested by ENGINEER, be uncovered for ENGINEER's observation and replaced at CONTRACTOR's expense.

13.9. If ENGINEER considers it necessary or advisable that covered Work be observed by ENGINEER or inspected or tested by others, CONTRACTOR, at ENGINEER's request, shall

uncover, expose or otherwise make available for observation, inspection or testing as ENGINEER may require, that portion of the Work in question, furnishing all necessary labor, material and equipment. If it is found that such Work is defective, CONTRACTOR shall bear all the expenses of such uncovering, exposure, observation, inspection and testing and of satisfactory reconstruction, including compensation for additional professional services, and an appropriate deductive Change Order shall be issued. If, however, such Work is not found to be defective, CONTRACTOR shall be allowed an increase in the Contract Price or an extension of the Contract Time, or both, directly attributable to such uncovering, exposure, observation, inspection, testing and reconstruction if he makes a claim therefor as provided in Articles 11 and 12.

Owner May Stop the Work:

13.10. If the Work is defective, or CONTRACTOR fails to supply sufficient skilled workmen or suitable materials or equipment, OWNER may order CONTRACTOR to stop the Work, or any portion thereof, until the cause of such order has been eliminated; however, this right of OWNER to stop the Work shall not give rise to any duty on the part of OWNER to exercise this right for the benefit of CONTRACTOR or any other party.

Correction or Removal of Defective Work:

13.11. If required by ENGINEER, CONTRACTOR shall promptly, without cost to OWNER and as specified by ENGINEER, either correct any defective Work, whether or not fabricated, installed or completed, or, if the Work has been rejected by ENGINEER, remove it from the site and replace it with nondefective Work.

One Year Correction Period:

13.12. If within one year after the date of Substantial Completion or such longer period of time as may be prescribed by law or by the terms of any applicable special guarantee required by the Contract Documents, any Work is found to be defective, CONTRACTOR shall promptly, without cost to OWNER and in accordance with OWNER's written instructions, either correct such defective Work, or, if it has been rejected by OWNER, remove it from the site and replace it with nondefective Work. If CONTRACTOR does not promptly comply with the terms of such instructions, or in an emergency where delay would cause serious risk of loss or damage, OWNER may have the defective Work corrected or the rejected Work removed and replaced, and all direct and indirect costs of such removal and replacement, including compensation for additional professional services, shall be paid by CONTRACTOR.

Acceptance of Defective Work:

13.13. If, instead of requiring correction or removal and replacement of defective Work, OWNER prefers to accept it, OWNER may do so. In such case, if acceptance occurs prior to ENGINEER's recommendation of final payment, a Change Order shall be issued incorporating the necessary revisions in the Contract Documents, including appropriate reduction in the Contract

Price; or, if the acceptance occurs after such recommendation, an appropriate amount shall be paid by CONTRACTOR to OWNER.

OWNER May Correct Defective Work:

13.14. If CONTRACTOR fails, within a reasonable time after written notice of ENGINEER to proceed, to correct and to correct defective Work or to remove and replace rejected Work as required by ENGINEER in accordance with paragraph 13.11., or if CONTRACTOR fails to perform the Work in accordance with the Contract Documents (including any requirements of the progress schedule), OWNER may, after seven days' written notice to CONTRACTOR, correct and remedy any such deficiency. In exercising his rights under this paragraph OWNER shall proceed expeditiously. To the extent necessary to complete corrective and remedial action, OWNER may exclude CONTRACTOR from all or part of the site, take possession of all or part of the Work, and suspend CONTRACTOR's services related thereto, take possession of CONTRACTOR's tools, appliances, construction equipment and machinery at the site and incorporate in the Work all materials and equipment stored at the site or for which OWNER has paid CONTRACTOR but which are stored elsewhere. CONTRACTOR shall allow OWNER, OWNER's representatives, agents and employees such access to the site as may be necessary to enable OWNER to exercise his rights under this paragraph. All direct and indirect costs of OWNER in exercising such rights shall be charged against CONTRACTOR in an amount verified by ENGINEER, and a Change Order shall be issued incorporating the necessary revisions in the Contract Documents and a reduction in the Contract Price. Such direct and indirect costs shall include, in particular but without limitation, compensation for additional professional services required and all costs of repair and replacement of work of others destroyed or damaged by correction, removal or replacement of CONTRACTOR's defective Work. CONTRACTOR shall not be allowed an extension of the Contract Time because of any delay in performance of the Work attributable to the exercise by OWNER of OWNER's rights hereunder.

ARTICLE 14 - PAYMENTS TO CONTRACTOR AND COMPLETION

Application for Progress Payment:

14.1. At least ten days before each progress payment falls due (but not more often than once a month), CONTRACTOR shall submit to ENGINEER for review an Application for Payment filled out and signed by CONTRACTOR covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents and also as ENGINEER may reasonably require. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the site or at another location agreed to in writing, the Application for Payment shall also be accompanied by such data, satisfactory to OWNER, as will establish OWNER's title to the material and equipment and protect OWNER's interest therein, including applicable insurance. Each subsequent Application for Payment shall include an affidavit of CONTRACTOR stating that all previous progress payments received on account of the Work have been applied to discharge in full all of CONTRACTOR's obligations reflected in prior Applications for Payment. The amount of retainage with respect to progress payments will be as stipulated in the Form of Agreement,

Article 5.

CONTRACTOR's Warranty of Title:

14.2. CONTRACTOR warrants and guarantees that title to all Work, materials and equipment covered by an Application for Payment, whether incorporated in the project or not, will pass to OWNER at the time of payment free and clear of all liens, claims, security interests and encumbrances (hereafter in these General Conditions referred to as "Liens").

Review of Applications for Progress Payment:

14.3. ENGINEER will, within ten days after receipt of each Application for Payment, either indicate in writing a recommendation of payment, or return the Application to CONTRACTOR indicating in writing ENGINEER's reasons for refusing to recommend payment. In the latter case, CONTRACTOR may make the necessary corrections and resubmit the Application. OWNER shall, within ten days of presentation to him of the ENGINEER's recommendation of payment, pay CONTRACTOR the amount recommended.

14.4. ENGINEER may refuse to recommend the whole or any part of any payment if, in his opinion, it would be incorrect to make such representations to OWNER. He may also refuse to recommend any such payment, or, because of subsequently discovered evidence or the results of subsequent inspections or tests, nullify any such payment previously recommended to such extent as may be necessary in ENGINEER's opinion to protect OWNER from loss because:

14.4.1. The Work is defective, or completed Work has been damaged requiring correction or replacement;

14.4.2. Written claims have been made against OWNER or Liens have been filed in connection with the Work;

14.4.3. The Contract Price has been reduced because of Modifications;

14.4.4. OWNER has been required to correct defective Work or complete the Work in accordance with paragraph 13.14;

14.4.5. Of CONTRACTOR's unsatisfactory prosecution of the Work in accordance with the Contract Documents, including failure to clean up;

14.4.6. Of liquidated damages payable by CONTRACTOR; or

14.4.7. CONTRACTOR's failure to make payment to Subcontractors, or for labor, materials or equipment.

Substantial Completion:

14.5. When CONTRACTOR considers the entire Work ready for its intended use CONTRACTOR shall, in writing to ENGINEER, certify that the entire Work is substantially

complete and request that ENGINEER issue a certificate of Substantial Completion. Within a reasonable time thereafter, CONTRACTOR and ENGINEER shall make an inspection of the Work to determine the status of completion. If ENGINEER does not consider the Work substantially complete, ENGINEER will notify CONTRACTOR in writing giving his reasons therefor. If ENGINEER considers the Work substantially complete, ENGINEER will prepare a certificate of Substantial Completion which shall fix the date of Substantial Completion. There shall be attached to the certificate a list of items to be completed or corrected before final payment.

14.6. OWNER shall have the right to exclude CONTRACTOR from the Work after the date of Substantial Completion, but OWNER shall allow CONTRACTOR reasonable access to complete or correct items on the list.

Partial Utilization:

14.7. Use by OWNER of completed portions of the Work may be accomplished prior to Substantial Completion of all the Work subject to the following:

14.7.1. OWNER at any time may request CONTRACTOR in writing to permit OWNER to use any part of the Work which OWNER believes to be substantially complete and which may be so used without significant interference with construction of the other parts of the Work. If CONTRACTOR agrees, CONTRACTOR will certify to ENGINEER that said part of the Work is substantially complete and request ENGINEER to issue a certificate of Substantial Completion for that part of the Work. Within a reasonable time thereafter CONTRACTOR and ENGINEER shall make an inspection of that part of the Work to determine its status of completion. If ENGINEER does not consider that part of the Work to be substantially complete, ENGINEER will notify CONTRACTOR in writing giving his reasons therefor. If ENGINEER considers that part of the Work to be substantially complete, ENGINEER will execute and deliver to CONTRACTOR a certificate to that effect, fixing the date of Substantial Completion as to that part of the Work, attaching thereto a list of items to be completed or corrected before final payment. OWNER shall have the right to exclude CONTRACTOR from any part of the Work which ENGINEER has so certified to be substantially complete, but OWNER shall allow CONTRACTOR reasonable access to complete or correct items on the list.

14.7.2. In lieu of the issuance of a certificate of Substantial Completion as to part of the Work, OWNER may take over operation of a facility constituting part of the Work whether or not it is substantially complete if such facility is functionally and separately usable; provided that prior to any such takeover, OWNER and CONTRACTOR have agreed as to the division of responsibilities between OWNER and CONTRACTOR for security, operation, safety, maintenance, correction period, heat, utilities and insurance with respect to such facility.

14.7.3. No occupancy of part of the Work or taking over of operations of a facility will be accomplished prior to compliance with the requirements of paragraph 5.14 with regard to property insurance.

Final Inspection:

14.8. Upon written notice from CONTRACTOR that the work is complete, ENGINEER will make a final inspection with CONTRACTOR and will notify CONTRACTOR in writing of all particulars in which this inspection reveals that the Work is incomplete or defective. CONTRACTOR shall immediately take such measures as are necessary to remedy such deficiencies.

Final Application for Payment:

14.9. After CONTRACTOR has completed all such corrections to the satisfaction of ENGINEER and delivered all maintenance and operating instructions, schedules, guarantees, Bonds, certificates of inspection, marked-up record documents and other documents - all as required by the Contract Documents, and after ENGINEER has indicated that the Work is acceptable (subject to the provisions of paragraph 14.13), CONTRACTOR may make application for final payment following the procedure for progress payments. The final Application for Payment shall be accompanied by all documentation called for in the Contract Documents and such other data and schedules as ENGINEER may reasonably require, together with complete and legally effective releases or waivers (satisfactory to OWNER) of all Liens arising out of or filed in connection with the Work. In lieu thereof and as approved by OWNER, CONTRACTOR may furnish receipts or releases in full; an affidavit of CONTRACTOR that the releases and receipts include all labor, services, material and equipment for which a Lien could be filed, and that all payrolls, material and equipment bills, and other indebtedness connected with the Work for which OWNER or his property might in any way be responsible, have been paid or otherwise satisfied; and consent of the Surety, if any, to final payment. If any Subcontractor, manufacturer, fabricator, supplier or distributor fails to furnish a release or receipt in full, CONTRACTOR may furnish a Bond or other collateral satisfactory to OWNER to indemnify OWNER against any Lien.

Final Payment and Acceptance:

14.10. If, on the basis of ENGINEER's observation of the Work during construction and final inspection, and ENGINEER's review of the final Application for Payment and accompanying documentation - all as required by the Contract Documents, ENGINEER is satisfied that the Work has been completed and CONTRACTOR has fulfilled all of his obligations under the Contract Documents, ENGINEER will, within ten days after receipt of the final Application for Payment, indicate in writing his recommendation of payment and present the Application for payment. Thereupon ENGINEER will give written notice to CONTRACTOR that the Work is acceptable subject to the provisions of paragraph 14.13. Otherwise, ENGINEER will return the Application to CONTRACTOR, indicating in writing the reasons for refusing to recommend final payment, in which case CONTRACTOR shall make the necessary corrections and resubmit the Application. If the Application and accompanying documentation are appropriate as to form and substance, OWNER shall, within thirty days after receipt thereof pay CONTRACTOR the amount recommended by ENGINEER.

14.11. If, through no fault of CONTRACTOR, final completion of the Work is significantly delayed and if ENGINEER so confirms, OWNER shall, upon receipt of CONTRACTOR's final Application for Payment and recommendation of ENGINEER, and without terminating the Agreement, make payment of the balance due for that portion of the Work fully completed and

accepted. If the remaining balance to be held by OWNER for Work not fully completed or corrected is less than the retainage stipulated in the Agreement, and if Bonds have been furnished as required in paragraph 5.1, the written consent of the Surety to the payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by CONTRACTOR to ENGINEER with the Application for such payment. Such payment shall be made under the terms and conditions governing final payment, except that it shall not constitute a waiver of claims.

CONTRACTOR's Continuing Obligation:

14.12. CONTRACTOR's obligation to perform and complete the Work in accordance with the Contract Documents shall be absolute. Neither recommendation of any progress or final payment by ENGINEER, nor the issuance of a certificate of Substantial Completion, nor any payment by OWNER to CONTRACTOR under the Contract Documents, nor any use or occupancy of the Work or any part thereof by OWNER, nor any act of acceptance by OWNER nor any failure to do so, nor the issuance of a notice of acceptability by ENGINEER pursuant to paragraph 14.10, nor any correction of defective Work by OWNER shall constitute an acceptance of Work not in accordance with the Contract Documents or a release of CONTRACTOR's obligation to perform the Work in accordance with the Contract Documents.

Waiver of Claims:

14.13. The making and acceptance of final payment shall constitute:

14.13.1. A waiver of all claims by OWNER against CONTRACTOR, except claims arising from unsettled or unfiled Liens, from defective Work appearing after final inspection pursuant to paragraph 14.8 or from failure to comply with the Contract Documents or the terms of any special guarantees specified therein; however, it shall not constitute a waiver by OWNER of any rights in respect of CONTRACTOR's continuing obligations under the Contract Documents; and

14.13.2. A waiver of all claims by CONTRACTOR against OWNER other than those previously made in writing and still unsettled or unfiled.

ARTICLE 15 - SUSPENSION OF WORK AND TERMINATION

Owner May Suspend Work:

15.1. OWNER may, at any time and without cause, suspend the Work or any portion thereof for a period of not more than ninety days by notice in writing to CONTRACTOR and Surety which shall fix the date on which Work shall be resumed. CONTRACTOR shall resume the Work on the date so fixed. CONTRACTOR may be allowed an increase in the Contract Price or an extension of the Contract Time, or both, directly attributable to any suspension of work at OWNER's request if he makes a claim therefor as provided in Articles 11 and 12.

Owner May Terminate:

- 15.2. Upon the occurrence of any one or more of the following events:
- 15.2.1. If CONTRACTOR is adjudged a bankrupt or insolvent;
 - 15.2.2. If CONTRACTOR makes a general assignment for the benefit of creditors;
 - 15.2.3. If a trustee or receiver is appointed for CONTRACTOR or for any of CONTRACTOR's property;
 - 15.2.4. If CONTRACTOR files a petition to take advantage of any debtor's act, or to reorganize under the bankruptcy or similar laws;
 - 15.2.5. If CONTRACTOR repeatedly fails to supply sufficient skilled workmen or suitable materials or equipment;
 - 15.2.6. If CONTRACTOR repeatedly fails to make prompt payments to Subcontractors or for labor, materials or equipment;
 - 15.2.7. If CONTRACTOR violates any laws, ordinances, rules, regulations or orders of any public body having jurisdiction;
 - 15.2.8. If CONTRACTOR disregards the authority of ENGINEER; or
 - 15.2.9. If CONTRACTOR otherwise violates in any substantial way any provisions of the Contract Documents.

OWNER may after giving CONTRACTOR and his Surety seven (7) days' written notice, terminate the services of CONTRACTOR, exclude CONTRACTOR from the site and take possession of the Work and of all CONTRACTOR's tools, appliances, construction equipment and machinery at the site and demand the Surety to finish the Work by whatever methods he may deem expedient but subject to the approval of OWNER. The Surety shall use the same to the full extent they could be used by CONTRACTOR (without liability to CONTRACTOR for trespass or conversion), incorporate in the Work all materials and equipment stored at the site or for which OWNER has paid CONTRACTOR but which are stored elsewhere, and finish the Work as OWNER may require. In such case CONTRACTOR shall not be entitled to receive any further payment until the Work is finished. If the unpaid balance of the Contract Price exceeds the direct and indirect costs of completing the Work, including compensation for additional professional services, such excess shall be paid to CONTRACTOR. If such costs exceed such unpaid balance, CONTRACTOR and the Surety shall be jointly and severally liable to pay the difference to OWNER. Such costs incurred by OWNER shall be incorporated in a Change Order, but in finishing the Work OWNER shall not be required to accept the lowest figure for the Work to be performed by the Surety.

15.3. Where CONTRACTOR's services have been so terminated by OWNER, the termination shall not affect any rights of OWNER against CONTRACTOR or the Surety then existing or which may thereafter accrue. Any retention or payment of moneys due CONTRACTOR by OWNER will

not release CONTRACTOR from liability.

15.4. Upon seven (7) days' written notice to CONTRACTOR and Surety, OWNER may, without cause and without prejudice to any other right or remedy, elect to abandon the Work and terminate the Agreement. In such case, CONTRACTOR shall be paid for all Work executed, any expense sustained plus reasonable termination expenses.

CONTRACTOR May Stop Work or Terminate:

15.5. If, through no act or fault of CONTRACTOR, the Work is suspended for a period of more than ninety (90) days by OWNER or under an order of court or other public authority, or ENGINEER fails to act on any Application for Payment within thirty (30) days after it is submitted, or OWNER fails for thirty days to pay CONTRACTOR any sum finally determined to be due, the CONTRACTOR may, upon seven (7) days' written notice to OWNER, terminate the Agreement and recover from OWNER payment for all Work executed and any expense sustained plus reasonable termination expenses. In addition and in lieu of terminating the Agreement, if ENGINEER has failed to act on an Application for Payment or OWNER has failed to make any payment as aforesaid, CONTRACTOR may upon seven (7) days' notice to OWNER stop the Work until payment of all amounts then due. The provisions of this paragraph shall not relieve CONTRACTOR of his obligations to carry on the Work in accordance with the progress schedule and without delay during disputes and disagreements with OWNER.

ARTICLE 16 - MISCELLANEOUS

Giving Notice:

16.1. Whenever any provision of the Contract Documents requires the giving of written notice it shall be deemed to have been validly given if delivered in person to the individual or to a member of the firm or to an officer of the corporation for whom it is intended, or if delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to the giver of the notice.

Computation of Time:

16.2. When any period of time is referred to in the Contract Documents by days, it shall be computed to exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or on a day made a legal holiday by the law of the applicable jurisdiction, such day shall be omitted from the computation.

General:

16.3. The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto, and, in particular but without limitation, the warranties, guarantees and obligations imposed upon CONTRACTOR by paragraphs 6.15, 13.1, 13.11, 13.14, 14.2, and 15.2, and all of the rights and remedies available to OWNER thereunder,

shall be in addition to, and not in limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by law or contractor, by special warranty or guarantee or by other provisions of the Contract Documents, and the provisions of this paragraph shall be as effective as if repeated specifically in the contract Documents in connection with each particular duty, obligation, right and remedy to which they apply. All representations, warranties and guarantees made in the Contract Documents shall survive final payment and termination or completion of this Agreement.

Liquidated Damages:

16.4. OWNER and CONTRACTOR recognize that time is of the essence to complete this Project and that OWNER will suffer financial loss if the Work is not substantially complete within the time specified in Agreement, plus any extensions thereof allowed in accordance with Article 12. They also recognize the delays, expense and difficulties involved in proving in a legal proceeding the actual loss suffered by OWNER if the Work is not substantially complete on time. Accordingly, instead of requiring any such proof, OWNER and CONTRACTOR agree that as liquidated damages for delay (but not as a penalty) CONTRACTOR shall pay OWNER the amount stated in the Contract for each day that expires after the time specified in the Contract for Substantial Completion until the Work is substantially complete. After Substantial Completion, if CONTRACTOR shall neglect, refuse or fail to complete the remaining Work within the time specified in the Contract or any proper extension thereof granted by OWNER, CONTRACTOR shall pay the OWNER an amount equal to all actual expenses incurred by the OWNER as a direct result of the CONTRACTOR'S negligence, refusal, or failure to so complete the remaining Work. In the event the CONTRACTOR is terminated or abandons the Work prior to the scheduled date for final completion, the CONTRACTOR may be liable for both liquidated damages attributable to delay and for excess completion costs.

Reports of Investigations and Tests of Subsurface and Latent Physical Conditions:

16.5. Reports of investigations and tests of subsurface and latent physical conditions at the site or otherwise affecting cost, progress or performance of the work which have been relied upon by ENGINEER in preparing the Drawings and Specifications are as listed in the Supplementary Conditions. OWNER will make such reports available for inspection to any Bidder or copies may be obtained from the ENGINEER by the Bidder at reproduction cost. These reports are not guaranteed as to accuracy or completeness, nor are they part of the Contract Documents.

Performance of Work by CONTRACTOR:

16.6. Contract Assignment. The successful bidder (or bidders) will be required to perform the work as a prime contractor. CONTRACTOR shall not sublet, sell, transfer, assign or otherwise dispose of the contract or any portion thereof, or of his right, title, or interest therein. CONTRACTOR shall perform on the site and with his own organization work equivalent to not less than fifty (50%) percent of the total dollar value of the work to be performed under this contract except that work designated in the Supplementary Conditions as specialty work may be performed by subcontractors and the cost of any such specialty work so performed by subcontracts may be deducted from the total contract amount before computing the amount of work required to

be performed by CONTRACTOR with his own organization.

Limitation of Remedy and Liability:

16.7 Contractor and Owner expressly waive any claim for consequential damages against the other including but not limited to, a waiver of claims for diminished bonding capacity, loss of financing, loss of business reputation, lost profits on other projects or other lost opportunity damage claims.

Contractor expressly agrees that any claim (tort, contract, claim in equity, or otherwise) by Contractor for damages against Owner shall not exceed the total amount of the contract price, less any amounts actually paid to the Contractor by the Owner (or by an insurer of the Owner).

All liability of the City allegedly resulting from, arising out of or connected with this Agreement, or from the performance or breach thereof, shall terminate three years from the termination of this Agreement.

Waiver of Right to Jury Trial:

16.8 THE PARTIES HEREBY KNOWINGLY, VOLUNTARILY AND INTENTIONALLY WAIVE ANY RIGHT WHICH ANY PARTY MAY HAVE TO TRIAL BY JURY IN RESPECT OF ANY PROCEEDING, LITIGATION OR COUNTERCLAIM BASED ON, OR ARISING OUT OF, UNDER OR IN CONNECTION WITH THIS AGREEMENT OR ANY COURSE OF CONDUCT, COURSE OF DEALING, STATEMENTS (WHETHER VERBAL OR WRITTEN) OR ACTIONS OF ANY PARTY. IF THE SUBJECT MATTER OF ANY LAWSUIT IS ONE IN WHICH THE WAIVER OF JURY TRIAL IS PROHIBITED, NO PARTY TO THIS AGREEMENT SHALL PRESENT AS A NON-COMPULSORY COUNTERCLAIM IN ANY SUCH LAWSUIT ANY CLAIM BASED ON, OR ARISING OUT OF, UNDER OR IN CONNECTION WITH THIS AGREEMENT. FURTHERMORE, NO PARTY TO THIS AGREEMENT SHALL SEEK TO CONSOLIDATE ANY SUCH ACTION IN WHICH A JURY TRIAL CANNOT BE WAIVED.

END OF SECTION

SECTION 00800
SUPPLEMENTARY CONDITIONS

The following supplements modify, change, delete from, or add to the General Conditions of the Construction Contract (Section 00700). Where any article of the General Conditions is modified or any paragraph, subparagraph or clause thereof is modified or deleted by these supplements, the unaltered provisions of that article, paragraph, subparagraph or clause shall remain in effect.

ARTICLE 16 - MISCELLANEOUS

Section 16.5 – Reports of Investigations and Test of Subsurface and Latent Physical Conditions

Add the following subparagraph:

- 16.5.1 The list of reports of investigations and tests of subsurface and latent physical conditions as referred to in General Conditions Section 16.5 are as follows:

None.

Add the following:

16.7 Minimum Requirements for the provision and maintenance of Payment and Performance Bonds, and Contractor's Insurance

In accordance with Resolution 2021-144 as it presently exists or may hereafter change, or applicable state, federal or local law, whichever is stricter, the following minimum requirements have been established:

A. Payment and Performance Bonds

1. Except as otherwise provided herein, the Contractor shall, prior to beginning performance, deliver to the City, and the City shall record in the public records of Volusia County, Florida, the Contractor's Payment and Performance Bond in an amount equal to the full amount of the Contract.
2.
 - (a) Payment and Performance Bonds shall not be required for any contract except those which are for the construction of a public building, for the prosecution and completion of a public work (as described in Section 180.06, **Florida Statutes**, as amended from time to time) or for repairs upon a public building or public work (as described in Section 180.06, **Florida Statutes**, as amended from time to time).
 - (b) With respect to those Contracts for which Payment and Performance Bonds are otherwise required:
 - i. Unless the City Manager, or designee, determines such Bond to be necessary to protect the interests of the City, no Contractor shall be

required to provide a Payment and Performance Bond for any Contract which is for \$25,000.00 or less.

- ii. Upon the request of the contractor, good cause shown by the Contractor, and a determination that the public health, safety and welfare will be sufficiently protected, the City Commission may exempt the contractor from the requirement of providing a Payment and Performance Bond for any Contract which is for more than \$25,000.00 but is less than \$200,000.00.
3. The Payment and Performance Bond shall list the Contractor as Principal and be issued by a surety insurer authorized to do business in Florida as a surety and listed as an acceptable surety in the Federal Register.
4. The Payment and Performance Bond shall be executed pursuant to Section 255.05, **Florida Statutes**, and be in a form substantially similar to the form set forth in Section 255.05(3), **Florida Statutes**.
5. The Payment and Performance Bond shall specifically provide coverage for delay damages due to a default by the Contractor.
6. The Payment and Performance Bond shall not make the Contract part of the Bond agreement.
7. In lieu of the Payment and Performance Bond, the Contractor may file with the Finance Director of the City, in an amount equal to the full amount of the Contract, cash, a money order, a certified check, a cashier's check, an irrevocable letter of credit, or a security of a type listed in Part II, Chapter 625, **Florida Statutes**.
8. In the event the surety on any Payment and Performance Bond furnished by the Contractor is declared bankrupt or becomes insolvent, or its right to do business in the State of Florida is terminated, the Contractor shall, within five (5) working days thereafter, substitute another Payment and Performance Bond and surety acceptable to the City.
9. The Contractor is totally and solely responsible for keeping its surety informed as to the Base Contract Price as bid, significant changes in the Project Scope, and the overall progress and completion of the Project for the entire life of the Contract.
10. The payment and performance bond requirements stated herein above shall not be applicable to service-related contracts unless otherwise determined by the City Manager in order to protect the health, safety and welfare of the general public.

B. Contractual Provisions Relative to Risk Management

All contracts for any public works to be performed, and service-related contracts, for or on behalf of the City shall include at a minimum, the following, or substantially similar, provisions:

1. Hold Harmless and Indemnity

The Contractor agrees to assume liability for and indemnify, hold harmless, and defend the City, its commissioners, mayor, officers, employees, agents, and attorneys of, from, and against all liability and expense, including reasonable attorney's fees, in connection with any and all claims, demands, damages, actions, causes of action, and suits in equity of whatever kind or nature, including claims for personal injury, property damage, equitable relief, or loss of use, to the extent caused by the negligence, recklessness, or intentionally wrongful conduct of the Contractor, its agents, officers, contractors, subcontractors, employees, or anyone else employed or utilized by the Contractor in the performance of this Contract. The Contractor's liability hereunder shall include all attorney's fees and costs incurred by the City in the enforcement of this provision.

2. Payment on Behalf of City

The Contractor shall pay all costs of the City's legal defense, as may be selected by the City, for all claims described in the Hold Harmless paragraph.

Such payment on behalf of the City shall be in addition to any and all other legal remedies available to the City and shall not be considered to be the City's exclusive remedy.

3. Loss Control/Safety

Precaution shall be exercised at all times by the Contractor for the protection of all persons, including employees and property. The Contractor shall comply with all applicable laws, regulations and ordinances related to safety and health, shall make special efforts to detect hazardous conditions, and shall take prompt action when loss control/safety measures are reasonably necessary.

The City may order work to be stopped if conditions exist that present an immediate danger to persons or property. The Contractor acknowledges that such work stoppage will not shift responsibility for any damages from the Contractor to the City.

4. Service Bond

For Service-related contracts only, the City may require the Contractor to secure a service bond with a minimum \$25,000 coverage limit for the period of the service agreement. The service bond covers dishonest acts of the contractor's employees against the City. A copy of the bond shall be provided to the City when the agreement commences.

Service-related contracts include and are not limited to businesses providing janitorial, pest control, general repair, security, carpet cleaning, locksmith, temporary employment, painting, moving services or other contracts as determined in the discretion of the Risk Manager as necessary to minimize loss.

C. Contractor's Insurance

1. General

The Contractor, including service-related contractors, shall purchase and maintain for the entire life of the Project, including any and all approved time extensions, until its final acceptance by the City, such insurance as will protect the Contractor from claims under Workers' Compensation, disability benefit laws or other similar employee benefit laws; from claims for damages because of bodily injury, occupational sickness or disease, or death of Contractor's employees; from claims insured by usual or unusual injury liability coverage; from claims or injury to or destruction of tangible property and from claims insured by usual Commercial General Liability coverage. This includes loss of use resulting therefrom, any or all of which may arise out of the Contractor's operations under the Contract Documents, whether such operations be by the Contractor, by any Subcontractor, or by anyone directly or indirectly employed by any of them or for whose acts any of them may be legally liable. The Contractor's deductibles/self-insured retentions shall be disclosed to the City and may be disapproved by the City, and may be reduced or eliminated at the sole discretion of the City. The Contractor is responsible for the amount of any deductible or self-insured retention.

2. Types of Insurance and Limits of Liability

The insurance required herein shall be written for not less than any limits of liability specified and incorporated as part of the Contract Documents or as required by law, whichever is greater, and shall include and not limited to the following:

- (a)** Workers' Compensation Insurance in statutory limits for the State of Florida with Coverage B - Employer's Liability limits of not less than:

- \$100,000 Each Accident Bodily Injury by Accident
 - \$100,000 Each Employee Bodily Injury by Disease
 - \$500,000 Policy Limit Bodily Injury by Disease

Certificate of Exemptions. If the contractor has a State-issued Certificate of Exemption, the contractor may provide a copy in place of the requirement for coverage. However, if the contractor subcontracts or retains any other person or entity to perform under the contract, that person or entity must provide proof of workers' compensation insurance as required by law or provide a Certificate of Exemption.

It is the intent of the City that any individual who either contracts directly with the city or performs any work on behalf of any such contractor be covered by workers' compensation insurance or have a valid exemption from said coverage.

(If applicable to the Project, the policy must include benefits under the United States Longshoremen's and Harbor Workers' Act and the Jones Act coverage--all maritime coverage.)

- (b) Commercial General Liability Insurance shall be written on a coverage form as broad as Insurance Services Office (ISO) Form CG 00 01 11 85, or its successor form, including but not limited to the following coverage (any deviation shall be noted on the Certificates of Insurance):
- a. Premises, Operations, Products and Completed Operations
 - b. Owners' & Contractors' Protective
 - c. Products & Completed Operation
 - d. Explosion, Collapse & Underground Conditions
 - e. Blanket Contractual Liability
 - f. Personal Injury Liability
 - g. Broad Form Property Damage Endorsement, including Completed Operations
 - h. Independent Contractors
 - i. Watercraft--Owned and Non-Owned (if applicable, endorsement must be included in General Liability policy or a separate Protection & Indemnity Policy must be written)
 - j. Pollution Liability (if applicable)
 - k. Asbestos Abatement (if applicable)
 - l. Fire Damage Liability

Certain coverage outlined above may not be required if they do not relate to the Project, as may be determined at the sole discretion of the City.

Commercial General Liability Coverage shall be written on an occurrence basis and the limits shall be no less and not limited to the following amounts:

Limits (not less than)

\$1 Million Each Occurrence
\$2 Million General Aggregate
\$1 Million Aggregate Products & Completed Operations

NOTE: Commercial General Liability Coverage must be purchased on either a project basis (separate policy per contract) or an endorsement allocating an aggregate limit per location or specified project.

- (c) Automobile Liability Insurance is required if an Automobile(s) is used in the performance of the contract.

ISO Symbol 1 (Any Auto), or alternatively a combination of Symbol 2 (Owned Autos), Symbol 8 (Hired Autos), and Symbol 9 (Non-Owned Autos), and limits shall be no less than:

\$1 Million	Combined Single Limit for Bodily Injury and Property Damage
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- (d) Excess Liability

For contracts \$250,000 or greater an Excess Liability Policy of at least but not limited to \$1,000,000 in addition to the scheduled underlying policies for Commercial General Liability, Automobile Liability and Employers' Liability, the Contractor shall also provide an Excess Liability Policy with a maximum self-insured retention not to exceed \$25,0000 per occurrence.

- (e) Builder's Risk

Contractor shall purchase Builder's Risk Insurance for any contracts that are deemed to be vertical construction on an All-Risk policy, and shall also include coverage for wind, hail, and named storm. Limits of coverage shall be at least and not limited to the value of the project.

- (f) Professional Liability, Malpractice and/or Errors and Omissions
(N/A for construction contracts)

The Contractor shall purchase and maintain professional liability, malpractice, or errors or omissions insurance with minimum limits of \$1,000,000 per occurrence. If a claims made form of coverage is provided, the retroactive date of coverage shall be no later than the inception date of claims made coverage, unless the prior policy was extended indefinitely to cover prior acts. Coverage shall be extended beyond the policy year either by a supplemental extended reporting period (ERP) of as great a duration as is available, and with no less coverage and with reinstated aggregate limits,

or by requiring that any new policy provides a retroactive date no later than the inception date of claims made coverage.

D. Requirements for Certificates of Insurance

1. With the execution of the Contract Documents, the Contractor, including service-related contractors, shall provide certificates of such insurance acceptable to the City. These certificates and insurance policies shall contain an endorsement that the coverage under the policies will not be canceled, non-renewed or materially changed until at least thirty (30) days' prior written notice of such cancellation, non-renewal or change (except for nonpayment of premium, which shall be ten (10) days) and a copy of the cancellation endorsement signed by an authorized representative of the insurer, be given to the City. The contractor shall be required to replace any expired or canceled policies in like amount and coverage to the satisfaction of the City. The Certificate of Insurance shall be the ACORD FORM 25-S (7/90), or its successor form, and shall be made a part of the Contract Documents.
2. New certificates of insurance shall be provided to the City at least fifteen (15) days prior to coverage renewals.
3. If requested by the City, the contractor shall immediately furnish complete copies of the Contractor's insurance policies, forms and endorsements.
4. For Commercial General Liability coverage the Contractor shall, at the option of the City, provide an indication of the amount of claims payments or reserves chargeable to the aggregate amount of liability coverage. If the Commercial General Liability form of coverage includes an annual aggregate limitation on the amount of insurance provided, a separate project aggregate limit may be required by the City for the given contract.
5. If the Contractor fails to obtain and maintain for the life of the Project the insurance required hereby or to replace any such expired or canceled policy, the City may obtain and maintain such insurance with such company as it deems satisfactory. Any amounts expended by the City in payment of premiums for such insurance shall be deducted by the City from the amount due the Contractor for the work covered by the Contract.

E. Policies of Insurance

1. Except as otherwise provided in this Exhibit, all insurance policies shall be issued by insurers licensed to do business in the State of Florida on an admitted basis or which is an eligible surplus lines insurer in the State of Florida, and any such insuring company is required to have a minimum financial rating of (A-), in the latest edition of "Best's Key Rating Guide", published by A. M. Best Co., Inc., or

some similarly nationally recognized rating authority, including Standard and Poors and Demotech.

2. For Workers' Compensation coverage only, self-insurance programs are acceptable with a minimum A- rated reinsurance carrier; written confirmation is required.
3. All policies of insurance or certificates thereof referred to in this Exhibit shall be deposited with the City Clerk.
4. The City shall be named an Additional Insured on General Liability including products and completed operations and Automobile Liability policies of insurance and certificates thereof.

END OF SECTION

LIEN WAIVER

The undersigned does hereby certify that through _____, 20____, the undersigned has performed labor and/or furnished materials for the construction of the _____ located at _____ owned by _____, at a price of \$ _____, and in consideration of the payment to the undersigned of such sum, the receipt of which is hereby acknowledged, the undersigned does hereby release and waive all liens and claims to liens which the undersigned may have as a result of the performance of such labor and/or the furnishing of such materials, and that the undersigned has paid in full for all materials purchased by the undersigned in connection with such project and for all labor furnished by the undersigned in connection with such project. The undersigned further certifies that the last date on which the undersigned furnished such labor and/or materials was _____, 20____.

CONTRACTOR

By _____

DATE: _____

TITLE: _____

THE STATE OF _____

COUNTY OF _____

Before me, the undersigned authority, on this day personally appeared _____, the _____ of _____, a corporation, known to me to be the person and officer whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed, and as the act and deed of said corporation, and in capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this _____ day of _____, 20____.

Notary Public in and for
said County and State

DIVISION 1

GENERAL REQUIREMENTS

SECTION 01010 – SUMMARY OF WORK

PART 1 - GENERAL

1.01 DESCRIPTION OF WORK

Work Covered by Contract Documents:

Work under this Contract is described as: **LIFT STATION 4P IMPROVEMENTS
2026-04**

The work consists of: Convert an existing wet pit/dry pit sewage lift station to a submersible lift station by removing all the block and frame construction, and a portion of the cast-in-place concrete construction; removing all equipment and material from within the generator room; the HVAC equipment room; all piping material/equipment from within the dry pit pump area; all electrical equipment from within the electrical room; installing Owner-supplied new submersible pumps in the wet well; site improvements and restoration.

The Specification Divisions and Drawings are an integrated part of the Contract Documents and as such will not stand alone if used independently as individual Sections, Divisions or Drawings sheets.

The Specifications and Drawings establish minimum standards of quality for this project. They do not purport to cover all details entering into the design and construction of materials or equipment.

The CONTRACTOR is advised that the equipment arrangements as shown on the drawings may vary with different manufacturers and the CONTRACTOR is responsible at no cost to the OWNER for making the changes necessary to accommodate the specific equipment installed.

Omission of a specific item or component part of a system obviously necessary for the proper functioning of the system shall not relieve the CONTRACTOR of the responsibility of furnishing the item as part of the work at no additional cost to the OWNER.

Contracts:

Construct work under a single, unit price contract.

1.02 QUALITY ASSURANCE

Laws and Regulations:

The CONTRACTOR shall give all notices and comply with all laws, ordinances, rules and regulations applicable to the work. If the CONTRACTOR observes that the Specifications or Drawings are at variance therewith, the CONTRACTOR shall give the ENGINEER prompt written notice thereof, and any necessary changes shall be adjusted by an appropriate modification. If the CONTRACTOR performs any work knowing or having reason to know that it is contrary to such laws, ordinances, rules and regulations, and without such notice to ENGINEER, the CONTRACTOR shall bear all costs arising therefrom; however, it shall not be the CONTRACTOR's primary responsibility to make certain that the Specifications and Drawings are in accordance with such laws, ordinances, rules and regulations.

1.03 JOB CONDITIONS

Taxes:

The CONTRACTOR shall pay all sales, consumer, use and other similar taxes required to be paid by him in accordance with the law of the place of the project.

Permits and Business Tax Receipts:

The CONTRACTOR shall obtain and pay for all construction permits and business tax receipts. The OWNER shall assist the CONTRACTOR, when necessary, in obtaining such permits and business tax receipts. The CONTRACTOR shall provide OWNER with copies of all permits prior to commencing work.

The CONTRACTOR shall pay all charges of utility service companies for connections to the work, and the OWNER shall pay all charges of such companies for capital costs related thereto.

It shall be the responsibility of the CONTRACTOR to verify the existence of all necessary permits and business tax receipts prior to the start of work. The OWNER will obtain permits involving interagency agreements, i.e., State Highway Crossing Permits, Railroad Crossing Permits, and similar permits.

Fees for building permits and impact fees are the responsibility of CONTRACTOR.

The CONTRACTOR and each Subcontractor must be Registered with Volusia County or with the City of Ormond Beach. Requirements for registering a business are as follows:

STATE CERTIFIED CONTRACTORS

1. Register with Volusia County Contractor Licensing (386-248-8158)

OR

2. Provide City with:
Copy of local business tax receipt (where your business is located)
Copy of State License (if applicable)
Certificate of Insurance

For additional information regarding registration, permits or business tax receipts, please call: (386) 610-0540

Labor, Materials and Equipment:

The CONTRACTOR shall provide competent, suitably qualified personnel to survey and lay out the work and perform construction as required by the Contract Documents. The CONTRACTOR shall at all times maintain good discipline and order at the site. Except in connection with the safety or protection of persons or the work or property at the site or adjacent thereto, and except as otherwise indicated in the Supplementary Conditions, all work at the site shall be performed during regular working hours, and the CONTRACTOR will not permit overtime work or the performance of work on Saturday, Sunday or any legal holiday without the OWNER's written consent given after prior written notice to the ENGINEER.

Unless otherwise shown, the CONTRACTOR shall furnish all materials, equipment, labor transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water and sanitary facilities and all other facilities and incidentals necessary for the execution, testing, initial operation and completion of the work.

Revised 9/26/25

SUMMARY OF WORK

01010-2

LIFT STATION 4P IMPROVEMENTS

The CONTRACTOR shall be responsible for all materials furnished by him and shall replace at his own expense all such material found to be defective in manufacture or damaged in handling. This shall include the furnishing of all material and labor required for the replacement of installed material discovered defective prior to the final acceptance of the work.

Contractor Use of Premises:

The CONTRACTOR shall confine construction equipment, the storage of materials and equipment and the operations of workmen to areas permitted by law, ordinances, permits or the requirements of the Contract Documents, and shall not unreasonably encumber the premises with construction equipment or other materials or equipment.

The CONTRACTOR shall not enter upon private property for any purpose without first securing the permission of the property owner in writing and furnishing the ENGINEER with a copy of said permission. This requirement will be strictly enforced, particularly with regard to such vacant properties as may be utilized for material storage.

The CONTRACTOR shall conduct his work in such a manner as to avoid damage to adjacent private or public property. Any damage to existing structures or work of any kind, including permanent reference markers or property corner markers, or the interruption of utility service, shall be repaired or restored promptly at no additional expense to the OWNER.

The CONTRACTOR shall preserve and protect all existing vegetation such as trees, shrubs and grass on or adjacent to the site which do not reasonably interfere with the construction, as determined by the ENGINEER. The CONTRACTOR will be responsible for all unauthorized cutting or damaging of trees and shrubs, including damage due to careless operation of equipment, stockpiling of materials or tracking of grass by equipment. The CONTRACTOR will be liable for, or will be required to replace or restore at no additional expense to the OWNER, all vegetation not protected or preserved as required herein that may be destroyed or damaged. The CONTRACTOR will not be required to move or remove any utilities except as specifically required by the Drawings and Specifications.

During the progress of the work, the CONTRACTOR shall keep the premises free from accumulations of waste materials, rubbish and other debris resulting from work. At the completion of the work, the CONTRACTOR shall remove all waste materials, rubbish and debris from and about the premises as well as all tools, appliances, construction equipment and machinery, and surplus materials, and shall leave the site clean and ready for occupancy by the OWNER. The CONTRACTOR shall restore to their original condition those portions of the site not designated for alteration by the Contract Documents.

The CONTRACTOR shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall the CONTRACTOR subject any part of the work or adjacent property to stresses or pressures that will endanger it.

Subsurface Reports:

None.

Notification of Construction:

The CONTRACTOR shall notify, in writing, all residents and businesses adjacent to the project work area of pending construction no later than 48 hours prior to commencement of actual construction. Copies of the written Notice shall be provided to the ENGINEER for approval of wording prior to public distribution.

Revised 9/26/25

SUMMARY OF WORK

01010-3

Notification of Street Closure:

The CONTRACTOR is required to obtain permission from the City Engineer prior to initiating street closures.

In the event a street closure is required, the CONTRACTOR shall notify, in writing, all emergency services and agencies, residents and businesses directly effected by any partial or full street closure caused by the construction no later than 48 hours prior to actual closure.

Below is a list of the agencies that are required to be notified in the event of a street closure:

<u>Agency:</u>	<u>Contact phone number:</u>
EVAC Ambulance Service	(386) 252-4911
Ormond Beach City Hall	(386) 610-0400
Ormond Beach Fire Dept. Administration	(386) 229-7090
Ormond Beach Police Dept.	(386) 229-7120
Ormond Beach Public Works Department	(386) 610-0700
Ormond Beach Postmaster (US Postal Service)	(386) 676-0693
Volusia County School Board - Transportation	(386) 258-4677
Volusia County VOTRAN	(386) 756-7496

If a **County** or **State Road** is to be closed, add the following agencies to the list:

Volusia County Department of Public Works	(386) 239-6535
Volusia County Emergency Management	(386) 254-1500
Volusia County Fire Services	(386) 254-4657
Florida Highway Patrol Dispatch	(407) 737-2200

If the closure will last longer than 5 days, the CONTRACTOR shall also notify the general public of such closures by placing an advertisement in the "Area" section of the local newspaper no later than 48 hours prior to the closure. The advertisement shall include information describing the extent of the closure (i.e. between which streets; detour routes, etc.), the date the closure will begin, and estimated date the road will be reopened. Provide a copy of the proposed notification, for approval by the ENGINEER, before placing the advertisement.

The CONTRACTOR shall maintain full compliance with the traffic regulations found in Paragraph 1.06, Section 01500 of this Contract.

Contractor's Hours of Operation:

Except in the event of an emergency, no work shall be done between the hours of 7:00 P.M. and 7:00 A.M., or on Saturdays and Sundays. If the proper and efficient execution of the work requires operations during the night or on week-ends, the written permission of the ENGINEER shall be obtained prior to starting such items of the work.

PART 2- PRODUCTS

(Not Applicable)

PART 3- EXECUTION

(Not Applicable)

END OF SECTION

Revised 9/26/25

SUMMARY OF WORK

01010-4

LIFT STATION 4P IMPROVEMENTS

SECTION 01025 – MEASUREMENT AND PAYMENT

PART 1 – GENERAL

1.01 DESCRIPTION OF WORK

- A. This section defines the method which will be used to determine the quantities of work performed or materials supplied and establishes the basis upon which payment will be made.

1.02 ESTIMATED QUANTITIES

- A. Where quantities are shown, they are approximate and are given only as a basis of calculation upon which the award of the Contract is to be made. OWNER or ENGINEER do not assume any responsibility for the final quantities, nor shall CONTRACTOR claim misunderstanding because of such estimate of quantities. Final payment will be made only for the satisfactorily completed quantity of each item.

1.03 MEASUREMENT STANDARDS

- A. All work completed under the Contract shall be measured according to United States Standard Methods.

1.04 METHOD OF MEASUREMENT

- A. Measurement of Length: Unless otherwise specified for the particular items involved, all measurements of distance for items to be paid for on the basis of length shall be taken horizontally or vertically.
- B. Measurement of Area: In the measurement of items paid for on the basis of area of finished work, the lengths and/or widths to be used in the calculations shall be the actual dimensions measured along the surface of the completed work within the neat lines shown or designated. At intersections, the measurement used for length of side area will be measured from the outside edge of the width allowed along the main trench.

1.05 PAYMENT

- A. Lump Sum Items: Where payment for items is shown to be paid on a lump sum basis, no separate payment will be made for any item of work required to complete the lump sum item within the limits of work shown or specified.
- B. Unit Price Items: Where payment for items is shown to be paid on a unit price basis, separate payment will be made for the items of work described herein and listed on the Bid Form. Any related work not specifically listed, but required for satisfactory completion of the work, shall be considered to be included in the scope of the appropriately listed work items.

1.06 COSTS INCLUDED IN PAYMENT ITEMS

- A. No separate payment will be made for the following items, and the cost of such work shall be included in the applicable pay items of work:
 - 1. Clearing and grubbing (including disposal of material).

2. Trench excavation, including necessary pavement removal and removal of vegetative surfaces.
3. Rental and installation of dewatering equipment and disposal of surplus water.
4. Structural fill, backfill, and grading.
5. Replacement of unpaved roadways, grass and shrubbery plots, unless otherwise noted.
6. Cleanup.
7. Foundation and borrow materials, except as hereinafter specified.
8. Testing and placing system in operation.
9. Any material and equipment required to be installed and utilized for tests.
10. Pipe, structures, pavement replacement, restoration and/or appurtenances included within the limits of lump sum work, unless otherwise shown.
11. Appurtenant work as required for a complete and operable system.
12. Furnishing adequate sanitary facilities for workers.
13. Supporting existing utilities during construction.
14. Concrete encasement.
15. Shoring, sheeting, and worksite safety.
16. Field offices.
17. Job signs.
18. Power.
19. Maintaining the existing quality of service during construction.
20. Bonds and insurance.

- B. Clean-up: CONTRACTOR'S attention is called to the fact that cleanup is considered a part of the work of construction. No payment will be made until cleanup is essentially complete.
- C. Work outside of Authorized Limits: No payment shall be made for work constructed outside the authorized limits of work.

1.07 APPLICATIONS FOR PAYMENT

- A. Applications for payment shall be prepared by the CONTRACTOR and submitted to the ENGINEER in accordance with the schedule established by the Conditions of the Contract and the Agreement.
- B. The Applications for Payment shall be submitted in the number and form established by the ENGINEER at the Preconstruction Conference. The form shall be completely filled out and executed by an authorized representative of the CONTRACTOR. Supporting data such as schedules of stored materials shall be attached to each copy of the application.

1.08 CHANGE ORDER PROCEDURE

- A. As defined in the General Conditions, a Change Order is a written order to the CONTRACTOR signed by the OWNER authorizing an addition, deletion or revision in the Work, or an adjustment in the Contract Price or the Contract Time which is issued after the execution of the Agreement.
- B. The following procedures shall be used in processing Change Orders:
 1. For Additions to the Work: The OWNER shall issue a written order to the CONTRACTOR directing him to accomplish the additional work. The CONTRACTOR shall review the order and if he feels that the additional work

entitles him to additional payment or additional time, he may submit a claim as prescribed in the Conditions of the Contract.

2. For Deletions from the Work: The OWNER shall issue a written order to the CONTRACTOR directing him to make the change. If the OWNER feels that the Contract price should be reduced as a result of the change, the OWNER shall make a claim for the reduction as provided in the Conditions of the Contract.
3. Cost of the changes in the work shall be determined in accordance with the requirements spelled out in the Conditions of the Contract. Modifications to incorporate the changes in cost will be made as the amount of any change is determined.

PART 2 –PRODUCTS (Not Applicable)

PART 3 – EXECUTION

3.01 BID ITEMS

General

BASE BID

Bid Item No. 1 – Mobilization/Demobilization

Definition. Mobilization shall be the preparatory work and operations in mobilizing for beginning work on the project, including, but not limited to, those operations necessary for the movement of personnel, equipment, supplies and incidentals to the project site, and for the establishment of temporary offices, buildings, safety equipment and first aid supplies, sanitary and other facilities, as required by the Contract Documents and applicable laws and regulations. The costs of bonds, required insurance, and any other preconstruction expense necessary for the start of the work, excluding the cost of construction materials, and permit fees, shall also be included in this item. Demobilization shall be the work of removing temporary facilities from the site.

Payment. Partial payments for this item will be made in accordance with the following schedule:

Percent of Original Contract Amount Earned	Allowable Percent of the Lump Sum Price for the Item
After Contract Execution	10
10	25
25	50
50	75
100	100

These payments will be subject to the standard retainage provided in the agreement. Payment of the retainage will be made after completion of the work and demobilization.

Bid Item No. 2 – Survey and Layout

Payment. Payment of the applicable lump sum price shall be full compensation for furnishing all plant, labor, materials and equipment necessary for the establishment of any temporary or permanent control during the extent of the project. Should any existing permanent control be disturbed during construction, the CONTRACTOR shall direct his licensed surveyor to replace the control at no additional cost to the OWNER.

Bid Item No. 3 – Erosion and Sedimentation Control

Payment. Payment of the applicable lump sum price shall be full compensation for furnishing all plant, labor, materials and equipment necessary to provide the required erosion and sedimentation control called out in the specifications and shown on the Detail Drawings of this Contract.

Bid Item No. 4 – Submit Certified “As-Built” Drawings

Payment. Payment of the applicable lump sum price shall be compensation for furnishing all plant, labor, materials and equipment necessary to submit the “as-built” Drawings, certified by a registered land surveyor or professional engineer. The CONTRACTOR’s attention is directed to Section 01720. Paragraph 1.04, which addresses the requirements for maintaining up to date “as-built” Drawings. Final payment will be withheld until an acceptable set of “As-Built” drawings are delivered and accepted by the ENGINEER and OWNER.

Bid Item No. 5 – Permit Fees and Allowances

Payment. An allowance has been established to reimburse costs associated with the building permit fees, inspections and related expenses. This will be paid at actual cost. Allowance can also be used to fund owner-approved items at actual cost plus 10%. Allowance shall only be used based upon prior written approval from the OWNER and ENGINEER. Any funds remaining in this Bid Item after the Contract is completed will remain with the OWNER.

Demolition and Relocation

Bid Item No. 6 – Remove Existing Odor Control Equipment, Concrete Slab and Wood Privacy Fence

Payment. Payment of the applicable lump sum price shall be full compensation for furnishing all plant, labor, materials and equipment necessary to completely remove the odor control equipment, including all above grade mechanical and electrical equipment; any buried piping/ductwork; the entire concrete slab and the wood privacy fence along the north and east sides of the equipment.

Bid Item No. 7 – Relocate Generator and Fuel Tank to New Location

Payment. Payment of the applicable lump sum price shall be full compensation for furnishing all plant, labor, materials and equipment necessary to relocate the existing generator and fuel tank to their new location shown on the site plan. This bid item shall also include a new concrete slab to support the generator, fuel tank and new day tank. The existing concrete slabs supporting the generator and fuel tank shall be removed as part of this Bid item.

Also included with this pay item shall be the cost for new fuel piping from the fuel tank to the day tank and from the day tank to the generator.

Bid Item No. 8 – Remove Generator Baffle Wall, Concrete Stairs, Metal Door, Retaining Wall and Handrail

Payment. Payment of the applicable lump sum price shall be full compensation for furnishing all plant, labor, materials and equipment necessary to remove the generator baffle wall, including support columns; the concrete stairs; remove the metal door on the westside of the building; remove the retaining wall; fill in the stairwell with clean, compacted sand and remove all handrail.

Bid Item No. 9 – Remove All Equipment, Material, Piping, Conduit, Wiring, Lighting and Ventilation Equipment from within the Generator Room, Electrical Room, Pump Pit Area and Area Above the Electrical Room

Payment. Payment of the applicable lump sum price shall be full compensation for furnishing all plant, labor, materials and equipment necessary to remove all the equipment and material from within the generator room, electrical room, pump pit area and area above the electrical room. Such equipment and material shall include the generator, which shall become the property of the Contractor; battery charger; generator shroud; generator silencer; day tank; fuel piping inside and outside the room; potable water piping; ventilation equipment; conduit/wiring; ladder; motor control center; automatic transfer switch; disconnect switches; circuit breakers; lighting; motors; ducting; electrical panels; piping; handrail; pumps; valves; discharge piping; a portion of the pump suction piping; sump pump and any other miscellaneous items located within the referenced areas.

Bid Item No. 10 – Remove All Building Material/Structure Above Elevation 13.00

Payment. Payment of the applicable lump sum price shall be full compensation for furnishing all plant, labor, materials and equipment necessary to remove the block structure above the original cast-in-place concrete lift station. This bid item shall include removal of the concrete block walls, louvers, roof rafters, roof sheathing, shingles, HVAC vents, hatch for pump removal, metal doors to generator room and any other structural elements that comprise the block structure built on top of the cast-in-place concrete lift station.

Bid Item No. 11 – Remove Cast-In Place Concrete Roof Slab and Walls Down to Elevation 13.00 and 9.50

Payment. Payment of the applicable lump sum price shall be full compensation for furnishing all plant, labor, materials and equipment necessary to saw cut and remove the concrete roof slab at elevation 17.00; remove the cast-in-place concrete north wall down to elevation 13.00 and remove the cast-in-place concrete west, south and east walls down to elevation 9.50. Also included in this bid item shall be the cost to fill in the pump pit area, with clean, compacted sand to elevation 13.00.

New Construction

Bid Item No. 12 – Construct New Asphalt Driveway

Payment. Payment of the applicable lump sum price shall be full compensation for furnishing all plant, labor, materials and equipment necessary to construct the asphalt driveway to the layout shown on the Drawings. The pavement cross-section shall follow that shown on the detail sheet.

Bid Item No. 13 – Furnish and Install New Generator Day Tank

Payment. Payment of the applicable lump sum price shall be full compensation for furnishing all plant, labor, materials and equipment necessary to furnish and install a new generator day tank to the location shown on the project site plan drawings. Any fuel piping included with the unit shall be installed per the manufacturer's instructions. Cost for new piping from the day tank to the fuel tank and generator is included in Bid Item No. 7. Removal of the existing concrete slab supporting the day tank shall be included in this pay item. The equipment shall receive a coating called out in Specification Section 09900 and 09901.

Bid Item No. 14 – Install Three (3) New Submersible Pumps

Payment. Payment of the applicable lump sum price shall be full compensation for furnishing all plant, labor, materials and equipment necessary to satisfactorily install the Owner-supplied submersible pumps.

Bid Item No. 15 – Furnish & Install Flygt Pump Control Panel and All Accessories

Payment. Payment of the applicable lump sum price shall be full compensation for furnishing all plant, labor, materials and equipment necessary to furnish and install a new pump control panel, pump discharge elbows, pump guide rails, upper guide rail brackets, mid-guide rail brackets, lifting chain/cable, three (3) base plates with anchors; floats, transducer and any other standard accessories that are part of the Flygt pump package. The three aluminum access hatches, with safety grating, shall be included with this Bid item.

Bid Item No. 16 – Construct New Cast-In Place Concrete at Lift Station

Payment. Payment of the applicable lump sum price shall be full compensation for furnishing all plant, labor, materials and equipment necessary to construct new cast-in-place concrete at the existing lift station site. Such payment shall include the walls and roof slab, with beams, of the wet well and the floor slab that will be used to support the discharge piping and support the outriggers of the City's boom/crane trucks.

Bid Item No. 17 – Furnish & Install New Ductile Iron Pump Discharge Piping, Fittings, Valves, ARV and Flow Meter

Payment. Payment of the applicable lump sum price shall be full compensation for furnishing all plant, labor, materials and equipment necessary to furnish and install all the ductile iron pipe and fittings that are located above grade and located within the wet well. Also, included in this Bid Item shall be the cost to furnish and install all valves, flow meter and air release valve that are located above grade; a pressure gauge; bypass suction line out of the wet well; stainless steel pipe supports and stand-off brackets for the pump discharge pipe and bypass suction line in the wet well; cost to construct concrete pipe supports; bypass connection fittings on the discharge piping; flanged coupling adapter installation; install 1" piping from the air release valve to inside the wet well; furnish and install the air intake vent located on the roof slab of the wet well; relocate the backflow preventer to the new location shown on the Drawings; furnish and install an aluminum hose rack located adjacent to the new easterly access hatch and core drill a 14" opening in the wet well east wall, insert a 2'-0" Long, 12" pipe sleeve, 12" cap and grout opening.

Bid Item No. 18 – Connection to Existing 10" Force Main

Payment. Payment of the applicable lump sum price shall be full compensation for furnishing all plant, labor, materials and equipment necessary to make a "cut-in" connection to the existing 10" force main. This Bid Item shall also include the cost to remove the existing bypass connection and to furnish and install 1-10" solid sleeve for the connection/removal work.

Bid Item No. 19 – Furnish & Install 10-inch Line Stop

Measurement. The quantity for payment shall be the actual number of line stops that are satisfactorily furnished and installed.

Payment. Payment of the applicable unit price shall be full compensation for furnishing all plant, labor, materials and equipment necessary to furnish and install the line stop at the location shown on the Drawings.

Bid Item No. 20– Furnish & Install Tapping Sleeve and Valve

Payment. Payment of the applicable lump sum price shall be full compensation for furnishing all plant, labor, materials and equipment necessary to furnish and install a 10" x 6" tapping sleeve and a 6" tapping valve, at the location shown on the Drawings. Also included in this Bid Item shall be the cost to furnish and install a 6" check valve.

Bid Item No. 21 – Provide Temporary Sewage By-Pass Pumping System

Payment. Payment of the applicable lump sum price shall be full compensation for furnishing all plant, labor, materials and equipment necessary to provide a temporary bypass pumping assembly. The Contractor shall operate the bypass system. As a minimum, the system shall contain (2) bypass pumps; one operational and one standby located adjacent to the bypass chamber. The standby pump shall be piped and electrically connected to operate at "the turn of a switch". Size of the bypass pump shall be in excess of 1,000 gpm at 72' TDH, when considering stormwater flow. The system shall also include piping, hose, fittings, control system and auto-dialer connected to Contractor personnel for notification purposes. The person being notified must be able to be onsite within 15 minutes. Once the new pump station has been satisfactorily completed and certified by the FDEP, the temporary system shall be dismantled and removed.

Bid Item No. 22 – Furnish & Install New Electrical Equipment Rack, Disconnect Switch, RTU Panel, Automatic Transfer Switch, Meter and Accessories

Payment. Payment of the applicable lump sum price shall be full compensation for furnishing all plant, labor, materials and equipment necessary to furnish and install all improvements shown on the Drawings and called out in the Specifications. Such improvements shall include a new equipment rack; new SCADA/RTU panel; SCADA programming; automatic transfer switch; disconnect switch; junction box, seal-offs; meter can; level transducer and backup float control system; conduit/wiring for power and control from wet well/transformer to the new equipment rack and all other items required for a complete and operable system as shown on the Drawings.

Alternate Bid

17A – Additional Cost to Furnish & Install New 316 SS Pump Discharge Pipe and Fittings

Applicable increase in price to furnish and install 316 SS pipe and fittings in lieu of ductile iron pipe and fittings in Bid Item 17.

END OF SECTION

SECTION 01027 – APPLICATIONS FOR PAYMENT

PART 1 – GENERAL

1.01 FORMAT AND DATA REQUIRED

- A. Coordinate the Schedule of Values and Applications for Payment with the CONTRACTOR'S Construction Schedule, Submittal Schedule, and List of Subcontracts.
- B. Schedule of Values: Coordinate preparation of the Schedule of Values with preparation of the CONTRACTOR'S Construction Schedule.
- C. Correlate line items in the Schedule of Values with other required administrative schedules and forms, including:
 - 1. CONTRACTOR'S Construction Schedule.
 - 2. Application for Payment forms, including Continuation Sheets.
 - 3. List of subcontractors.
 - 4. List of products.
 - 5. List of principal suppliers and fabricators.
 - 6. Schedule of submittals.
- D. Submit the Schedule of Values at the earliest possible date but no later than 7 days before the date scheduled for submittal of the initial Applications for Payment.
- E. Format and Content: Use the Project Manual table of contents as a guide to establish the format for the Schedule of Values. Provide at least one line item for each Specification Section.
- F. Include the following Project identification:
 - 1. Project name and location.
 - 2. Name of ENGINEER.
 - 3. Project number.
 - 4. CONTRACTOR'S name and address.
 - 5. Date of submittal.
- G. Arrange the Schedule of Values in tabular form with separate columns to indicate the following for each item listed:
 - 1. Related Specification Section or Division.
 - 2. Description of Work.
 - 3. Name of subcontractor.
 - 4. Change Orders (numbers) that affect value.
 - 5. Dollar value.
 - 6. Percentage of Contract Sum to nearest one-hundredth percent, adjusted to total 100 percent.
- H. Provide a breakdown of the Contract Sum in sufficient detail to facilitate evaluation of Applications for Payment. Break subcontract amounts down into several line items. Round amounts to nearest whole dollar; the total shall equal the Contract Sum.
- I. Update and resubmit the Schedule of Values when Change Orders or Construction Change Directives change the Contract Sum.
- J. Applications for Payment shall be consistent with previous applications and payments as certified by the ENGINEER and paid for by the OWNER.

- K. Payment Application Times: Payment dates are indicated in the Agreement. The period covered by each application is the period indicated in the Agreement.
- L. Payment Application Forms: Use AIA Document G702 and Continuation Sheets G703 as the form for Applications for Payment.
- M. Application Preparation: Complete every entry, including notarization and execution by a person authorized to sign on behalf of the CONTRACTOR. The ENGINEER will return incomplete applications without action.
 - 1. Entries shall match data on the Schedule of Values and the Contractor's Construction Schedule. Use updated schedules if revisions were made.
 - 2. Include amounts of Change Orders and Construction Change Directives issued prior to the last day of the construction period covered by the application.
- N. Transmittal: Submit 3 executed original copies of each Application for Payment to the ENGINEER within 24 hours. One copy shall be complete, including waivers of lien and similar attachments.
 - 1. Transmit each copy with a transmittal listing attachments and recording appropriate information related to the application.
- O. Waivers of Mechanics Lien: With each Application for Payment, submit waivers of lien from every entity who may file a lien arising out of the Contract and related to the Work covered by the previous payment.

1.02 INITIAL APPLICATION FOR PAYMENT

- A. Administrative actions and submittals that must precede or coincide with submittal of the first Application for Payment include the following:
 - 1. List of subcontractors.
 - 2. List of principal suppliers and fabricators.
 - 3. Schedule of Values.
 - 4. CONTRACTOR'S Construction Schedule (preliminary if not final).
 - 5. Submittal Schedule (preliminary if not final).
 - 6. List of CONTRACTOR'S staff assignments.
 - 7. Copies of building permits.
 - 8. Copies of licenses from governing authorities.
 - 9. Certificates of insurance and insurance policies.
 - 10. Performance and payment bonds.

1.03 SUBSTANTIATING DATA FOR PROGRESS PAYMENTS

- A. When the OWNER requires substantiating data, CONTRACTOR shall submit suitable information, with a cover letter identifying:
 - 1. Project.
 - 2. Application number and date.
 - 3. Detailed list of enclosures.
 - 4. For stored products:
 - a. Item number and identification as shown on application.
 - b. Description of specific material.
- B. Submit one (1) copy of data and cover letter for each copy of application.

- C. Submit requisite number of photographs with each application.
- D. List the name and address of all Subcontractors and Suppliers who have performed work or provided supplies or material for each application.
- E. Submit certified payroll sheets for CONTRACTOR'S forces and all Subcontractors for the month preceding the submitted application.
- F. Submit revised monthly progress schedules with each month's Application for Payment, including cash flow projections.
- G. The CONTRACTOR is to maintain an updated set of drawings to be used as record drawings in accordance with the Contract Documents. AS A PREREQUISITE FOR PAYMENT OF MONTHLY PROGRESS PAYMENTS, THE CONTRACTOR IS TO EXHIBIT THE UPDATED RECORD DRAWINGS FOR REVIEW BY THE OWNER.

1.04 APPLICATION FOR PAYMENT AT SUBSTANTIAL COMPLETION

- A. Following issuance of the Certificate of Substantial Completion, submit an Application for Payment. This application shall reflect Certificates of Partial Substantial Completion issued previously for OWNER occupancy of designated portions of the Work.
- B. Administrative actions and submittals that shall precede or coincide with this application include the following:
 - 1. Occupancy permits.
 - 2. Warranties and maintenance agreements.
 - 3. Test/adjust/balance records.
 - 4. Maintenance instructions.
 - 5. Meter readings.
 - 6. Changeover information related to OWNER'S occupancy.
 - 7. Final cleaning.
 - 8. Application for reduction of retainage and consent of surety.

1.05 FINAL PAYMENT APPLICATION

- A. Administrative actions and submittals that must precede or coincide with submittal of the final Application for Payment include the following:
 - 1. Completion of Project closeout requirements and submittals including As-Built Survey.
 - 2. Completion of items specified for completion after Substantial Completion.
 - 3. Transmittal of Project construction records to the OWNER.
 - 4. Certified property survey.
 - 5. Proof that taxes, fees, and similar obligations were paid.
 - 6. Removal of temporary facilities and services.
 - 7. Change of door locks to OWNER'S access.

PART 2 – PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

END OF SECTION

SECTION 01040 – COORDINATION

PART 1 – GENERAL

1.01 PROJECT COORDINATION

- A. The CONTRACTOR shall provide for the complete coordination of the construction efforts. This shall include, but not necessarily be limited to, coordination of the following:
1. The work of subcontractors.
 2. The flow of material and equipment from suppliers.
 3. The effort of equipment manufacturers during test and checkout.
 4. Interrelated work with public utilities companies.
 5. The interrelated work with the OWNER where tie-ins to existing facilities are required.
 6. The effort of independent testing agencies.

1.02 CUTTING AND PATCHING

- A. The CONTRACTOR shall do all cutting, fitting and patching of his work that may be required to make its several parts come together and integrate with such other work. The CONTRACTOR shall not endanger any work of others by cutting, excavating or otherwise altering their work and will only cut or alter their work with the written consent of the ENGINEER and the others whose work will be affected.

PART 2 – PRODUCTS

(Not Applicable)

PART 3 – EXECUTION

(Not Applicable)

END OF SECTION

SECTION 01045 – CUTTING AND PATCHING

PART 1 – GENERAL

1.01 DESCRIPTION OF WORK

- A. This Section establishes general requirements pertaining to cutting (including excavating), fitting, and patching of the Work required to:
 - 1. Make the several parts fit properly.
 - 2. Uncover Work to provide for installation, inspection, or both, or ill -timed work.
 - 3. Rework existing items to provide for new construction.

1.02 QUALITY ASSURANCE

- A. Perform all cutting and patching in strict accordance with pertinent requirements of these Specifications and, in the event no such requirements are determined, in conformance with the ENGINEER'S written direction.

1.03 SUBMITTALS

- A. Request for ENGINEER'S Consent
 - 1. Prior to cutting any item which affects structural safety, submit written request to the ENGINEER for permission to proceed with cutting.
 - 2. Should conditions of the Work, or schedule, indicate a required change of materials or methods for cutting and patching, so notify the ENGINEER and secure his written permission prior to proceeding.
- B. Notice to the ENGINEER
 - 1. Submit written notice to the ENGINEER designating time the Work will be uncovered to provide for the ENGINEER'S observation.

PART 2 – PRODUCTS

2.01 MATERIALS

- A. Materials used in the replacement of existing work and the construction of work in conjunction with cutting and patching shall be new unless prior approval from the ENGINEER has been obtained to re-use existing materials.

2.02 FABRICATION

- A. The materials and methods used in the fabrication of items required under this section shall comply with the individual sections of this specification that have to do with new construction.

PART 3 –EXECUTION

3.01 CONDITIONS

- A. Examination: Examine existing conditions, including elements subject to movement or damage during cutting, excavating, backfilling, and patching. After uncovering the Work, inspect conditions affecting installation of the new Work.

B. Discrepancies:

1. If uncovered conditions are not as anticipated, immediately notify the ENGINEER and secure needed directions.
2. Do not proceed in areas of discrepancy until all such discrepancies have been fully resolved.

3.02 PREPARATION PRIOR TO CUTTING

- A. Provide all required protection including, but not necessarily limited to, shoring, bracing, and support to maintain structural integrity of the Work, and personal protective clothing and/or equipment of CONTRACTOR'S workers.

3.03 PERFORMANCE

- A. Perform all required excavating and backfilling as required under pertinent Sections of these Specifications. Perform cutting and demolition by methods which will prevent damage to other portions of the Work and will provide proper surfaces to receive installation or repair and new work. Perform fitting and adjustment of products to provide finished installation complying with the specified tolerances and finishes.

END OF SECTION

SECTION 01050 – FIELD ENGINEERING

PART 1 – GENERAL

1.01 SECTION INCLUDES

- A. Provide field engineering service for project as indicated on Drawings and specified in this Section.

1.02 QUALIFICATIONS OF SURVEYOR OR ENGINEER

- A. Florida Registered Engineer or Land Surveyor.

1.03 SURVEY REFERENCE POINTS

- A. Existing basic horizontal and vertical control points are designated on Drawings. All elevations are referred to NGVD 1988. Establish all vertical and horizontal controls required for construction.
- B. Locate and protect control points prior to starting site work, and preserve permanent reference points during construction.
 - 1. Make no changes or relocations of such points without prior written notice to ENGINEER.
 - 2. Report to ENGINEER when any reference point is lost or destroyed, or requires relocation because of necessary changes in grades or locations.
 - 3. Require surveyor to replace control points which may be lost or destroyed. Establish replacements based on original survey control.
 - 4. ENGINEER will identify existing control points and properly line corner stakes indicated on Drawings, as required.

1.04 PROJECT SURVEY REQUIREMENTS

- A. Establish a minimum of two (2) permanent bench marks on the project site, all referenced to data established by survey control points. Record locations, with horizontal and vertical data, on Project Record Documents.
- B. Establish lines and levels, locate and lay out, by instrument and similar appropriate means.
 - 1. Site improvements.
 - 2. Building foundation, column locations, floor levels and roof levels.
 - 3. Controlling lines and levels required for mechanical and electrical trades.
- C. Verify layouts by same methods from time to time.

1.05 RECORDS

- A. Maintain a complete, accurate log of control and survey work as it progresses.
- B. On completion of foundations and major site improvements, prepare a certified survey showing finished dimensions, locations, angles and elevations of construction.

1.06 SUBMITTALS

- A. Submit name and address of surveyor or professional engineer to ENGINEER.
- B. On request of ENGINEER, submit documentation to verify accuracy of field survey work.
- C. Submit certificate signed and sealed by a State of Florida Registered Engineer or Land Surveyor certifying that elevations and locations of improvements are in conformance with Contract Documents.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

END OF SECTION

SECTION 01065 – PERMITS AND FEES

PART 1 – GENERAL

1.01 DESCRIPTION

- A. Scope of Work: Obtain and pay for all permits and licenses including, but not limited to, all construction and Right-of-Way utilization permits.
- B. Permits by CONTRACTOR: CONTRACTOR will apply for and OWNER will pay for the following permits:
 - City of Ormond Beach Building Permit and/or Driveway Permit (if applicable)
- C. Permits by CONTRACTOR: CONTRACTOR will apply for and CONTRACTOR will pay for the following permits:
 - St. Johns River Water Management District Dewatering Permit (if applicable)
- D. Permits by OWNER: The OWNER has applied and paid for the following permits:
 - Florida Department of Environmental Protection Permit to Construct a Domestic Wastewater Collection / Transmission System
- E. Copies of the permits obtained by the OWNER are attached as an Appendix or will be distributed at the Pre-Construction Conference.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

END OF SECTION

SECTION 01070 – CODES, REFERENCES AND ABBREVIATIONS

PART 1 – GENERAL

1.01 SECTION INCLUDES

- A. Referenced standards and abbreviations.

1.02 REFERENCED STANDARDS

- A. Any reference to published specifications or standards of any organization or association shall comply with the requirements of the specification or standard which is current on the date of Advertisement for Bids. In case of a conflict between the referenced specifications or standards, the one having the more stringent requirements shall govern.
- B. In case of conflict between the referenced specifications or standards and the Contract Documents, the Contract Documents shall govern.

1.03 ABBREVIATIONS

The following are definitions of abbreviations used within the Project Manual:

AA	Aluminum Association, Inc.
AASHTO	American Association of State Highway and Transportation Officials
ACI	American Concrete Institute
AISC	American Institute of Steel Construction, Inc.
AISI	American Iron and Steel Institute
AITC	American Institute of Timber Construction
AMA	Acoustical Materials Association
AMCA	Air Movement and Control Association, Inc.
ANSI	American National Standards Institute, Inc.
APA	American Plywood Association
ASHRAE	American Society of Heating, Refrigerating and Air Conditioning Engineers, Inc.
ASME	American Society of Mechanical Engineers
ASTM	American Society for Testing and Materials
AWMA	Aluminum Window Manufacturer's Association
AWPA	American Wood Preserves Association

AWPB	American Wood Preservers Bureau
AWPI	American Wood Preservers Institute
AWS	American Welding Society, Inc.
AWWA	American Water Works Association
CPSC	U.S. Consumer Product Safety Commission
CRSI	Concrete Reinforcing Steel Institute
CS	Commercial Standards and National Bureau of Standards
FBC	Florida Building Code
FM	Factory Mutual Research Corp.
FS	Federal Specifications
FS	Florida Statutes
GA	Gypsum Association
HI	Hydraulic Institute
IEEE	Institute of Electrical and Electronic Engineers
NAAMM	National Association of Architectural Metal Manufacturers
NBFU	National Board of Fire Underwriters
NCMA	National Concrete Masonry Association
NECA	National Electrical Contractors' Association
NEMA	National Electrical Manufacturers' Association
NFiPA	National Fire Protection Association
NFoPA	National Forest Products Association
NSF	National Sanitation Foundation
PCA	Portland Cement Association
PCI	Precast Prestressed Concrete Institute
PS	Product Standards National Institute of Standards and Technology

SDI	Steel Door Institute
SJI	Steel Joist Institute
SMACCNA	Sheet Metal and Air Conditioning Contractors' National Association, Inc.
SSPC	Structural Steel Painting Council
UL	Underwriters Laboratories, Inc.

1.04 CODES AND GOVERNMENTAL DEPARTMENTS

CFR	Code of Federal Regulations
EPA	Environmental Protection Agency
FDEP	Florida Department of Environmental Protection
FDOT	Florida Department of Transportation
FAC	Florida Administrative Code
NEC	National Electric Code (Published by NFIPA)
OSHA	Occupational Safety and Health Act

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

END OF SECTION

SECTION 01100 – SPECIAL PROJECT PROCEDURES

PART 1 – GENERAL

1.01 PUBLIC NUISANCE

- A. The CONTRACTOR shall not create a public nuisance including, but not limited to, encroachment on adjacent lands, flooding of adjacent lands, or excessive noise.
- B. Sound levels measured by the OWNER shall not exceed 50 dBA from 7:00 P.M. to 7:00 A.M. or 60 dBA from 7:00 A.M. to 7:00 P.M. This sound level shall be measured at the exterior of the nearest exterior wall of the nearest residence. Levels at the equipment shall not exceed 85 dBA at any time. Sound levels in excess of these values are sufficient cause to have the work halted until equipment can be quieted to these levels. Work stoppage by the OWNER for excessive noise shall not relieve the CONTRACTOR of the other portions of this Specification including, but not limited to, completion dates and bid amounts.
- C. No extra charge may be made for time lost due to work stoppage resulting from the creation of a public nuisance.

1.02 SUSPENSION OF WORK

- A. During inclement weather, all work which might be damaged or rendered inferior by such weather conditions shall be suspended. The orders and decisions of the OWNER as to suspensions shall be final and binding. During suspension of the work from any cause, the work shall be suitably covered and protected so as to preserve it from injury by the weather or otherwise; and, if the OWNER shall so direct, rubbish and surplus materials shall be removed.

1.03 SPECIAL REQUIREMENTS

- A. The following requirements shall govern:
 - 1. No additional payment will be made for pumping or other difficulties encountered due to water.
 - 2. The CONTRACTOR shall, prior to interrupting a utility service (water, sewer, etc.) for the purpose of making cut-ins to the existing lines or for any other purposes, contact the OWNER and make arrangements for the interruption which will be satisfactory to the OWNER.
 - 3. All equipment delivered to the job site shall be properly protected from dirt, dust, dampness, water and any other condition detrimental to the life of the equipment from the date of delivery to the time that control of the equipment is assumed by the OWNER. If any equipment is delivered to the job site before any building thereon is enclosed, it shall be housed in a temporary, structurally rigid, watertight enclosure.
 - 4. Certain information regarding the reputed presence, size, character and location of existing underground structures, pipes and conduits has been shown on the Contract Drawings. There is no certainty of the accuracy of this information, and the location of underground structures shown may be inaccurate and other obstructions than those shown may be encountered. The CONTRACTOR hereby distinctly agrees that the OWNER is not responsible for the correctness or sufficiency of the information given; that in no event is this information to be

considered as a part of the Contract; and that consideration for equitable compensation will be made for conditions materially different from those shown on the Drawings, as determined by the OWNER.

1.04 JURISDICTIONAL DISPUTES

- A. It shall be the responsibility of the CONTRACTOR to pay all costs that may be required to perform any of the work shown on the Drawings or specified herein in order to avoid any work stoppages due to jurisdictional disputes. The basis for subletting work in question, if any, shall conform to precedent agreements and decisions on record with the Building and Construction Trades Department, AFL-CIO, dated June, 1973, including any amendments thereto.

1.05 PUMPING

- A. The CONTRACTOR, with his own equipment, shall do all pumping necessary to prevent flotation of any part of the structures during construction operations.
- B. The CONTRACTOR shall, for the duration of the Contract and with his own equipment, pump out water which may seep or leak into the structures. Operating areas shall be kept dry at all times. The extent of pumping required in non-operating areas shall be determined by the ENGINEER.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

END OF SECTION

SECTION 01200 – PROJECT MEETINGS

PART 1 – GENERAL

1.01 DESCRIPTION OF WORK

- A. Project meetings shall be scheduled as needed throughout the progress of the work. The ENGINEER or the CONTRACTOR shall be responsible for scheduling the meetings, preparing the agenda, distributing written notice of each meeting not less than four days in advance of the meeting date, making physical arrangements for the meeting, presiding at the meeting, recording the minutes (including all significant proceedings and decisions), and reproducing and distributing copies of the minutes to all participants and all parties affected by decisions made.
- B. Representatives attending the meetings shall be qualified and authorized to act on behalf of the entity that they represent.

1.02 PRE-CONSTRUCTION CONFERENCE

- A. A pre-construction conference will be held prior to beginning any work under the Contract. ENGINEER will schedule the conference in consultation with OWNER and CONTRACTOR.
- B. CONTRACTOR shall be ready to submit his anticipated progress schedule, a preliminary schedule of shop drawing submissions, and a preliminary schedule of values of work.
- C. The pre-construction conference will be attended by representatives of OWNER, ENGINEER, utility companies who will be affected by the work, and such of CONTRACTOR'S subcontractors as he wishes to attend.

1.03 PROGRESS MEETINGS

- A. Regular progress meetings shall be held during the construction period. At these meetings the CONTRACTOR shall submit any updated progress schedules, advise OWNER and ENGINEER of any anticipated delays or problems in the progress of the work, and discuss any problems or events which affect the progress.

PART 2 – PRODUCTS (Not Applicable)

PART 3 – EXECUTION (Not Applicable)

END OF SECTION

SECTION 01310 – ADMINISTRATIVE REQUIREMENTS

PART 1 – GENERAL

1.01 SECTION INCLUDES

- A. Meetings, construction progress documentation, submittals, record documents.

1.02 PRECONSTRUCTION CONFERENCE

- A. The OWNER will schedule a preconstruction conference prior to beginning the Work to review shop drawing procedures, submittal requirements, and construction administration requirements (project coordination and communication). The CONTRACTOR shall bring to the preconstruction conference the proposed construction schedule, a preliminary schedule of shop drawing submissions, and a preliminary schedule of values of work. All will be reviewed with the OWNER during the meeting.

1.03 PROGRESS MEETINGS

- A. The frequency of progress meetings shall be determined during the preconstruction conference. As a minimum, progress meetings shall be held once per month during construction.
- B. The CONTRACTOR and OWNER shall attend the progress meetings.

1.04 PROGRESS SCHEDULES AND REPORTS

- A. Within 10 days after the effective date of the Agreement, the CONTRACTOR shall submit to the ENGINEER for review and acceptance, an estimated progress schedule indicating the starting and completion dates of the various stages of the work, a preliminary schedule of shop drawing submissions, and a preliminary schedule of value of the work. Include sub-schedules of related activities which are essential to its progress.
- B. Revised schedules shall be submitted periodically as changes become apparent.
- C. Unless other format or use of a network analysis system is required, schedules shall be prepared in the form of a horizontal bar chart. A separate horizontal bar shall be provided for each trade or operation. The first work day of each week shall be identified on the horizontal time scale. Scale and spacing will be such as to allow space for notations and revisions.
- D. Schedules shall show the complete sequence of construction by activity with dates for the beginning and completion of each major element of construction. Projected percentage of completion for each item as of the first day of each month shall be shown.
- E. Progress Reports: The CONTRACTOR shall prepare and submit a monthly progress report. The report shall indicate the progress at the date of submission of each activity shown on his progress schedule. It shall show changes occurring since previous submissions, activities modified since previous submissions, and revised projections of progress and completion. The submittal shall include a narrative report to define: problem areas, anticipated delays, and the impact on the schedule, and corrective action recommended and its effect.

1.05 SCHEDULE OF VALUES

- A. At least 10 days prior to submitting the first Application for a progress payment, the CONTRACTOR shall submit to the ENGINEER a schedule of values of the work. This schedule shall be satisfactory in form and substance to the ENGINEER. The schedule of values shall include quantities and unit prices aggregating the contract price, and shall subdivide the work into component parts in sufficient detail to serve as the basis for progress payments during construction. Upon acceptance of the schedule of values by the ENGINEER, it shall be incorporated into the form of Application for Payment discussed and agreed upon at the preconstruction conference.
- B. Where estimated quantities and unit prices are shown in the Bid Form as the basis of payment, the quantities shown in the Bid Form are approximate and are given only as a basis of calculation upon which the award of the contract is to be made. The OWNER or ENGINEER do not assume any responsibility that the final quantities will remain in accordance with estimated quantities, nor shall the CONTRACTOR claim misunderstanding or deception because of such estimate of quantities. Final payment will be made on the basis of the actual completed quantities of each item.

1.06 DEFINITIONS

- A. Shop Drawings: Shop drawings are original drawings, prepared by the CONTRACTOR, a subcontractor, supplier, or distributor, which illustrate some portion of the Work; showing fabrication, layout, setting, or erection details. Shop drawings shall be prepared by a qualified detailer and shall be identified by reference to sheet and detail numbers on the Contract Drawings.
- B. Product Data: Product data are manufacturer's standard schematic drawings and manufacturer's catalog sheets, brochures, diagrams, schedules, performance charts, illustrations, and other standard descriptive data. Catalog sheets, brochures, etc., shall be clearly marked to identify pertinent materials, products, or models.
- C. Samples: Samples are physical examples to illustrate materials, equipment, or workmanship and to establish standards by which work is to be evaluated.
- D. Miscellaneous Submittals: Miscellaneous submittals related directly to the work (non-administrative) include warranties, maintenance agreements, workmanship bonds, project photographs, survey data and reports, physical work records, quality testing and certifying reports, copies of industry standard, record drawings, field measurement data, operating and maintenance materials, overrun stock, and similar information, devices and materials applicable to the work and not processed as shop drawings, product data or samples.

1.07 SUBMITTAL REQUIREMENTS

- A. Prior to submission, thoroughly check shop drawings, product data, and samples for completeness and for compliance with the Contract Documents. Verify all field measurements, quantities, dimensions, specified performance criteria, fabrication, shipping, handling, storage, assembly, installation, and safety requirements.
- B. Coordinate the submittals with the requirements for other related work.

- C. Notify the ENGINEER, in writing at the time of submission, of deviations in submittals from the requirements of the Contract Document. The CONTRACTOR'S responsibility for deviations in submittals from the requirements of the Contract Documents is not relieved by the ENGINEER'S review of submittals, unless the ENGINEER gives written acceptance of specific deviations.
- D. Submit at least six (6) copies of each shop drawing and product data. The specific number of copies required of all submittals will be determined during the preconstruction meeting. Submit the number of samples indicated in the individual Specification Sections.
- E. Where a specific product manufacturer and model number is listed in individual specification sections and is proposed by the CONTRACTOR to be used, full submittal of product data is not required. In this case, submit in letter format the name of the product, manufacturer, model number, specification section, and name of project. Certify the identified product is proposed to be used in the project.
- F. Shop drawings, product data, and samples shall be accompanied by a letter of transmittal referring to the name of the project and to the specification page number and/or Drawing number for identification of each item. Submittals for each type of work shall be numbered consecutively, and the numbering system shall be retained throughout all revisions.
- G. Submittals shall bear the CONTRACTOR'S stamp of approval certifying that they have been checked and indicate appropriate specification section and/or drawing location. Submittals without the CONTRACTOR'S initialed or signed certification stamp and submittals which, in the ENGINEER'S opinion, are incomplete, contain numerous errors or have not been properly checked, will be returned unchecked by the ENGINEER for resubmission.
- H. Begin no work which requires submittals until return of submittals with ENGINEER stamp and initials or signature indicating the submittal has been approved.
- I. Systems to be submitted in the shop drawing submittal shall include but not necessarily be limited to:
 - 1. Each item of equipment and/or materials listed in the project equipment and material schedules.
 - 2. Special casings.
- J. In addition to the above, the manufacturer shall submit through the CONTRACTOR copies of the results of the tests performed by an independent laboratory that demonstrate compliance with the reference specification for:
 - 1. Ductile iron pipe
 - 2. Casing pipe
 - 3. PVC pipe
 - 4. Asphaltic materials

1.08 ENGINEER'S REVIEW OF SUBMITTALS

- A. ENGINEER'S review and approval of submittals will not extend to means, methods, techniques, sequences, procedures of construction, or to safety precautions.

- B. The review and approval of a separate item will not indicate approval of the assembly in which the item functions. ENGINEER'S review and approval of submittals shall not relieve CONTRACTOR from responsibility for any variation from the requirements of the Contract Documents.
- C. The ENGINEER will review submittals with reasonable promptness. The ENGINEER'S review of submittals shall not be construed as a complete check and shall not relieve the CONTRACTOR from responsibility for complete compliance with the Contract requirements.
- D. No corrections, changes, or deviations indicated on submittals reviewed by the ENGINEER shall be considered as a change order.
- E. Where review of submittals is required by the Owner of other agencies, the ENGINEER will forward the appropriate submittal(s) to these parties after ENGINEER review. Once review of all parties is complete, the submittal(s) will be returned to the CONTRACTOR reflecting the review of all parties.
- F. If the submittal is not satisfactory, one copy of the submitted item will be retained by the ENGINEER and all other copies returned to the CONTRACTOR for appropriate action.
- G. In the event a third submittal is required, due to previous submittals of incomplete or incorrect data or not in compliance with the Contract Documents, the CONTRACTOR will be charged one-half of the cost incurred by the ENGINEER for the review of the third submittal. The CONTRACTOR shall bear the total cost incurred by the ENGINEER for all subsequent reviews. The ENGINEER costs charged to the CONTRACTOR will be at the cost plus rate generally charged by the ENGINEER and will be deducted by the OWNER from payments due to the CONTRACTOR.
- H. Distribution of copies of acceptable submittals will be as mutually determined by the CONTRACTOR, OWNER, and ENGINEER on an individual item basis during or following the preconstruction conference.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

END OF SECTION

SECTION 01390 – COLOR AUDIO-VIDEO PRE-CONSTRUCTION RECORD

PART 1 – GENERAL

1.01 DESCRIPTION

- A. Scope of Work: Prior to commencing the Work, the CONTRACTOR shall have a continuous color audio-video digital recording taken within the confines of the fence that surrounds the pump station site. Also, the recording shall include the area from the fence to the street on the south side of the site.

1.02 APPROVAL

- A. No construction shall begin prior to review and approval of the audio-video DVD recording covering the Project by the OWNER. The OWNER shall have the authority to reject all or any portion of the audio-video DVD recordings not conforming to specifications and order that it be redone at no additional charge.
- B. The CONTRACTOR shall reschedule unacceptable coverage within five (5) days after being notified. The OWNER shall designate those areas, if any, to be omitted from or added to the audio-video coverage.
- C. The DVD recordings shall not be made more than thirty (30) days prior to construction in any area. All DVD's and written records shall become property of the OWNER.

1.03 PROFESSIONAL VIDEOGRAPHERS

- A. The CONTRACTOR shall engage the services of a professional videographer. The color audio-video recording shall be prepared by a responsible commercial firm known to be skilled and regularly engaged in the business of pre-construction color audio-video documentation.
- B. The videographer shall furnish to the OWNER, a list of all equipment to be used for the audio-video recording, i.e., manufacturer's name, model number, specifications and other pertinent information.
- C. The videographer shall furnish the OWNER with additional information including the names and addresses of two references that the videographer has performed color audio-video recordings for projects of a similar nature within the last twelve (12) months.

1.04 PHOTOGRAPHS OF LINE WORK

- A. The CONTRACTOR shall make provision at his expense for photographs to be taken just prior to construction and for unusual conditions during construction. The photographs shall show pertinent physical features along the line of construction prior to start of construction. Two 4-inch x 6-inch prints of all pictures shall be furnished to the OWNER's representative.

PART 2 – PRODUCTS

2.01 COLOR PRINTS

- A. Paper:

1. Double Weight
2. Finish: Smooth Surface, Glossy
3. Size: 8-inch x 10-inch

B. Identify Each Print on Back, Listing:

1. Name of Project
2. Orientation of View
3. Date and Time of Exposure
4. Name and Address of Photographer

2.02 DVD's

- A. Audio-video DVD's shall be new. The DVD used for the recordings shall be professional quality 12 cm color DVD media that conforms to either DVD-R or DVD+R recording standards using high quality DVD video and audio bitrates. Reprocessed disks will not be acceptable. The recorded DVD's shall be compatible for playback with any standard DVD-R or DVD+R player.

PART 3 – EXECUTION

3.01 TECHNIQUE

- A. Factual Presentation
- B. Correct Exposure and Focus
1. High resolution and sharpness.
 2. Maximum depth of field.
 3. Minimum distortion

3.02 DELIVERY OF PRINTS

- A. Deliver prints to ENGINEER to accompany each Application for Payment.

3.03 EQUIPMENT

- A. All equipment, accessories, materials, and labor to perform this service shall be furnished by the CONTRACTOR or professional videographer.
- B. The total audio-video recording system and the procedures employed in its use shall be such as to produce a finished product that will fulfill the technical requirements of the Project as well as those more subjective requirements of high quality audio and video production. The video portion of the recording shall reproduce bright, sharp, clear pictures with accurate colors and shall be free from distortion, or any other form of picture imperfection. The audio portion of the recording shall reproduce the commentary of the camera operator with proper volume, clarity and be free from distortion.
- C. When conventional wheeled vehicles are used, the distance from the camera lens to the ground shall not be more than ten feet (10'). In some instances, audio-video recording coverage may be required in areas not accessible by conventional wheeled vehicles. Such coverage shall be obtained by walking or special conveyance approved by the OWNER.

- D. The color video camera used in the recording system shall record the color signal with a minimum horizontal resolution of 350 lines, a luminance signal to noise ratio of 45 dB, and a minimum illumination requirement of 25-foot candles.

3.04 RECORDED INFORMATION - AUDIO

- A. Each DVD shall begin with the current date, project name and be followed by the general location, i.e., viewing side and direction of progress. The audio tract shall consist of an original live recording. The recording shall contain the narrative commentary of the videographer, recorded simultaneously with its fixed elevation video record of the zone of influence of construction.
- B. The OWNER reserves the right to supplement the audio portion of the recording as deemed necessary. A representative of the OWNER shall be selected to provide such narrative.

3.05 RECORDED INFORMATION - VIDEO

- A. All video recordings shall, by electronic means, display on the screen the time of day, the month, day and year of the recording. This time and date information must be continuously and simultaneously generated with the actual recording.
- B. All DVD's and their storage cases shall be identified by DVD index number, project title, and general project location. Each DVD shall have a log of that recording's contents displayed on the storage case of each DVD. The log shall describe the various segments of coverage contained on that DVD in terms of the names of streets or easements, coverage beginning and end, directions of coverage, video unit counter numbers, engineering stationing numbers and the date.

3.06 LIGHTING

- A. All recordings shall be done during times of good visibility. No recording shall be done during precipitation, mist or fog. The recording shall only be done when sufficient sunlight is present to properly illuminate the subjects of recording and to produce bright, sharp video recordings of those subjects.

3.07 SPEED OF TRAVEL

- A. The rate of speed in the general direction of travel of the vehicle used during taping shall not exceed 440 feet per minute (5 mph). Panning, zoom-in and zoom-out rates shall be sufficiently controlled to maintain a clear view of the object.
- B. If the project is a pump station site, the rate of speed of travel shall not apply.

3.08 AREA OF COVERAGE

- A. Recordings shall include all surface features located within the zone of influence of construction supported by appropriate audio coverage. Such coverage shall include, but not be limited to, existing driveways, sidewalks, curbs, pavements, ditches, mailboxes, landscaping, culverts, buildings, vaults, concrete pads, fences, signs, and headwalls within the area covered.

END OF SECTION

SECTION 01400 – QUALITY CONTROL

PART 1 – GENERAL

1.01 TESTING LABORATORY SERVICES

- A. Arrangements for testing laboratory services will be made by CONTRACTOR. Payment for testing to show compliance with specified requirements will be paid for by OWNER. The cost of retesting when materials and workmanship fail to meet specified requirements will be deducted from monies due CONTRACTOR.

1.02 LABORATORY STANDARDS

- A. Testing laboratories shall conform to the applicable requirements of ASTM E329-77, STANDARD RECOMMENDED PRACTICE FOR INSPECTION AND TESTING AGENCIES FOR CONCRETE, STEEL AND BITUMINOUS MATERIALS AS USED IN CONSTRUCTION, LATEST EDITION, and shall be inspected and approved by the ELF/FC&PA Joint Technical Committee, Inc., or by an equivalent recognized national authority.
- B. Agents of testing laboratories performing field sampling and field testing of concrete shall be certified by the American Concrete Institute as Concrete Field Testing Technicians Grade 1 or by an equivalent recognized national authority for an equivalent level of competence, or shall be licensed Professional Engineers.

1.03 ACCESS FOR INSPECTION

- A. OWNER, ENGINEER and their authorized representatives shall be permitted free access and every reasonable facility for the inspection of all Work, materials and equipment. OWNER and his authorized representatives shall also be permitted to inspect payrolls, invoices for materials and equipment. OWNER and his authorized representatives shall also be permitted to inspect payrolls, invoices for materials and equipment and other relevant data and records.
- B. Authorized representatives of Federal, State or local agencies shall be permitted access to inspect for compliance with applicable laws, regulations and permit requirements.

PART 2 – PRODUCTS

(Not Applicable)

PART 3 – EXECUTION

(Not Applicable)

END OF SECTION

SECTION 01500 – TEMPORARY FACILITIES AND CONTROLS

PART 1 - GENERAL

1.01 DESCRIPTION OF REQUIREMENTS

- A. This section specifies the minimum requirements for temporary facilities, utilities to be brought to the site, refuse/waste collection and control required to enable the construction of the project to progress adequately. The providing of adequate facilities at every stage of performing the work is the CONTRACTOR's sole responsibility, and is not limited by the requirement of this section.
- B. Except as otherwise indicated, the CONTRACTOR may, at his option, provide stand-alone utility plants to provide needed services, in lieu of connected services from available public utilities, provided such stand-alone plant facilities comply with governing regulations. Prior to availability of temporary utility services, provide trucked-in/trucked-out containerized or unitized services for startup of construction operations at the site.
- C. Except as otherwise indicated, the costs of providing and using temporary utility services are included in the Contract Sum.

1.02 TEMPORARY FACILITIES

- A. The types of utility services required for general temporary use at the project site include the following (other specific services may be required for specific construction methods or operations):
 - 1. Sanitary
 - 2. Storm Sewer or Open Drainage/Run-off Control
 - 3. Refuse/Waste Collection
- B. Temporary Sanitary Facilities: The CONTRACTOR shall provide adequate sanitary facilities for the use of those employed on the work. Such facilities shall be made available when the first employees arrive on the site of the work, shall be properly secluded from public observation, and shall be constructed and maintained during the progress of the work in suitable numbers and at such points and in such manner as may be required or approved.
- C. The CONTRACTOR shall provide these portable sanitary facilities "on-site" for use by workers. Transporting workers to the nearest "public" sanitary facility will NOT be considered an acceptable alternative to these requirements.
- D. The CONTRACTOR shall maintain the sanitary facilities in a satisfactory and sanitary condition at all times and shall enforce their use. He shall rigorously prohibit the committing of nuisances on the site of the work, on the lands of the OWNER, or on adjacent property. The cost of providing these sanitary facilities shall be included in the CONTRACTOR's applicable pay items of work and no separate payment shall be made thereof.
- E. Temporary Refuse/Waste Collection: The CONTRACTOR shall provide for adequate refuse/waste collection and disposal. City Ordinance requires that all rental open-top rolloff containers units or rental cubic-yard container units must be procured from one of the City's franchised construction and demolition debris providers. For a list of the City's Franchised Providers, please call Public Works at 386-676-3220.

It will be the CONTRACTOR's responsibility to make all necessary arrangements for refuse/waste collection and disposal. The cost of providing such refuse/waste collection and disposal shall be included in the CONTRACTOR's applicable pay items of work and no separate payment shall be made thereof.

- F. Termination and Removal: At the time the need for temporary utility service or a substantial portion thereof has ended, or when its service has been replaced by use of permanent services, or not later than the time of substantial completion, promptly remove the installation unless requested by the Engineer to retain it for a longer period. Complete and restore work which may have been delayed or affected by the installation and use of the temporary utility, including repairs to construction and grades and restoration and cleaning of exposed surfaces. Replace work damaged beyond acceptable restoration.

1.03 TEMPORARY CONTROLS

- A. Noise Control: The CONTRACTOR shall provide adequate protection against objectionable noise levels caused by the operation of construction equipment.
- B. Dust Control: The CONTRACTOR shall provide for adequate protection against raising objectionable dust clouds caused by moving construction equipment, high winds or any other cause.
- C. Water Control: The CONTRACTOR shall provide for satisfactory disposal of surplus water and shall submit a plan to the Engineer for his review prior to initiation and implementation of the plan. Prior approval shall be obtained from the proper authorities for the use of public or private lands or facilities for such disposal.
- D. Pollution Control
 - 1. The CONTRACTOR shall provide for adequate protection against polluting any public or private lands, lakes, ponds, rivers, streams, creeks, and other such areas, by the disposal of surplus material in the form of solids, liquids, or gases or from any other cause. The CONTRACTOR shall provide for adequate refuse/waste collection and disposal as described in Part 1, paragraph 1.02 of this Section.
 - 2. The CONTRACTOR shall evaluate and assess the impact of any adverse effects on the natural environment which may result from construction operations and shall operate to minimize pollution of air, ground or surface waters vegetation, and afford the neighboring community the maximum protection during and up to completion of the construction project.
 - 3. The CONTRACTOR shall take sufficient precautions to prevent pollution of streams, lakes and reservoirs with fuels, oils, bitumens, calcium chloride or other harmful materials. He shall conduct and schedule his operations so as to avoid or otherwise prevent pollution of siltation of streams, lakes and reservoirs and to avoid interference with movement of migratory fish
 - 4. All chemicals used during project construction or furnished for project operation, whether herbicide, pesticide, disinfectant, polymer, reactant or of other classification, must show approval of either EPA or USDA. Use of all such chemicals and disposal of residues shall be in strict conformance with instructions.

E. Erosion Control

1. The CONTRACTOR shall not expose, by construction operations, a larger area of erosive land at any one time than the minimum necessary for efficient construction operations, and the duration of exposure of the uncompleted construction to the elements shall be as short as practicable.
2. Erosion control features shall be constructed concurrently with other work and at the earliest practicable time.

1.04 STORAGE FACILITIES

- A. All products, materials and equipment shall be stored in accordance with the manufacturer's instructions, with seals and labels intact and legible. Products subject to damage by the elements shall be stored in weathertight enclosures. Temperature and humidity shall be maintained within the ranges required by the manufacturer's instructions. Fabricated products shall be stored above the ground on blocking or skids. Products which are subject to deterioration shall be covered with impervious coatings with adequate ventilation to avoid condensation. Loose granular materials shall be stored in a well-drained area on solid surfaces to prevent mixing with foreign matter. Any products which will come in contact with potable water shall be stored off the ground so as to prevent contamination.
- B. Storage shall be arranged in such a manner to provide easy access for inspection. Periodic inspections shall be made of all stored products to insure that they are maintained under specified conditions, and free from damage or deterioration.
- C. After installation, CONTRACTOR shall provide substantial coverings as necessary to installed products to protect from damage from traffic and subsequent construction operations. Coverings shall be removed when no longer needed.

1.05 PRESERVATION OF PROPERTY

- A. Preserve from damage all property along the line of the work, or which is in the vicinity of or in any wise affected by the work, the removal or destruction of which is not called for by the plans. Wherever such property is damaged due to the activities of the CONTRACTOR, it shall be immediately restored to its original condition by the CONTRACTOR at no cost to the OWNER.
- B. In case of failure on the part of the CONTRACTOR to restore such property, or make good such damage or injury, the OWNER may, after 48 hours notice to the CONTRACTOR, proceed to repair, rebuild or otherwise restore such property as may be deemed necessary and the cost thereof will be deducted from any monies due or which may become due the CONTRACTOR under this Contract.
- C. The CONTRACTOR shall be responsible for the protection of property, in the areas in the vicinity of the project; and for the protection of his equipment, supplies, materials and work, against any damage resulting from the elements, such as flooding, by rainstorm, wind damage, or other elemental cause resulting from the project configuration. The CONTRACTOR shall take all precautions against any such damage occurrence, and shall be responsible for damage resulting from same. The CONTRACTOR shall provide adequate drainage facilities, tie-downs, or other protection, throughout the Contract period, for the protection of his, the OWNER'S, and other properties from such damage.

1.06 TRAFFIC REGULATION

- A. Signs, marking barricades and procedures shall conform to the requirements of the Florida Department of Transportation Manual on Traffic Controls and Safe Practices for Street and Highway Construction, Maintenance and Utility Operations.
- B. The CONTRACTOR shall maintain one-lane, two-way traffic at all times and maintain customer access to local businesses at all times throughout the course of the work.
- C. The CONTRACTOR shall provide and maintain adequate barricades, construction signs, torches, flashers, guards and flagmen as required in pedestrian and vehicular traffic areas. Regulations of local authorities shall be complied with.
- D. The CONTRACTOR shall provide suitable crossings at street intersections and driveways, and supply such aid as may be required for pedestrians and motorists, including delivery vehicles, to safely negotiate the construction areas.
- E. The CONTRACTOR shall carry on the work in a manner that will cause the least interruption in traffic. Closing to through travel of more than two consecutive blocks, including the cross streets intersected will not be permitted without specific authorization from the local authorities. Where traffic must cross open trenches, the CONTRACTOR shall provide suitable bridges at street intersections and driveways and provide adequate ingress and egress to dwellings, business facilities, utilities and services. At any time the streets are required to be closed, the CONTRACTOR shall notify, in writing, law enforcement agencies, fire departments, and parties operating emergency vehicles before the street is closed and again as soon as it is opened. Access to fire hydrants and other fire extinguishing equipment shall be provided and maintained at all times. Refer to Section 01010 of these Specifications for "Notification of Construction" and "Notification of Street Closure" requirements.
- F. On completion of work, the CONTRACTOR shall remove all debris, excess materials, barricades and temporary work leaving walkways and road clear of obstructions.

PART 2 - PRODUCTS

(Not Applicable)

PART 3 - EXECUTION

(Not Applicable)

END OF SECTION

SECTION 01568 – EROSION AND SEDIMENTATION CONTROL

PART 1 – GENERAL

1.01 DESCRIPTION

- A. In addition to the requirements of Division 1 and Section 02200:
 - 1. All erosion, sedimentation and water pollution control features shall be in place or relocated as necessary prior to the start of any clearing, grading or construction. CONTRACTOR shall be responsible for the installation and maintenance of all temporary erosion control features.
 - 2. Location of the control features shall be as required to facilitate drainage and control erosion and sedimentation within and adjacent to the site.
 - 3. Control features are defined as, but not limited to, swales, berms, silt fences, silt barriers and temporary fences.

1.02 QUALITY ASSURANCE

- A. The provisions for prevention, control and abatement of erosion, sedimentation and water pollution shall be as stated in the FDOT Standard Specifications for Road and Bridge Construction, Section 104, latest edition, and as required by the St. John's River Water Management District.

1.03 SUBMITTALS

- A. Procedures shall be in accordance with General Conditions.
- B. Product data: Manufacturers' literature, application instructions and samples.
- C. List of materials and their characteristics for other erosion control items.

1.04 START OF WORK

- A. Do not start work until erosion control measures are in place.

PART 2 – PRODUCTS

2.01 MATERIALS

- A. Silt Barriers
 - 1. Two (2) types of silt barriers shall be installed in accordance with the plans: silt barriers installed on the ground, and floating silt barriers.
 - 2. Silt barriers (filter fabric) shall be synthetic and contain ultraviolet ray inhibitors and stabilizers to provide a minimum of six (6) months of expected usable construction life at a temperature range of zero degree Fahrenheit (0°F) to one hundred twenty degrees Fahrenheit (120°F). Hay bales shall not be used for silt barriers, unless specifically approved by the OWNER.
 - 3. Filter fabric shall be a pervious sheet of propylene, nylon or polyester and shall be certified by the manufacturer or supplier to conform to the following specifications:

Filter efficiency (Test VTM-51):	75%
Minimum tensile strength at 20% elongation (Test ASTM-D-1682):	120 lbs.
Tear strength (Test ASTM D2263):	50 lbs.

4. CONTRACTOR shall submit further filter fabric specifications and installation configuration prior to start of construction.
5. Silt barriers shall be maintained in place until substantial completion of the Project.
6. Filter fabric shall be purchased in a continuous roll cut to the length of the barrier to avoid use of joints. When joints are necessary filter fabric shall be spliced together only at a support post, with a six-inch (6") overlap, and securely sealed.
7. The following items shall be installed and maintained in accordance with the applicable sections of the FDOT Standard Specifications:
 - a. Temporary silt fences and staked silt barriers
 - b. Floating silt barrier

B. Temporary Fence

1. Brightly colored fence as manufactured by Mirafi, product Mirasafe, or approved equal.
2. Material shall be four feet (4') high, attached to six feet (6') metal posts at twelve feet (12') centers. Posts shall be driven eighteen inches (18") into ground.

C. Filter Fabric for Placement Beneath Rip-Rap

1. Filter Fabric should be Mirafi 600X or approved equal.

D. Rip-Rap

1. Rubble type rip-rap consisting of broken stone meeting the requirements of Section 530-3.3 of the FDOT Standard Specifications for Road and Bridge Construction, Latest Edition.

PART 3 – EXECUTION

3.01 GENERAL

- A. Temporary erosion control features shall consist of, but not be limited to, temporary grassing, temporary sodding, temporary mulching, sandbagging, slope drains, sediment basins, artificial coverings, berms, baled hay or straw, floating silt barriers, staked silt barriers, and staked silt fences. Design details for some of these items may be found in the Water Quality Section of the applicable edition of the FDOT Roadway and Traffic Design Standards. All of these items shall be constructed in accordance with applicable sections of the FDOT Standard Specifications.
- B. Incorporate permanent erosion control features into the project at the earliest practical time. Correct conditions, using temporary measures, which develop during construction to control erosion prior to the time it is practical to construct permanent control features.

- C. Construct temporary and permanent erosion and sediment control measures and maintain them to prevent the pollution of adjacent water ways in conformance with the laws, rules and regulations of Federal, State and local agencies.
- D. Copies of approved permits will be provided to the CONTRACTOR for his review and use. CONTRACTOR shall be required to comply with all General and Special Conditions noted within the permit by the particular permitting agency. The CONTRACTOR shall maintain copies of these permits on the job site at all times.

3.02 INSTALLATION

- A. The following items shall be installed and in accordance with the FDOT Standard Specifications. The procedures are only generally described herein.
 - 1. Temporary Grassing: This work shall consist of furnishing and placing grass seed.
 - 2. Temporary Sod: This work shall consist of furnishing and placing sod.
 - 3. Temporary Mulching: This work shall consist of furnishing and applying a two-inch to four-inch thick blanket of straw or hay mulch and then mixing or forcing the mulch into the top two inches of the soil in order to temporarily control erosion. Only decayed straw or hay, which can readily be cut into the soil, shall be used. Other measures for temporary erosion control such as hydro-mulching, chemical adhesive soils stabilizers, etc., may be substituted for mulching with straw or hay with the approval of the City. When permanent grassing operations begin, temporary mulch materials shall be plowed under in conjunction with preparation of the ground.
 - 4. Sandbagging: This work shall consist of furnishing and placing sandbags in configurations, so as to control erosion and siltation.
 - 5. Slope Drains: This work shall consist of constructing slope drains, utilizing pipe, fiber mats, rubble, cement concrete, asphaltic concrete, plastic sheeting, or other acceptable materials, in accordance with the details shown in FDOT's Roadway and Traffic Design Standards or as suitable to adequately perform the intended function.
 - 6. Sediment Basins: Sediment basins shall be constructed in accordance with the details shown in FDOT's Roadway and Traffic Design Standards or as suitable to adequately perform the intended function. Sediment basins shall be cleaned out as necessary.
 - 7. Artificial Coverings: This work shall consist of furnishing and applying fiber mats, netting, plastic sheeting, or other approved covering to the earth surfaces.
 - 8. Berms: This work shall consist of construction of temporary earth berms to divert the flow of water from an erodible surface.
 - a. This work shall consist of construction of baled hay or straw dams or earth berms to protect against downstream accumulations of silt. The baled hay or straw dams shall be constructed in accordance with the details shown in FDOT's Roadway and Traffic Design Standards.
 - b. The berm dam shall be placed so as to effectively control silt dispersion under conditions present on this project. Alternate solutions and usage of materials may be used if approved.
 - 9. Filter Fabric for placement beneath rip-rap:
 - a. Unroll filter fabric adequately longitudinally with the swale.

- b. Install anchoring pins in the fabric to protect the material from wind uplift.
- c. Toe filter fabric into soil a minimum of twelve inches (12") at the top and bottom of the slope.

10. Rubble Rip-Rap:

- a. Rip-rap should be placed carefully to not damage or displace the filter fabric. Filter fabric which rips or becomes displaced during rip-rap placement should be repaired. The placement of the rip-rap should proceed from the bottom up to the top of the slope. At no time should the rip-rap be dumped onto the fabric from the tip of the slope and allowed to roll down the surface of the fabric.
- b. Placement of rip-rap shall be in accordance with Section 530-3 of the FDOT Standard Specifications for Road and Bridge Construction, latest edition.
- c. Minimum thickness of rip-rap layer is two feet (2').

3.03 SILT BARRIERS

- A. Silt barriers shall be installed and maintained at the locations shown on the Drawings. The CONTRACTOR is required to prevent the possibility of silting onto any adjacent parcel.
- B. Silt barrier shall be of the staked type and stakes shall be installed as indicated in the Drawings.
- C. The height of the silt barrier fabric shall be a minimum of forty-two inches (42").
- D. The stakes shall be two inch (2") x four inch (4") wood, five feet (5') long and shall be spaced a maximum of ten feet (10) apart at the barrier location and driven securely into the ground.
- E. A trench shall be excavated approximately four inches (4") wide by four (4") deep along the line of stakes. The filter fabric shall be tied or stapled to the wooden stakes and eight inches (8") of fabric shall be extended into the trench. The staples shall be heavy duty wire and at least one-half inch (1/2") long. The trench shall then be backfilled and the soil compacted over the filter fabric.

3.04 FLOATING SILT BARRIERS

- A. Floating silt barriers shall be located as shown on the Drawing and shall be in place prior to the start of any construction or grading.
- B. Floating silt barriers shall meet or exceed the Florida Department of Transportation Roadway and Traffic Design Standards, Index No. 102, Floating Silt Barrier. CONTRACTOR shall submit fabric filter material specifications and installation configuration for approval prior to the start of construction.

3.05 TEMPORARY FENCE

- A. Furnish, install and maintain on wetland lines, buffer lines, tree save lines and otherwise as shown on Drawings. Attach silt barrier to the temporary fence.

- B. Follow manufacturer's installation recommendations.

3.06 MAINTENANCE

- A. Silt barriers and temporary fences shall be inspected immediately after each rainfall and at least once a day during periods of prolonged rainfall. Any repairs shall be made immediately.
- B. Should the fabric on a silt barrier or temporary fence decompose or become ineffective, the installation shall be repaired or replaced immediately at no additional cost to the OWNER. If the CONTRACTOR fails to repair or replace the items as above, the OWNER shall have the right to stop work without additional cost to the OWNER in accordance with Article 15 of the General Conditions until such time as the repair or replacement has been made.
- C. Sediment deposits shall be removed after each storm event. The CONTRACTOR will repair and restore the installations to a working and effective condition to the satisfaction of the OWNER.
- D. At the completion of all work, the silt barriers and the temporary fences will be removed unless otherwise directed by the OWNER.
- E. Any sediment deposits in place after the silt fence or filter barrier is no longer required shall be dressed to conform to the existing grade and prepared for seeding or sodding.

3.07 CONTROL OF CONTRACTOR'S OPERATIONS WHICH MAY RESULT IN WATER POLLUTION

- A. Take sufficient precautions to prevent pollution of streams, canals, lakes, reservoirs, wetlands and other sensitive areas with silt, sediment, fuels, oils, bitumens, calcium chloride, or other harmful materials. Conduct and schedule operations so as to avoid or otherwise minimize pollution or siltation of such streams, etc. and to avoid interference with movement of migratory fish. Do not pump the residue from dust collectors or washers into any water body.
- B. Construction operations in rivers, streams, lakes, tidal waters, reservoirs, canals, and other impoundments shall be restricted to those areas where it is necessary to perform filling or excavation to accomplish the work shown in the Contract Documents and to those areas which must be entered to construct temporary or permanent structures. As soon as conditions permit, promptly clear rivers, streams, and impoundments of all obstructions placed therein or caused by construction operations.
- C. Except as necessary for construction, do not deposit excavated material in rivers, streams, canals, or impoundments, or in a position close enough thereto, to be washed away by high water or run-off.
- D. Where pumps are used to remove highly turbid waters from enclosed construction areas such as cofferdams or forms, treat the water prior to discharge into State or other waters. Pump the water into grassed swales, appropriately vegetated areas, or sediment basins, or confine it by an appropriate enclosure such as siltation curtains when other methods are not considered appropriate. Do not contaminate State or other waters.
- E. Do not disturb lands or waters outside the limits of construction, unless approved in advance and in writing by the OWNER. No operations within non-permitted wetlands or upland buffers are allowed.

3.08 PROTECTION DURING SUSPENSION OF CONTRACT TIME

- A. In the event that it is necessary that the construction operations be suspended for any appreciable length of time, shape the top of the earthwork in such a manner as to permit run-off of rainwater and construct earth berms along the top edges of embankments to intercept run-off water. Provide temporary slope drains to carry run-off from cuts and embankments which are located in the vicinity of rivers, streams, canals, lakes and impoundments. Should such preventative measures fail, immediately take such other action as necessary to effectively prevent erosion and siltation.

END OF SECTION

SECTION 01600 – MATERIALS AND EQUIPMENT

PART 1 – GENERAL

1.01 DESCRIPTION

- A. Scope of Work: Material and equipment incorporated into the Work:
1. Conform to applicable specifications and standards.
 2. Comply with size, make, type and quality specified, or as specifically approved in writing by the OWNER.
 3. Manufactured and fabricated products:
 - a. Design, fabricate and assemble in accord with the best engineering and shop practices.
 - b. Manufacture like parts of duplicate units to standard sizes and gauges, to be interchangeable.
 - c. Two (2) or more items of the same kind shall be identical, by the same manufacturer.
 - d. Products shall be suitable for service and conditions.
 - e. Equipment capacities, sizes and dimensions shown or specified shall be adhered to unless variations are specifically approved in writing.
 4. Do not use material or equipment for any purpose other than that for which it is designed or is specified.
- B. Related Requirements Described Elsewhere:
1. Conditions of the Contract.
 2. Summary of Work: Section 01010
 3. Special Project Procedures: Section 01100

1.02 APPROVAL OF MATERIALS

- A. Only new materials and equipment shall be incorporated in the work. All materials and equipment furnished by the CONTRACTOR shall be subject to the inspection and approval of the OWNER. No material shall be delivered to the work without prior approval of the OWNER.
- B. Within thirty (30) days after the Effective Date of the Agreement, the CONTRACTOR shall submit to the OWNER, data relating to materials and equipment he proposes to furnish for the work. Such data shall be in sufficient detail to enable the OWNER to identify the particular product to form an opinion as to conformity to the specifications. If Asbestos is contained in any item, the CONTRACTOR shall include a notification of this fact. This notification must include the type and percent of asbestos content. All data shall comply with Paragraph 1.06 of this Section.

- C. Facilities and labor for handling and inspection of all materials and equipment shall be furnished by the CONTRACTOR. If the OWNER requires, either prior to beginning or during the progress of the work, the CONTRACTOR shall submit samples of materials for such special tests as may be necessary to demonstrate that they conform to the specifications. Such samples shall be furnished, stored, packed and shipped as directed at the CONTRACTOR'S expense. Except as otherwise noted, the CONTRACTOR will make arrangements for and pay for the tests.
- D. The CONTRACTOR shall submit data and samples sufficiently early to permit consideration and approval before materials are necessary for incorporation in the work. Any delay of approval resulting from the CONTRACTOR'S failure to submit samples or data promptly shall not be used as a basis of claim against the OWNER.
- E. In order to demonstrate the proficiency of workmen or to facilitate the choice among several textures, types, finishes and surfaces, the CONTRACTOR shall provide such samples of workmanship or finish as may be required.
- F. The materials and equipment used on the work shall correspond to the approved samples or other data.

1.03 MANUFACTURER'S INSTRUCTION FOR INSTALLATION

- A. When Contract Documents require the installation of work shall comply with manufacturer's printed instruction, obtain and distribute copies of such instruction to parties involved in the installation, including five copies to the OWNER.
- B. Handle, install, connect, clean, condition and adjust products in strict accord with such instruction and in conformity with specified requirements.
 - 1. Should job conditions or specified requirements conflict with manufacturer's instruction, consult with OWNER for further instructions.
 - 2. Do not proceed with work without clear instructions.
- C. Perform work in accordance with manufacturer's instructions. Do not omit any preparatory step or installation procedure unless specifically modified or exempted by Contract Documents.

1.04 TRANSPORTATION AND HANDLING

- A. Arrange deliveries of products in accordance with construction schedules, coordinate to avoid conflict with work and conditions at the site.
 - 1. Deliver products in undamaged condition, in manufacturer's original containers or packaging, with identifying labels intact and legible.
 - 2. Immediately on delivery, inspect shipments to assure compliance with requirements of Contract Documents and approved submittals, and that products are properly protected and undamaged.
- B. Provide equipment and personnel to handle products by methods to prevent soiling or damage to products or packaging.

1.05 SPECIAL TOOLS

- A. Manufacturers of equipment and machinery shall furnish any special tools (including grease guns or other lubricating devices) required for normal adjustment, operations and maintenance, together with instructions for their use. The CONTRACTOR shall preserve and deliver to the OWNER these tools and instruction in good order no later than upon completion of the Contract.

1.06 STORAGE AND HANDLING OF EQUIPMENT ON SITE

- A. If there is a long period allowed for construction, special attention shall be given to the storage and handling of equipment on site. As a minimum, the procedure outlined below shall be followed:
 - 1. Equipment shall not be shipped until approved by the OWNER. The intent of this requirement is to reduce on-site storage time prior to installation and/or operation. Under no circumstances shall equipment be delivered to the site more than one month prior to installation without written authorization from the OWNER. Equipment shipped to the site shall be stored in accordance with Paragraph 1.05, herein.
 - 2. All equipment having moving parts such as gears, electric motors, etc. and/or instruments shall be stored in a temperature and humidity controlled building approved by the OWNER, until such time as the equipment is to be installed.
 - 3. All equipment shall be stored fully lubricated with oil, grease, etc. unless otherwise instructed by the manufacturer.
 - 4. Manufacturer's storage instructions shall be carefully studied by the CONTRACTOR and reviewed with the OWNER. These instructions shall be carefully followed and a written record of this kept by the CONTRACTOR.
 - 5. Moving parts shall be rotated a minimum of once weekly to insure proper lubrication and to avoid metal-to-metal "welding". Upon installation of the equipment, the CONTRACTOR shall start the equipment, does not deteriorate from lack of use.
 - 6. Lubricants shall be changed upon completion of installation and as frequently as required thereafter during the period between installation and acceptance. Mechanical equipment to be used in the work, if stored for longer than ninety (90) days, shall have the bearings cleaned, flushed and lubricated prior to testing and startup, at no extra cost to the OWNER.
 - 7. Prior to acceptance of the equipment, the CONTRACTOR shall have the manufacturer inspect the equipment and certify that its condition has not been detrimentally affected by the long storage period. Such certification by the manufacturer to be in a condition equal to that of equipment that has been shipped, installed, tested and accepted in a minimum time period. As such, the manufacturer will guarantee the equipment equally in both instances. If such a certification is not given, the equipment shall be judged to be defective. It shall be removed and replaced at the CONTRACTOR'S expense.

1.07 WARRANTY

- A. For all major pieces of equipment, submit a warranty from the equipment manufacturer as specified in Section 01740: Warranties. The manufacturer's warranty period shall be concurrent with the CONTRACTOR'S for one (1) year after the time of completion and acceptance.

1.08 SPARE PARTS

- A. Spare parts for certain equipment provided have been specified in the pertinent sections of the Specifications. The CONTRACTOR shall collect and store all spare parts so required in an area to be designated by the OWNER. In addition, the CONTRACTOR shall furnish to the OWNER an inventory listing all spare parts, the equipment they are associated with, the name and address of the supplier, and the delivered cost of each item. Copies of actual invoices for each item shall be furnished with the inventory to substantiate the delivered cost.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

END OF SECTION

SECTION 01640 – SUBSTITUTIONS AND PRODUCT OPTIONS

PART 1 – GENERAL

1.01 REQUESTS FOR REVIEW

- A. Requests to review substitute items of material and equipment will not be accepted by the ENGINEER from anyone other than the CONTRACTOR. If the CONTRACTOR wishes to furnish or use a substitute or equivalent items of material or equipment, the CONTRACTOR shall make written application to the ENGINEER for acceptance, certifying that the proposed substitute will perform adequately the functions called for by the general design, be similar and of equivalent substance to that specified and be suited to the same use and capable of performing the same function as that specified. The application will state whether or not acceptance of the substitute for use in the work will require a change in Drawings or Specifications to adapt the design to the substitute and whether or not incorporation or use of the substitute in connection with the work is subject to payment of any license fee or royalty. All variations of the proposed substitute from that specified shall be identified in the application and available maintenance, repair and replacement service will be indicated. The application will also contain an itemized estimate of all costs that will result directly or indirectly from acceptance of such substitute, including costs of redesign and claims of other contractors affected by the resulting change, all of which shall be considered by the ENGINEER in evaluating the proposed substitute. The ENGINEER may require the CONTRACTOR to furnish at the CONTRACTOR's expense additional data about the proposed substitute. The ENGINEER will be the sole judge of acceptability, and no substitute will be ordered or installed without the ENGINEER'S prior written acceptance. The OWNER may require the CONTRACTOR to furnish at the Contractor's expense, a special performance guarantee of other surety with respect to any substitute.

1.02 PRODUCT SELECTION

- A. Provide products that comply with the Contract Documents, that are undamaged, and unless otherwise indicated, new at the time of installation.
- B. To the fullest extent possible, provide products of the same kind from a single source.
- C. Compatibility among product options is required. Where more than one choice is available as options during product selection, select an option that is compatible with other products and materials already selected.
- D. Provide products complete with accessories, trim, finish, safety guards, and other devices and details needed for a complete installation and the intended use and effect.
- E. Where available, provide standard products of types that have been produced and used successfully in similar situations on other projects.
- F. Where Contract Documents are at variance with specific manufacturer's details and installation procedures, contact the ENGINEER for resolution prior to start of work.
- G. For products specified by naming a number of products and manufacturers with "or equal", select any of the products and manufacturers listed, or propose a substitution. If the CONTRACTOR wishes to propose a substitution, the CONTRACTOR must submit a request for product substitution for approval by the ENGINEER and OWNER.
- H. For products specified naming only one product and manufacturer, or a number of products and manufacturers without the "or equal" allowance, no substitutes are allowed.

- I. For products specified by reference standards only, the CONTRACTOR may provide any product complying with the specified standard.
- J. For products specified by performance and descriptive methods, without naming manufacturer's products, the CONTRACTOR may provide the products of any manufacturer complying with the Contract Documents, subject to the review of the product data and concurrence by the ENGINEER as specified within.

1.03 SUBSTITUTION AFTER EXECUTION OF AGREEMENT

- A. After execution of the Agreement, substitution of materials or equipment from Suppliers other than those listed or included in the Agreement will be considered only if it is demonstrated by CONTRACTOR that:
 - 1. The material or equipment proposed for substitution is superior in design, construction and/or efficiency to that of the listed manufacturer or supplier;
 - 2. The material proposed for substitution is in every way equal to that of the listed supplier, and that availability and/or delivery of listed materials within the time frame scheduled cannot be met;
 - 3. A specified product is no longer available.
 - 4. The product cannot be delivered by the manufacturer in a timely manner.
 - 5. The product is found to be incompatible with other specified products.
 - 6. The material proposed for substitution is in every way equal to that of the listed supplier and is available at a lower cost. In the event such a substitution is allowed, CONTRACTOR shall accept and execute a Change Order reducing the Contract Price by an amount equal to the cost differential.

1.04 ENGINEER'S CHARGES

- A. The ENGINEER will record time required by the ENGINEER and the ENGINEER'S consultants in evaluating substitutions proposed by the CONTRACTOR and in making changes in the Drawings or Specifications occasioned by the substitution. Whether or not the ENGINEER accepts a proposed substitute, the CONTRACTOR shall reimburse the OWNER for the charges of the ENGINEER and the ENGINEER'S consultants for evaluating any proposed substitute.

1.05 EQUIPMENT REQUIRING VARIATION IN SPACE

- A. It is intended that the CONTRACTOR shall furnish equipment which may be installed and shall operate properly in the structures as shown. Should the CONTRACTOR select alternate equipment resulting in an alteration to, addition to, enlargement of, or any other changes from the lines, dimensions, and grades shown, the CONTRACTOR shall make such changes or alterations as are required and no additional payment will be made by the OWNER for changes in structures occasioned by the selection of alternate equipment. All such variations shall be subject to review and acceptance by ENGINEER.
- B. Equipment requiring supplemental services in addition to those shown or specified in order to fulfill the operating objectives and including additional mechanisms, operating steps and/or controls as compared with specified equipment will not be acceptable.

PART 2 – PRODUCTS

(Not Applicable)

PART 3 – EXECUTION

(Not Applicable)

END OF SECTION

SECTION – 01700 CONTRACT CLOSEOUT

PART 1 – GENERAL

1.01 DESCRIPTION

- A. Scope of Work: Comply with requirement stated in Conditions of the Contract and in specifications for administrative procedures in closing out the Work.
- B. Related Requirements Described Elsewhere:
 - 1. Conditions of the Contract, fiscal provisions, legal submittals and additional administrative requirements.
 - 2. Project Record Documents: Section 01720.
 - 3. Warranties: Section 01740.

1.02 SUBSTANTIAL COMPLETION

- A. When CONTRACTOR considers the Work as substantially complete, the CONTRACTOR shall submit to the OWNER:
 - 1. A written notice that the Work, or designated portion thereof, is substantially complete.
 - 2. A list of items to be completed or corrected.
- B. Within a reasonable time after receipt of such notice, the OWNER shall make an inspection to determine the status of completion.
- C. Should the OWNER determine that the Work is not substantially complete:
 - 1. The OWNER shall promptly notify the CONTRACTOR in writing, giving the reasons thereof.
 - 2. CONTRACTOR shall remedy the deficiencies in the Work and send a second written notice of substantial completion to the OWNER.
 - 3. The OWNER shall re-inspect the Work.
- D. When the OWNER finds that the Work is substantially complete, the CONTRACTOR shall:
 - 1. Prepare and deliver to OWNER a tentative Certificate of Substantial Completion on form provided herein, with a tentative list of items to be completed or corrected before final payment.

1.03 FINAL INSPECTION

- A. When CONTRACTOR considers the Work is complete, it shall submit written certification that:
 - 1. Contract Documents have been reviewed.
 - 2. Work has been inspected for compliance with Contract Documents.
 - 3. Work has been completed in accordance with Contract Documents.
 - 4. Equipment and systems have been tested in the presence of the OWNER and are operational.

5. Work is completed and ready for final inspection.
- B. The OWNER shall make an inspection to verify the status of completion with reasonable promptness after receipt of such certification.
- C. Should the OWNER consider that the Work is incomplete or defective:
 1. The OWNER shall promptly notify the CONTRACTOR in writing, listing the incomplete or defective work.
 2. CONTRACTOR shall take immediate steps to remedy the stated deficiencies, and send a second written certification to the OWNER that the Work is complete.
 3. The OWNER shall re-inspect the Work.

1.04 REINSPECTION FEES

- A. Should the OWNER perform re-inspections due to failure of the Work to comply with the claims of status of completion made by the CONTRACTOR:
 1. The OWNER shall compensate the Engineer / Architect / Consultants, etc., for such additional services.
 2. The OWNER shall deduct the amount of such compensation from the final payment to the CONTRACTOR.

1.05 CONTRACTOR'S CLOSEOUT SUBMITTALS TO ENGINEER

- A. Project Record Documents: To requirements of Section 01720.
- B. Warranties: To requirements of Section 01740.
- C. Evidence of Payment and Release of Liens: To requirements of the General Conditions and Supplementary Conditions.
- D. Certificate of Insurance for Products and Completed Operations.

1.06 FINAL ADJUSTMENT OF ACCOUNTS

- A. Submit a final statement of accounting to the OWNER.
- B. Statement shall reflect all adjustments to the Contract Sum:
 1. The original Contract Sum.
 2. Additions and deductions resulting from:
 - a. Previous change orders or written amendment
 - b. Allowances
 - c. Unit prices
 - d. Deductions for uncorrected work
 - e. Penalties and bonuses
 - f. Deductions for liquidated damages
 - g. Deductions for re-inspection payments
 - h. Other adjustments

3. Total Contract Sum, as adjusted.
4. Previous payments.
5. Sum remaining due.

- C. The OWNER shall prepare a Final Change Order, reflecting approved adjustments to the Contract Sum which were not previously made by Change Orders.

1.07 FINAL APPLICATION FOR PAYMENT

- A. CONTRACTOR shall submit the final Application for Payment in accordance with procedures and requirements stated in the Conditions of the Contract.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

END OF SECTION

SECTION 01710 – FINAL CLEANING

PART 1 – GENERAL

1.01 DESCRIPTION OF REQUIREMENTS

- A. The CONTRACTOR shall execute cleaning, during progress of the work, and at the completion of the work, as required by General Conditions.
- B. Cleaning and disposal operations shall comply with codes, ordinances, regulations, and anti-pollution laws.

PART 2 – PRODUCTS

(Not Applicable)

PART 3 – EXECUTION

3.01 DURING CONSTRUCTION

- A. The CONTRACTOR shall:
 - 1. Execute periodic cleaning to keep the work, the site and adjacent properties free from accumulations of waste materials, rubbish and windblown debris, resulting from construction operations.
 - 2. Provide on-site containers for the collection of waste materials, debris and rubbish.
 - 3. Remove waste materials, debris and rubbish from the site periodically and dispose of at legal disposal areas away from the site.

3.02 FINAL CLEANING

- A. The CONTRACTOR shall:
 - 1. Employ skilled workmen for final cleaning.
 - 2. Broom clean exterior paved surface; rake clean other surfaces of the grounds.
 - 3. Prior to final completion, or OWNER occupancy, CONTRACTOR shall conduct an inspection of sight-exposed exterior surfaces, and all work areas, to verify that the entire work is clean.

END OF SECTION

SECTION 01720 – PROJECT RECORD DOCUMENTS

PART 1 – GENERAL

1.01 DESCRIPTION

- A. Scope of Work: Maintain at the site for the OWNER one (1) record copy at a minimum:
 - 1. Drawings
 - 2. Specifications
 - 3. Addenda
 - 4. Change Orders and other modifications of the Contract
 - 5. Field Orders or written instructions
 - 6. Approved Shop Drawings, Working Drawings and Samples
 - 7. Field Test records
 - 8. Construction photographs
 - 9. Change Requests
 - 10. CONTRACTOR'S Daily Reports
 - 11. Written Interpretations and Clarifications

1.02 MAINTENANCE OF DOCUMENTS AND SAMPLES

- A. Store documents and samples in CONTRACTOR'S field office apart from documents used for construction.
 - 1. Provide files and racks for storage of documents.
 - 2. Provide locked cabinet or secure storage space for storage of samples.
- B. File documents and samples in accordance with CSI format with section numbers as provided herein.
- C. Maintain documents in a clean, dry, legible, condition and in good order. Do not use record documents for construction purposes.
- D. Make documents and samples available at all times for inspection by the OWNER.
- E. As a prerequisite for monthly progress payments, the CONTRACTOR is to exhibit the currently updated "Record Documents" for review by the OWNER.
- F. CONTRACTOR shall submit on a daily basis two (2) copies of the preceding day's daily report to the OWNER.

1.03 MARKING DEVICES

- A. Provide felt tip marking pens for recording information in the color code designated by the OWNER.

1.04 RECORDING

- A. Label each document "PROJECT RECORD" in two inch (2") high printed letters.

- B. Keep record documents current at the end of work each day marking any changes and inserting change orders and directives into the documents.
- C. Do not permanently conceal any work until required information has been recorded. This includes markups and any “as-built” survey as required by these specifications.
- D. Record Contract Drawings: Legibly mark drawings to record actual construction with the following information verified by a registered Florida Land Surveyor.
 - 1. Depths of various elements of foundation in relation to survey datum.
 - 2. Horizontal and vertical location of underground utilities and appurtenances referenced to permanent surface improvements.
 - 3. Location of internal utilities and appurtenances concealed in construction referenced to visible and accessible features of structure.
 - 4. Field changes of dimension and detail.
 - 5. Changes made by Revision Order, Directive, and other modifications.
 - 6. Details not shown on the original Contract Drawings.
 - 7. Installation of power and control wiring with point-to-point wiring identification.
- E. Record Specifications and Addenda: Legibly mark-up each Section to record:
 - 1. Manufacturer, trade name, catalog number, and supplier of each product and item of equipment actually installed.
 - 2. Changes made by Revision Order, Directive, and other modifications.
 - 3. Other matters not originally specified.
- F. Shop Drawings and Samples: Legibly annotate to record changes made after approval.

1.05 “AS-BUILT” DRAWINGS

- A. The CONTRACTOR shall engage the services of a professional land surveyor registered in the State of Florida prior to any construction activities. The surveyor shall be named in the list of subcontractors.
- B. The surveyor must comply with all requirements of Chapter 21 HH-6.05 of the Florida Administrative Code.
- C. The surveyor shall use the locational requirements of the State of Florida.
- D. The surveyor shall provide on-site survey while construction is in progress and at such other times as required to fulfill all professional obligations and as listed below.
 - 1. Elevations and state plane coordinates shall be identified for the ends of all conduits or pipelines installed or used for construction, ends of all duct bank stubouts, and all direct buried cable splice locations.
 - 2. Elevations and coordinates shall be identified along the center line of pipelines, direct buried cable, buried conduit or duct bank by no fewer than one elevation shot per one hundred (100) linear feet and at any change of direction vertical or horizontal of underground utility length. Slopes shall be identified.
 - 3. All elevation shots shall be referenced to “top-of-pipe” (T.O.P.), “top-of-concrete-duct-bank” (T.O.D.B.), “bottom-of-concrete-duct-bank” (B.O.D.B.), “top-of-conduit” (T.O.C.) or “top-of-electric-cable” (T.O.E.), as appropriate for the project.

4. Manhole rings, slabs on grade, valve box rims, equipment pads, surface body water levels and other project construction features shall be recorded by elevation and state plane coordinates as "As-Built".
 5. All existing structures, utilities, and features revealed during the course of construction shall be accurately located and dimensioned. Movement of such utilities or structures required by project installation shall be recorded as "As-Built". This requirement shall apply whether the existing structure, utility or feature was shown on the original contract drawings or not.
- E. At the conclusion of the work, the CONTRACTOR shall provide the OWNER one (1) Mylar, three (3) approved, certified "As-Built" and one (1) "As-Built" Survey Drawing file in AutoCAD format (latest release) on a compact disk(s). The AutoCAD drawing files shall comply with the following standards:
1. The compact disk(s) shall be formatted for AutoCAD type DWG files or self-extracting compressed data file to a DWG format.
 2. The drawing format shall not contain any "X-REFS" (cross references) to other files.
 3. The drawing format shall contain only AutoCAD Standard Font Files and Acad.mnu type menu references only.
 4. Text from different layers shall not overlap. Colors and line types shall be "BY-LAYER". Only AutoCAD standard fonts and line types shall be used.
 5. All coordinate and elevation numbers shall be limited to three (3) decimal places.
 6. Text height shall be entered such that when the drawing is plotted to scale, the actual text height is no less than one-eighth inch (1/8"). The plotting scale for the drawings shall be the same scale as the construction drawings.
 7. Drawings shall be plotted on twenty-four inch (24") x thirty-six inch (36") sheets. The areas on each sheet shall match the areas shown on the construction drawings.

1.06 SUBMITTALS

- A. The CONTRACTOR shall deliver the following documentation, drawing(s), data, and disk(s) to the OWNER no later than two (2) weeks after the declared date of Substantial Completion.
1. Two (2) sets of contract drawings marked in red to reflect the final "As-Built" conditions.
 2. Two (2) sets of signed and sealed plots of the "As-Built" drawings(s) provided by the surveyor together with one (1) compact disk(s) of the "As-Built" survey drawing file(s).
 3. One (1) set of Specifications with Addenda marked in red to reflect the final "As-Built" conditions.
- B. Such other documents as shall be required by the regulations of the State of Florida shall be supplied in accordance with the provisions of law.
- C. Accompany submittal with transmittal letter, in duplicate, containing:
1. Date, Project title and number.
 2. CONTRACTOR'S name and address.
 3. Title and number of each record document.

4. Certification that each document as submitted is complete and accurate, and contains signature of CONTRACTOR, or its authorized representative.
- D. Failure to deliver any of the above items shall be considered justification for assessing additional retainage.

PART 2 – PRODUCTS - (NOT APPLICABLE)

PART 3 – EXECUTION - (NOT APPLICABLE)

END OF SECTION

SECTION 01730 - OPERATING AND MAINTENANCE DATA

PART 1 - GENERAL

1.01 REQUIREMENTS INCLUDED

A. Scope of Requirements:

1. Compile product data and related information appropriate for Owner's maintenance and operation of products furnished under Contract.
2. Prepare operating and maintenance data as specified in this Section and as referenced in other pertinent sections of the Specifications.
3. Instruct Owner's personnel in maintenance of products and in operation of equipment and systems.

1.02 QUALITY ASSURANCE

A. Preparation of data shall be done by personnel:

1. Trained and experienced in maintenance and operation of described products.
2. Familiar with requirements of this Section.
3. Skilled as a technical writer to the extent required to communicate essential data.
4. Skilled as draftsman competent to prepare required drawings.

1.03 FORMAT OF SUBMITTALS

A. Prepare data in form of an instructional manual for use by Owner's personnel.

B. Format:

1. Size: 8 1/2 inches x 11 inches
2. Paper: 20 pound minimum, white, for typed pages.
3. Text: Manufacturer's printed data, or neatly typewritten.
4. Drawings:
 - a. Provide reinforced punched binder tab, bind in with text.
 - b. Reduce larger drawings and fold to size of text pages but not larger than 14 inches x 17 inches.
5. Provide fly-leaf for each separate product, or operating equipment.
 - a. Provide typed description of products and major component parts of equipment.
 - b. Provide indexed tabs.
6. Cover: Identify each volume with typed or printed title **"OPERATING AND MAINTENANCE INSTRUCTIONS"**.
7. List:
 - a. Title of project
 - b. Identity of separate structure as applicable.

- c. Identity of general subject matter covered in the manual.

C. Binders:

- 1. Commercial quality three-post binders with durable and cleanable plastic covers.
- 2. Maximum post width: 2 inches.
- 3. When multiple binders are used, correlate the data into related consistent groupings.

1.04 CONTENT OF MANUAL

A. Neatly typewritten table of contents for each volume, arranged in systematic order.

- 1. Contractor, name of responsible principal, address and telephone number.
- 2. A list of each product required to be included, indexed to content of the volume.
- 3. List, with each product, name, address and telephone number of:
 - a. Subcontractor or installer
 - b. A list of each product required to be included, indexed to content of the volume.
 - c. Identify area of responsibility of each SubContractor/Installer.
 - d. Local source of supply for parts and replacement
- 4. Identify each product by product name and other identifying symbols as set forth in Contract Documents.

B. Product Data:

- 1. Include only those sheets which are pertinent to the specified product.
- 2. Annotate each sheet to:
 - a. Clearly identify specific product or part installed
 - b. Clearly identify data applicable to installation
 - c. Delete references to inapplicable information.

C. Drawings:

- 1. Supplement product data with drawings as necessary to clearly illustrate:
 - a. Relations of component parts of equipment and systems
 - b. Control and flow diagrams.
- 2. Coordinate drawings with information in Project Record Documents to assure correct illustration of completed installation.
- 3. Do not use Project Record Documents as maintenance drawings.

D. Written text, as required to supplement product data for the particular installation:

- 1. Organize in consistent format under separate headings for different procedures.

2. Provide logical sequence of instructions of each procedure.
- E. Copy of each warranty, bond and service contract issued.
1. Provide information sheet for Owner's personnel, give:
 - a. Proper procedures in event of failure
 - b. Instances which might affect validity of warranties or bonds.

1.05 MANUAL FOR EQUIPMENT AND SYSTEMS

- A. Submit four copies of complete manual in final form.
- B. Content, for each unit of equipment and system, as appropriate:
1. Description of unit and component parts.
 - a. Function, normal operating characteristics, and limiting conditions.
 - b. Performance curves, engineering data and tests.
 - c. Complete nomenclature and commercial number of replaceable parts.
 2. Operation procedures:
 - a. Start-up, break-in, routine and normal operating instructions.
 - b. Regulation, control, stopping, shut-down and emergency instructions.
 - c. Summer and winter operating instructions.
 - d. Special operating instructions.
 3. Maintenance procedures:
 - a. Routine operations
 - b. Guide to "trouble-shooting"
 - c. Disassembly, repair and reassembly
 - d. Alignment, adjusting and checking.
 4. Servicing and lubrication required:
 - a. Complete lubrications schedule.
 - b. List of all lubricants required and acceptable products from three manufacturers for each lubricant.
 5. Manufacturer's printed operating and maintenance instructions.
 6. Description of sequence of operation by control manufacturer.
 7. Original manufacturer's parts list, illustrations, assembly drawing and diagrams required for maintenance.

- a. Predicted life of parts subject to wear.
 - b. Items recommended to be stocked as spare parts.
 - 8. As installed control diagrams by controls manufacturer.
 - 9. Each Contractor's coordination drawings.
 - 10. List of original manufacturer's spare parts, manufacturer's current prices and recommended quantities to be maintained in storage.
 - 11. Other data as required under pertinent sections of specifications.
- C. Content, for each electric and electronic system, as appropriate:
- 1. Description of system and component parts.
 - a. Function, normal operating characteristics, and limiting conditions.
 - b. Performance curves, engineering data and tests.
 - c. Complete nomenclature and commercial number of replaceable parts.
 - 2. Circuit directories and panel boards.
 - a. Electrical service
 - b. Controls
 - c. Communications.
 - 3. As installed color coded wiring diagrams.
 - 4. Operating procedures:
 - a. Routine and normal operating instructions
 - b. Sequences required
 - c. Special operating instructions.
 - 5. Maintenance procedures:
 - a. Routine operations
 - b. Guide to "trouble-shooting"
 - c. Disassembly, repair and reassembly
 - d. Adjustment and checking.
 - 6. Manufacturer's printed operating and maintenance instructions.
 - 7. List of original manufacturer's spare parts, manufacturer's current prices, and recommended quantities to be maintained in storage.
 - 8. Other data as required under pertinent sections of the Specifications.

- D. Prepare and include additional data when the need for such data becomes apparent during instruction of Owner's personnel.
- E. Additional requirements for operating and maintenance data: Respective sections of Specifications.

1.06 SUBMITTAL SCHEDULE

- A. Submit two copies of preliminary draft of proposed formats and outlines of contents of Operation and Maintenance Manuals within 90 days after Notice to Proceed.
 - 1. Engineer will review the preliminary draft and return one copy with comments.
- B. Submit two copies of completed data in final form no later than 30 days following Engineer's review of the last shop drawing and/or other submittal specified in Section 01300. One copy will be returned with comments to be incorporated into final copies.
- C. Submit four (4) copies of approved manual in final form directly to the offices of the Owner within 30 calendar days of product shipment to the project site and preferably within 30 days after the reviewed copy is received.
- D. Provide four (4) copies of addenda to the operation and maintenance manuals as applicable and certificates as specified within 30 days after final inspection.

1.07 INSTRUCTION OF OWNER'S PERSONNEL

- A. Prior to demonstration test, fully instruct Owner's designated operating and maintenance personnel in operation, adjustment and maintenance of products, equipment and systems.
- B. Operating and maintenance manual shall constitute the basis of instruction. Review contents of manual with personnel in full detail to explain all aspects of operations and maintenance.
- C. Instructors shall be fully qualified personnel as outlined within the individual equipment specifications. If so specific training specifications are listed with the equipment, the Contractor shall provide the instruction with qualified Contractor personnel.
- D. The instructors shall provide for and prepare lessons scopes and handouts for up to five individual designated by the Owner that outline the items to be covered. Separate sessions for operation and maintenance instruction shall be provided consecutively. Handouts shall be submitted to the Owner with at least one week's notice prior to the training session.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

END OF SECTION

SECTION 01740 – WARRANTIES

PART 1 – GENERAL

- A. All work performed under this contract shall be warranted for labor and materials for a minimum period of one year after date of Substantial Completion. Specific warranties are noted in specific Sections.
- B. Standard product warranties are preprinted written warranties published by individual manufacturers for particular products and are specifically endorsed by the manufacturer to the OWNER.
- C. Special warranties are written warranties required by or incorporated in the Contract Documents, either to extend time limits provided by standard warranties or to provide greater rights for the OWNER.
- D. Refer to the General Conditions for terms of the CONTRACTOR'S period for correction of the Work.
- E. Disclaimers and Limitations: Manufacturer's disclaimers and limitations on product warranties do not relieve the CONTRACTOR of the warranty on the Work that incorporates the products. Manufacturer's disclaimers and limitations on product warranties do not relieve suppliers, manufacturers, and subcontractors required to countersign special warranties with the CONTRACTOR.
- F. Related Damages and Losses: When correcting failed or damaged warranted construction, remove and replace construction that has been damaged as a result of such failure or must be removed and replaced to provide access for correction of warranted construction.
- G. Reinstatement of Warranty: When Work covered by a warranty has failed and been corrected by replacement or rebuilding, reinstate the warranty by written endorsement. The reinstated warranty shall be equal to the original warranty with an equitable adjustment for depreciation.
- H. Replacement Cost: Upon determination that Work covered by a warranty has failed, replace or rebuild the Work to an acceptable condition complying with requirements of the Contract Documents. The CONTRACTOR is responsible for the cost of replacing or rebuilding defective Work regardless of whether the OWNER has benefited from use of the Work through a portion of its anticipated useful service life.
- I. OWNER'S Recourse: Expressed warranties made to the OWNER are in addition to implied warranties and shall not limit the duties, obligations, rights, and remedies otherwise available under the law. Expressed warranty periods shall not be interpreted as limitations on the time in which the OWNER can enforce such other duties, obligations, rights, or remedies.
- J. Rejection of Warranties:
 - 1. The OWNER reserves the right to reject warranties and to limit selection to products with warranties not in conflict with requirements of the Contract Documents.

2. Where the Contract Documents require a special warranty, or similar commitment, the OWNER reserves the right to refuse to accept the Work, until the CONTRACTOR presents evidence that entities required to countersign such commitments are willing to do so.

K. Written Warranties

1. Submit written warranties to the ENGINEER prior to the date certified for Substantial Completion. If the ENGINEER'S Certificate of Substantial Completion designates a commencement date for warranties other than the date of Substantial Completion, submit written warranties upon request of the ENGINEER.
2. When a designated portion of the Work is completed and occupied or used by the OWNER, by separate agreement with the CONTRACTOR during the construction period, submit properly executed warranties to the ENGINEER within 15 days of completion of that designated portion of the Work.
3. When the Contract Documents require the CONTRACTOR, or the CONTRACTOR and a subcontractor, supplier or manufacturer to execute a special warranty, prepare a written document that contains appropriate terms and identification, ready for execution by the required parties. Submit a draft to the OWNER, through the ENGINEER, for approval prior to final execution.
4. Refer to Divisions 2 through 16 Sections for specific content requirements and particular requirements for submitting special warranties.
5. Bind warranties and bonds in heavy-duty, commercial-quality, durable 3-ring, vinyl-covered loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8-1/2-by-11-inch (115-by-280-mm) paper.
6. Provide heavy paper dividers with celluloid covered tabs for each separate warranty. Mark the tab to identify the product or installation. Provide a typed description of the product or installation, including the name of the product, and the name, address, and telephone number of the Installer.
7. Identify each binder on the front and spine with the typed or printed title "WARRANTIES," Project title or name, and name of the CONTRACTOR.
8. When warranted construction requires operation and maintenance manuals, provide additional copies of each required warranty, as necessary, for inclusion in each required manual.

PART 2 – PRODUCTS

(Not Applicable)

PART 3 – EXECUTION

(Not Applicable)

END OF SECTION

DIVISION 2

SITEWORK

SECTION 02010 – SUBSURFACE INVESTIGATION

PART 1 – GENERAL

1.01 DESCRIPTION

- A. No soils report has been prepared for this project.

1.02 QUALITY ASSURANCE

- A. Bidders should visit the site and acquaint themselves with all existing conditions. Prior to bidding, bidders may make their own subsurface investigations to satisfy themselves as to site and subsurface conditions, but all such investigations shall be performed under time schedules and arrangements approved in advance by the OWNER.

1.03 JOB CONDITIONS

- A. The CONTRACTOR shall visit the site and acquaint himself with all existing conditions. Prior to bidding, bidders may make their own subsurface investigations to satisfy themselves as to site and subsurface conditions, but such subsurface investigations shall be performed only under time schedules and arrangements approved in advance by the OWNER.

PART 2 – PRODUCTS (Not Applicable)

PART 3 – EXECUTION

3.01 PERFORMANCE

- A. All work relative to subsurface conditions shall be accomplished in accordance with the specific requirements of the individual sections of the Specifications.
- B. Readjust all work performed which does not meet technical or design requirements as hereinafter specified, but make no deviations from the Contract Documents without specific and written approval of the CONTRACTOR.

END OF SECTION

SECTION 02200 – EARTHWORK

PART 1 – GENERAL

1.01 DESCRIPTION OF WORK

- A. This Section includes digging of excavations for structures, piping and roadways; backfilling around structures and piping; shaping and contouring the ground surface to conform to established grades and elevations; compacting of earth or rock materials to specified densities; bracing, sheeting and shoring; dewatering; removal of surplus excavated materials; and related work as shown on the Drawings and as specified.

1.02 DEFINITIONS

- A. Excavation
1. Removal of earth and rock to form cavities for the construction of foundations and structures and to form trenches for the installation of piping or conduits.
 2. Cavity formed by the removal of earth and rock.
- B. Earth: Unconsolidated material in the crust of the earth derived by weathering and erosion. Earth includes:
1. Materials of both inorganic and organic origin;
 2. Boulders less than 1/3 cubic yard in volume, gravel, sand, silt, and clay;
 3. Materials which can be excavated with a backhoe, trenching machine, drag line, clam shell, bulldozer, highlift, or similar excavating equipment without the use of explosives, rock rippers, rock hammers, or jack hammers.
- C. Rock: A natural aggregate of mineral particles connected by strong and permanent cohesive forces. Rock includes:
1. Limestone, sandstone, dolomite, granite, marble, and lava;
 2. Boulders 1/3 cubic yard or more in volume;
 3. Materials which cannot be excavated by equipment which is used to remove earth overburden without the use of explosives, rock rippers, rock hammers, or jack hammers.
- D. Undercutting: Excavation of rock and unsuitable earth below the bottom of a foundation, structure, pipe or conduit to be constructed or installed.
- E. Subgrade. Undisturbed bottom of an excavation.
- F. Bedding. Earth placed in trench to support pipe and conduit.
- G. Backfill and Fill
1. Earth placed around structures from the bottom of an excavation to finished grade, or to the subbase of pavement.
 2. Earth placed in a trench from the top of bedding to finished grade, or to subbase of pavement.
- H. Topsoil: Earth containing sufficient organic materials to support the growth of grass.

1.03 JOB CONDITIONS

- A. Carefully maintain bench marks, monuments and other reference points, and if disturbed or destroyed, replace as directed.
- B. Should the CONTRACTOR encounter unusual subsurface and/or latent conditions at the site, he shall immediately give notice to the ENGINEER of such conditions before they are disturbed. The ENGINEER will promptly investigate the conditions and he will at once make such changes in the Drawings and/or Specifications as he may find necessary. Any increase or decrease in cost resulting from such changes will be adjusted in the manner provided in the General Conditions.

1.04 QUALITY ASSURANCE

- A. Codes and Standards: Perform excavation and landfilling work in compliance with applicable requirements of governing authorities having jurisdiction.
- B. Testing and Inspection Service: The OWNER will retain a Soils Engineer to perform soil testing and inspection service for quality control testing of earthwork operations. Tests revealing satisfactory results will be paid for by the OWNER. The cost of tests revealing unsatisfactory results will be deducted from monies due the CONTRACTOR.

PART 2 – PRODUCTS

2.01 MATERIALS

- A. Earth for Fill and Backfill: Earth used for fill or backfill shall be of such gradation and moisture content that it will compact to the specified density and remain stable.
- B. Pipe Cover Material: Pipe cover material shall consist of durable particles ranging in size from fine to coarse (No. 200 to 1-inch) in size, in a substantially uniform combination. Unwashed bank run sand and crushed bank-run gravel will be considered generally acceptable. Bedding material may be used for cover material.
- C. Special Backfill: Special backfill shall be the following soils, classified by the Unified Soil Classification System, ASTM D-2487:

Group Symbols	Typical Name
GW	Well-graded gravels and gravel-sand mixtures, little or no fines
GP	Poorly graded gravels and gravel-sand mixtures, little or no fines
SW	Well-graded sands and gravelly sands, little or no fines
SP	Poorly graded sands and gravelly sands, little or no fines

- D. Suitable Backfill: Suitable backfill shall be the following soils, classified by the Unified Soil Classification System, ASTM D-2487:

Group Symbols	Typical Name
GW	Well-graded gravels and gravel-sand mixtures, little or no fines
GP	Poorly graded gravels and gravel-sand

	mixtures, little or no fines
GM	Silty gravels, gravel-sand-silt mixtures
GC	Clayey gravels, gravel-sand-clay mixtures
SW	Well-graded sands and gravelly sands, little or no fines
SP	Poorly graded sands and gravelly sands, little or no fines
SM	Silty sands, sand-silt mixtures
SC	Clayey sands, sand-clay mixtures
ML	Inorganic silts, very fine sands, rock flour, silty or clayey fine sands
CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays

- E. Unsuitable Materials: Materials which are unsuitable for backfill include stones greater than 6 inches in their largest dimension, pavement, rubbish, debris, wood, metal, plastic, and the following soils, classified by the Unified Soil Classification System, ASTM D-2487:

Group Symbols	Typical Name
OL	Organic silts and organic silty clays of low plasticity
MH	Inorganic silts, micaceous or diatomaceous fine sands or silts, elastic silts
CH	Inorganic clays of high plasticity, fat clays
OH	Organic clays of medium to high plasticity
PT	Peat, muck, and other highly organic soils

PART 3 – EXECUTION

3.01 PROTECTION OF EXISTING FACILITIES

- A. Support and protect all poles, fences, utility pipes, wire, conduits, buildings and structures.
- B. Proceed with caution during excavation so the exact location of underground utilities and structures, both known and unknown, may be determined. CONTRACTOR shall be responsible for the repair of utilities and structures when broken or otherwise damaged.
- C. Wherever water, or other pipes or conduits cross the excavation, the CONTRACTOR shall support said pipes and conduits without damage to them and without interrupting this Contract. The manner of supporting such pipes, or similar items, shall be subject to the approval of the ENGINEER.
- D. When utility lines that have to be removed or relocated are encountered within the areas of operations, the CONTRACTOR shall notify the ENGINEER in ample time for the necessary measure to be taken to prevent interruption of the service.
- E. The CONTRACTOR shall so conduct the work that no equipment, material, or debris will be placed or allowed to fall upon private property in the vicinity of the work, unless he shall have first obtained the property owner's written consent to do so and shall have shown said written consent to the OWNER.

- F. All excavated material shall be piled in a manner that will not obstruct driveways. Hydrants under pressure, valve pit covers, valve boxes, curb stop boxes, or other utility controls shall be left unobstructed and accessible until the work is completed. Drainageways shall be kept clear or other satisfactory provisions made for drainage.
- G. Natural watercourses shall not be obstructed, except where specifically permitted for the construction of outfall and subaqueous crossings.

3.02 CLEARING

- A. Before excavating, clear and remove logs, stumps, brush, vegetation, rubbish, and other perishable matter from the project site.
- B. Do not remove or damage trees that do not interfere with the finished work. Completely remove trees required to be removed, including stumps and roots. Replace trees removed unnecessarily. Properly treat damaged trees which can be saved.

3.03 STRIPPING AND STOCKPILING TOPSOIL

- A. Strip topsoil and vegetation from the areas to be excavated. Clean topsoil may be stockpiled for reuse.

3.04 EXCAVATING

- A. Make excavations to elevations and dimensions necessary to permit bracing, sheeting, erection of forms, inspection of foundation, and installation of piping or conduits. Excavate trenches to the required alignment, depth and width. Excavate trenches in advance of pipe and conduit installation only as far as necessary to provide proper alignment and grade. Plan trenching operations to cause a minimum of danger to adjacent property and a minimum of inconvenience to the public.
- B. The width of trenches at the top of the pipe shall be ample to permit the pipe to be laid and joined properly and to allow the backfill to be placed and compacted as specified. Maximum trench width shall be such that design loadings on pipe will not be exceeded. Trenches shall be of such extra width, when required, to permit the placement of supports, sheeting, bracing, and appurtenances.
- C. Depth of trenches shall be such as to allow installation of pipelines at the grades or elevations shown.
- D. Trees, boulders, and other surface encumbrances, located so as to create a hazard to anyone involved in the excavation work or who is in the vicinity of the work at anytime during operations, shall be removed or made safe before excavating is begun.
- E. CONTRACTOR shall be responsible for the determination of the angle of repose of the soil in which the excavating is to be done. Excavate all slopes to at least the angle of repose except for areas where solid rock allows for line drilling or presplitting.
- F. Sides, slopes, and faces of all excavations shall meet accepted engineering requirements by scaling, benching, barricading, rock bolting, wire meshing, or other equally effective means. Give special attention to slopes which may be adversely affected by weather or moisture content.

- G. Flatten the excavation sides when an excavation has water conditions, silty materials, loose boulders, and areas where erosion and slide planes appear.
- H. Shore or otherwise support sides of excavations in hard or compact soil when the excavation is more than five feet in depth. In lieu of shoring, the sides of the excavation above the five-foot level may be sloped to preclude collapse, but shall not be steeper than a one-foot rise to each 1/2-foot horizontal.
- I. Use diversion ditches, dikes, or other suitable means to prevent surface water from entering an excavation and to provide adequate drainage of the area adjacent to the excavation. Do not allow water to accumulate in an excavation. If possible, the grade should be away from the excavation.
- J. Excavations shall be inspected by a competent CONTRACTOR'S representative after every rainstorm or other hazard-increasing occurrence, and the protection against slides and cave-ins shall be increased if necessary.
- K. Do not store excavated or other material nearer than four feet from the edge of any excavation. Store and retain materials as to prevent materials from falling or sliding back into the excavation. Install substantial stop log or barricades when mobile equipment is utilized or allowed adjacent to excavations.

3.05 SHEETING

- A. The CONTRACTOR has the option of sheeting excavations.
- B. Supporting systems, such as piling, cribbing, shoring, and bracing shall be designed by a qualified CONTRACTOR'S representative and meet accepted engineering requirements. When tie rods are used to restrain the top of sheeting or other retaining systems, securely anchor the tie rods well back of the angle of repose. When tight sheeting or sheet piling is used, assume full loading due to groundwater table, unless prevented by weep holes or drains or other means. Provide additional stringers, ties, and bracing to allow for any necessary temporary removal of individual supports.
- C. Materials used for sheeting, sheet piling, cribbing, bracing, shoring and underpinning shall be in good, serviceable condition. Timbers shall be sound, free from large or loose knots, and of proper dimensions.
- D. Take special precautions in sloping or shoring the sides of excavations adjacent to a previously backfilled excavation or a fill, particularly when the separation is less than the depth of the excavation. Pay particular attention to joints and seams of material comprising a face and to the slope of such seams and joints.
- E. If it is necessary to place or operate power shovels, derricks, trucks, materials, or other heavy objects on a level above or near an excavation, sheet-pile, shore, and brace the side of the excavation as necessary to resist the extra pressure due to such superimposed loads.
- F. If the stability of adjoining buildings or walls is endangered by excavations, provide shoring, bracing, or underpinning as necessary to ensure the safety of adjoining buildings or walls. Such shoring, bracing or underpinning shall be inspected daily or more often, as conditions warrant, by a competent CONTRACTOR'S representative and the protection effectively maintained.

- G. The CONTRACTOR shall be held responsible for the sufficiency of all sheeting and bracing used, and for all damage to persons or property resulting from the improper quality, strength, placing, maintaining, or removing of the same. This includes damage to trees, sidewalks, and other property on the project site as well as on the private grounds.
- H. Drive sheeting ahead of excavation. Do not remove sheeting until the excavation backfill has reached within two feet of the top of the excavation, except that the lower course of sheeting may be removed from a double sheeted excavation. When sheeting is drawn, completely fill all cavities remaining in or adjoining the excavation. When sheeting is left in place, completely fill all cavities behind such sheeting.

3.06 ROCK REMOVAL

- A. Rock, boulders or other hard, lumpy or unyielding materials encountered in trench bottoms shall be removed to a depth at least 6 inches below the bottom and on each side of any pipes to be installed. All rock and other hard foundation material under structures shall be freed of all loose material, cleaned, and cut to a firm surface; either level, stepped vertically and horizontally or serrated, as may be directed. All seams shall be cleaned out and filled with concrete or mortar.
- B. Blasting of rock or other hard to remove materials will not be permitted on this project.

3.07 SUBGRADES

- A. Do not construct foundations, footings, slabs, or piping on loose soil, mud, or other unstable or unsuitable soil.
- B. Fill excess cuts under foundations, footings, and slabs with concrete.
- C. Fill excess cuts under piping with compacted bedding as specified in this Section.

3.08 BACKFILLING FOUNDATION AND STRUCTURE EXCAVATIONS

- A. Remove debris and other unstable or unsuitable materials from excavations before backfilling is started.
- B. Backfill excavations in areas to be paved with Special Backfill: Place Special Backfill in 12-inch lifts. Compact each lift of backfill to not less than 98% of the maximum dry density as determined in accordance with AASHTO T-180. Compaction shall be by hand tamping or approved mechanical tamping devices, or in larger excavations by approved rollers. Do not compact backfill by puddling, unless permitted by the ENGINEER.
- C. Backfill excavations not requiring Special Backfill with Suitable Material:
 - 1. Place backfill and fill materials in lifts no greater than 12 inches in loose depth. Place backfill and fill materials in lifts no greater than four inches in loose depth where hand tampers are used. Backfill and fill shall be within 2% of optimum moisture content. For soils containing less than 5% material passing a No. 200 sieve, moisture content may be increased to within 3% of optimum. Compact backfill and fill to not less than 95% of the maximum dry density. Tests for determination of maximum dry density shall meet the requirements of AASHTO T-180. Use compaction equipment which is suited to the soil being compacted.

2. If suitable, use stored excavated material for backfill and fill. Provide additional material, if required, to complete backfill and fill. Additional backfill and fill material shall be provided at no additional cost to the OWNER.
- D. Do not use the following materials for backfill:
1. Unsuitable materials;
 2. Materials which are too wet or too dry to be compacted to the densities specified in this Section.
- E. Place the backfill and fill in a manner which will not overload foundations or structures. Place backfill and fill evenly on all sides of foundations and structures. Do not use equipment that will overload foundations or structures during filling or backfilling.
- F. Do all cutting, filling, and grading necessary to bring the entire area around foundations and outside of structures to the following subgrade levels:
1. To the underside of the respective surfacing for walks and pavement;
 2. To finished grade for lawns and planted areas within the project site.

3.09 BACKFILLING PIPING TRENCHES

- A. Do not backfill trenches and excavations until all utilities have been inspected by the OWNER'S representative and until all underground utilities and piping systems are installed in accordance with the requirements of the specifications and the Drawings.
- B. Remove debris and other unsuitable materials from excavations before backfilling is started.
- C. Place and tamp bedding and backfilling in a manner which will not damage pipe coating, wrapping, or encasement.
- D. Bedding procedures shall be as specified in the particular Section for the applicable pipe material.
- E. If bedding does not cover the pipe, place pipe cover material from the top of bedding to 12 inches over the pipe. Compact pipe cover material to the density required to allow backfill over the pipe cover material to be compacted to the density specified.
- F. Do not use the following materials for backfilling:
1. Unsuitable Materials;
 2. Materials which are too wet or too dry to be compacted to the densities specified in this Section.
- G. If suitable, use stored excavated material for backfill and fill. Provide additional material, if required, to complete backfill and fill. Additional backfill and fill material shall be provided at no additional cost to the OWNER.
- H. Backfill excavations in areas to be paved with Special Backfill.
1. Place Special Backfill in 12-inch lifts. Compact each lift of backfill to not less than 98% of the maximum dry density as determined in accordance with AASHTO T-180, Method A. Compaction shall be by hand tamping or approved mechanical

tamping devices, or in larger excavations by approved rollers. Backfill and fill materials shall be within 2% of optimum moisture content. Do not compact backfill by puddling, unless permitted by the ENGINEER.

I. Backfill trenches not requiring Special Backfill with Suitable Material.

1. Place backfill and fill materials in lifts no greater than 12 inches in loose depth and compact to produce an adequate foundation for seeding. The top 4 inches of backfill shall not contain stones or other objects larger than 1 inch in maximum dimension. Mound backfill above finish grade to allow for settlement. Fill and restore any settlement of the backfill. Grade area to be restored to finish grade after settlement of backfill and immediately before restoration of vegetated areas.

3.10 FINISH GRADING

- A. Shape the surface of all earthwork to conform to the lines, grades, contours and cross-sections shown on the drawings. Hand dressing may be required in certain areas or in confined areas where equipment operation is restricted.
- B. In final shaping of the surface of the earthwork a tolerance of 0.1 foot above or below the plan elevation will be allowed with the following exceptions:
 1. Earthwork shall be shaped to slope away from all buildings and structures.
 2. Earthwork shall be shaped to match adjacent pavement, curb, sidewalks, and similar appurtenances.
 3. Ditch bottoms and swales shall be shaped so that no water will be impounded except in areas designated for impoundment.

3.11 CLEANUP AND MAINTENANCE

- A. Cleanup the job site as grading is completed. Remove excess earth, rock, bedding, materials, and backfill materials. Remove unused piping materials, structure components, and appurtenances. Restore items moved, damaged, or destroyed during construction.
- B. Maintain the job site until the work has been completed and accepted. Fill excavations which settle when settlement is visible. Restore items damaged by construction or improper restorations. Keep dust conditions to a minimum.

3.12 STORAGE AND REMOVAL OF EXCAVATED MATERIAL

- A. Suitable excavated material required for filling and backfilling operations may be stockpiled on the job site.
- B. Remove unsuitable materials from the job site as unsuitable materials are excavated. Remove surplus suitable materials from the job site as excavations are backfilled.
- C. Excavated suitable surplus materials shall remain the OWNER'S property and shall be stockpiled at the location(s) designated by the OWNER.

END OF SECTION

SECTION 02240 – DEWATERING (DURING CONSTRUCTION)

PART 1 – GENERAL

1.01 DESCRIPTION

- A. Scope of Work: The work to be performed under this Section shall include the design and installation of a temporary wellpoint system to dewater subsurface waters so that the installation of utilities may proceed with a dry trench. The system shall remain in place until completion of construction.
- B. Related Work Described Elsewhere:
 - 1. Earthwork: Section 02200

1.02 QUALITY ASSURANCE

- A. Qualifications: The temporary dewatering system shall be designed by a firm who regularly engages in the design of dewatering systems and who is fully experienced, reputable and qualified in the design of such dewatering systems. The firm shall have a successful record of operation for a minimum of five (5) years prior to bid date.
- B. In lieu of experience, the dewatering firm shall provide a performance and warranty bond for 1.5 times the total installed cost of the temporary dewatering system. This bond shall be executed prior to award and/or contract execution.
- C. Standards: The dewatering of any excavation areas and the disposal of water during construction shall be in strict accordance with all local and state government rules and regulations.

1.03 SUBMITTALS

- A. Materials and Shop Drawings: Shop drawings required to establish compliance with the specifications shall be submitted in accordance with the provisions of Section 01310: Administrative Requirements.

1.04 CRITERIA

- A. The wellpoint system shall be developed to the point that is capable of dewatering such that pipe can be laid and compacted satisfactorily as shown on the Drawings. Each wellpoint system shall be capable of dewatering and maintaining groundwater levels at the respective structures.

PART 2 – PRODUCTS

2.01 GENERAL

- A. The equipment specified herein shall be standard wellpoint dewatering equipment of proven ability as designed and manufactured by firms having experience in the design and production of such equipment. The equipment furnished shall be designed, constructed and installed in accordance with the best practices and methods.
- B. The use of wrapped underdrains or “socks” for dewatering shall not be allowed unless approval is obtained by the OWNER.

- C. The CONTRACTOR shall be required to monitor the performance of the dewatering system during the progress of the work and require such modifications as may be required to assure that the systems will perform satisfactorily. Dewatering system shall be designed in such a manner as to preserve the undisturbed bearing capacity of the subgrade soils and to preserve the integrity of adjacent structures.

PART 3 – EXECUTION

3.01 INSTALLATION

- A. Dewatering: The CONTRACTOR shall install a temporary wellpoint dewatering system for the removal of subsurface water encountered during construction of the proposed structures and/or piping.

3.02 PROTECTION AND SITE CLEAN-UP

- A. At all times during the progress of the Work the CONTRACTOR shall use all reasonable precautions to prevent either tampering with the wellpoints or the entrance of foreign material.
- B. In the event that satisfactory dewatering cannot be accomplished due to subsurface conditions or where dewatering could damage existing structures, the CONTRACTOR shall obtain the Owner/Engineer's approval of wet trench.
- C. Immediately upon completion of the wellpoint system, the CONTRACTOR shall remove all of his equipment, materials, and supplies from the site of the work, remove all surplus materials and debris, fill in all holes or excavations, and grade the site to elevations of the surface levels which existed before work started. The site shall be thoroughly cleaned and approved by the Owner/Engineer.

3.03 DISPOSAL

- A. Water pumped from the trench or other excavation shall be disposed of in storm sewers having adequate capacity, canals or suitable disposal pits.
- B. CONTRACTOR is responsible for acquiring all permits required to discharge the water and shall protect waterways from turbidity during the operation.
- C. In areas where adequate disposal sites are not available, partially backfilled trenches may be used for water disposal only when the CONTRACTOR'S plan for trench disposal is approved in writing by the Owner/Engineer. The CONTRACTOR'S plan shall include temporary culverts, barricades and other protective measures to prevent damage to property or injury to any person or persons.
- D. No flooding of streets, roadways, driveways or private property will be permitted. Engines driving dewatering pumps shall be equipped with residential type mufflers. Where practical and feasible, electrical "drops" should be used in lieu of portable generators.

END OF SECTION

SECTION 02500 – PAVING

PART 1 – GENERAL

1.01 DESCRIPTION

- A. This Section provides paving requirements (by reference) and base and curbing requirements for the roadway resurfacing project.
- B. Related Work Specified Elsewhere:

1.02 QUALITY ASSURANCE

- A. CONTRACTOR shall be responsible for employing an independent testing laboratory to prepare required design mixes and to monitor his quality control procedures. CONTRACTOR shall be responsible for all asphalt plant testing.
- B. CONTRACTOR shall provide a certificate that all materials and workmanship provided by him conform to Contract Requirements.
- C. OWNER will retain an independent testing laboratory to field verify quality of materials used in paving work.
- D. Where the “Standard Specifications” require that materials be from a source approved by the Department of Transportation, CONTRACTOR may provide proof of such source approval or he may employ an independent testing laboratory to perform necessary sampling and testing and to certify that all source meets requirements for Department approval.

1.03 REFERENCE STANDARDS

- A. The “Standard Specifications” referred to in this Section are the Florida Department of Transportation, Standard Specifications for Road and Bridge Construction. The most current edition shall be used unless a specific edition is referred to. Those paragraphs in the “Standard Specifications” referring to Measurement and Payment are not applicable to work under this contract.
- B. References to AASHTO shall mean the American Association of State Highway and Transportation Officials.

1.04 SUBMITTALS

- A. Submit Certificate of Compliance with specified requirements in duplicate for OWNER's and ENGINEER's file.
- B. Design mixes, complete with back-up data, shall be submitted before paving begins in quadruplicate for use by OWNER, ENGINEER, Quality Control Laboratory and field inspector.

1.05 JOB CONDITIONS

- A. Alignment and Elevations:
 - 1. Establish and maintain alignment and elevations as shown or specified.

- B. Weather Limitations:
 - 1. Conform to weather limitations specified for each component of the paving system.

PART 2 – PRODUCTS

2.01 STABILIZED SUBGRADE

- A. Materials for use in constructing the stabilized subgrade shall conform to the requirements of Section 914 of the “Standard Specifications”.

2.02 MATERIALS FOR CRUSHED CONCRETE BASE COURSE

- A. The minimum percentage of carbonate of calcium and magnesium in the crushed concrete material shall be 60. The maximum percentage of water-sensitive clay mineral shall be 3. Determination shall be at the option of the ENGINEER.
- B. Crushed concrete material shall not contain cherty or other extremely hard pieces, or lumps, balls, or pockets of sand or clay size material in sufficient quantity as to be deleterious to the proper bonding, finishing, or strength of the crushed concrete base.

2.03 MATERIALS FOR LIMEROCK BASE COURSE

- A. Limerock materials for the construction of base courses shall conform to the requirements of Section 230 of the “Standard Specifications”.

2.04 MATERIALS FOR ASPHALTIC CONCRETE MIXTURES

- A. Materials for use in asphaltic concrete mixtures shall conform to the requirements listed in “Standard Specifications”, as further clarified in Section TP of the project specifications.
- B. The use of recycled asphaltic concrete will not be allowed for any purpose without written permission of the ENGINEER.
- C. CONTRACTOR shall employ an independent testing laboratory to test materials and prepare a design mix for the type of mix to be used on the project and to monitor plant asphalt production for quality control, as specified by OWNER.
- D. The asphaltic concrete manufacturing plant, used for the asphaltic concrete mixture, shall be a maximum of fifty (50) miles from the project site.

2.05 MATERIALS FOR PRIME AND TACK COATS FOR BASE COURSES

- A. Materials used for prime and tack coats shall conform to the requirements of Section 300 of the “Standard Specifications”, latest Edition.

2.06 CONCRETE CURB AND CURB AND GUTTER

- A. Concrete for use in concrete curb and curb and gutter shall be non-structural concrete conforming to the requirements of Section 520 of the “Standard Specifications”, latest Edition.

PART 3 – EXECUTION

3.01 INSPECTION

- A. Examine areas where pavements are to be constructed. Ensure that clearing and grubbing has been satisfactorily completed. Verify that subgrade has been constructed to proper elevations and that fill in embankment has been properly compacted.

3.02 STABILIZED SUBGRADE

- A. The stabilized subgrade shall be constructed in accordance with the requirements of Section 160 of the “Standard Specifications”.
- B. At least 3-inches (loose measurement) of a suitable commercial or local stabilizing material, as described in the “Standard Specifications”, Section 914, shall be mixed into the subgrade for stabilization in accordance with the “Standard Specifications”, Section 160. The Limerock Bearing Ratio (LBR) shall be 40. Density tests will be paid for by the OWNER except that all retests required due to failure to meet specifications shall be paid for by the CONTRACTOR.
- C. After the subgrade has been prepared, it shall be kept free from ruts, depressions and any damage resulting from the hauling or handling of tools and equipment.

3.03 CRUSHED CONCRETE BASE COURSE

- A. Samples of base course material shall be supplied by the CONTRACTOR at his expense, and all materials shall be approved by the ENGINEER prior to use in the work. Additional samples of base course materials shall be furnished during construction as required by the ENGINEER.
- B. The material shall be transported to the point where it is to be used, over material previously placed, and dumped on the end of the preceding spread. No hauling shall be done over the subgrade.
- C. At least 97% (by weight) of the material shall pass a 3 ½-inch sieve and the material shall be graded uniformly down to dust. The fine materials shall consist entirely of dust or fracture. All crushing or breaking-up which might be necessary in order to meet such size requirements shall be done before the material is placed on the road.
- D. The base shall be bladed and shaped to conform to the typical sections shown on the Drawings. The base shall then be compacted by rolling with a combination of steel wheel and rubber tired rollers until an average density of 98% of the maximum density obtainable under AASHTO Method T-180 is reached. The base shall have an average LBR of not less than 100. The LBR value of material produced at a particular source shall be determined in accordance with an approved quality control procedure.

3.04 LIMEROCK BASE COURSE

- A. Limerock base course shall be constructed in accordance with the requirements of and to the tolerances shown in Section 230 of the “Standard Specifications”.

3.05 ASPHALTIC CONCRETE PAVING

- A. Asphaltic concrete mixtures for use in leveling and surface courses shall be prepared, placed, compacted and finished in compliance with Section TP of these Specifications.

3.06 PRIME AND TACK COATS

- A. Equipment for application, preparation of surfaces, weather limitations, methods and rates of application shall conform to the requirements of Section 300 of the "Standard Specifications", latest Edition.

3.07 CONCRETE CURB AND CURB AND GUTTER

- A. Concrete curb and curb and gutter shall be constructed in compliance with the requirements of Section 520 of the "Standard Specifications", latest Edition.

END OF SECTION

SECTION 02616 – DUCTILE IRON PIPE AND FITTINGS FOR PRESSURE SERVICE

PART I – GENERAL

1.01 DESCRIPTION

- A. Scope of Work: Provide and install ductile iron pipe of the sizes and in the locations shown on the Drawings and as specified herein.
- B. Related Work Described Elsewhere:
 - 1. Earthwork: Section 02200
 - 2. Mechanical - General Requirements: Section 15000
 - 3. Pressure Testing of Piping: Section 02661

1.02 QUALITY ASSURANCE

- A. Standards (as applicable):
 - 1. Cement mortar lining for water: ANSI 21.4.
 - 2. Rubber gasket joints: ANSI 21.11.
 - 3. Ductile iron pipe thickness: ANSI A 21.50.
 - 4. Ductile iron pipe centrifugally cast in metal or sand lined molds: ANSI A 21.51.
 - 5. D.I. pipe flanges and fittings: ANSI B 16.1.
 - 6. Threaded flanges: DIPRA standard.
 - 7. Cast and ductile iron fittings: ANSI A 21.10.
 - 8. Ceramic epoxy lining: ASTM E96-93, ASTM B117-85, ASTM G95-87, ASTM D714-87.
- B. Qualifications: All ductile iron pipe and ductile iron fittings shall be furnished by manufacturers who are fully experienced, reputable, and qualified in the manufacture of the materials to be furnished. The pipe and fittings shall be designed, constructed and installed in accordance with the best practices and methods and shall comply with these Specifications as applicable.
- C. Manufacturer: Pipe shall be as manufactured by the American Cast Iron Pipe Company, U.S. Pipe and Foundry Company, McWane Cast Iron Pipe Company or equal.

1.03 SUBMITTALS

- A. Shop Drawings, including layouts within, and under buildings and structures shall be submitted to the Project Manager for approval in accordance with Section 01310: Administrative Requirements. Shop Drawings shall be prepared by the pipe manufacturer.
- B. Tabulated layout schedule including:
 - 1. Order of installation and closures.
 - 2. Pipe top elevation and station at each change of grade and alignment.
 - 3. Elements of curves and bends, both in horizontal and vertical alignment, including elements of the resultant true angular deflections in cases of combined curvature.
 - 4. The limits of each reach of pipe thickness class and of restrained joints.
 - 5. The limits of each reach of concrete encasement or encasement in casing.
 - 6. Locations of closures for length adjustment and for construction convenience.

- 7. Locations of manholes and other points of access for placement of mortar lining at field joints and removal of test bulkheads.
 - 8. Locations of valves and other mechanical equipment.
 - 9. Methods and locations of supports.
- C. Details of special elbows and fittings.
 - D. Calculations and/or test data demonstrating that the proposed restrained joint arrangement can transmit the required forces.
 - E. Copy of the manufacturer's quality control check of pipe material and production.
 - F. Provide an affidavit of compliance with AWWA standards referenced in this specification.
- 1.04 PRODUCT DELIVERY, STORAGE AND HANDLING
- A. All pipe shall be shipped and stored at the jobsite with wood lagging between pipes such that pipes do not make contact with one another.
 - B. Exercise extra care when handling cement lined pipe because damage to the lining will render it unfit for use.

PART 2 – PRODUCTS

2.01 MATERIALS

- A. Pipe - Ductile Iron Pipe conforming to ANSI A21.51 and AWWA C-151 for buried pipe, ANSI B16.1/AWWA C153 for compact fittings and ANSI 21.15 and AWWA C-115 for flanged pipe.
 - 1. Unless otherwise shown on the Drawings, the minimum thickness of ductile iron pipe shall be:
 - a. For buried pipe 12" and less: Pressure Class 350.
 - b. For buried pipe 14" and greater: Pressure Class 250.
 - c. For pipe with flanges (all above grade or exposed piping): Class 53.
 - 2. Pipe for use with sleeve type couplings shall have plain ends (without bells or beads) cast or machined at right angles to the axis.
 - 3. Pipe for use with split type couplings shall have ends with cast or machined shoulders or grooves that meet the requirements of the coupling manufacturer.
 - 4. Pipe shall be supplied in lengths not in excess of 20 feet having rubber-ring type push-on joints, standard mechanical joints or restrained joints where required for underground piping and flanged joint piping for all above grade piping as shown on the Drawings.
 - 5. Coatings and Linings
 - a. Exterior of pipe and fittings:
 - (1) Buried pipe and fittings: factory applied bituminous coating or coal tar varnish or asphalt base paint, one-mil thick in accordance with AWWA C-151.

- (2) Exposed pipe and fittings: factory applied coating of an universal rust-inhibitive primer 3.0 mils dry thickness in accordance with AWWA C-115.

b. Interior of pipe and fittings (unless indicated otherwise on Drawings):

- (1) All applications except potable water and reuse water: ceramic epoxy lining in accordance with the following Specification:

- (a) All ductile iron pipe and fittings shall be delivered to the application facility without asphalt, cement lining, or any other lining on the interior surface. The ceramic epoxy lining shall be an amine cured novalac epoxy containing at least 20% by volume of ceramic quartz pigment. The lining shall be a minimum 40 mils dry film thickness. Any request for substitution must be accompanied by a successful history of lining pipe and fittings for sewer service, a test report verifying the following properties and a certification of the test results.

- (b) A permeability rating of 0.00 when tested according to the procedure described in Method A of ASTM E96-93, Procedure A with a test duration of 30 days.

- (c) The following tests must be run on coupons from factory lined ductile iron pipe:

ASTM B 117-85 Salt Spray (scribed panel) – Results to equal 0.0 undercutting after two years.

ASTM G 95-87 Cathodic Disbondment (1.5 volts @ 77°F) – Results to equal no more than 0.5mm undercutting after 30 days.

Immersion Testing rated using ASTM D714-87

20% Sulfuric Acid – No effect after two years.

140°F – 25% Sodium Hydroxide – No effect after two years.

160°F Distilled Water – No effect after two years.

120°F Tap Water (scribed panel) – 0.0 undercutting after two years with no effect.

Abrasion Resistance – Less than 4 mils loss after one million cycles on a ± 22.50 sliding aggregate slurry abrasion tester using a sharp natural siliceous gravel with a particle size between 2 mm and 10 mm.

- (d) Application of the lining shall be done under the pipe manufacturer's recommendations.

- (2) Potable water and reuse water: cement lining in accordance with ANSI A21.4 and AWWA C-104.
- B. Fittings: All ductile iron pipe fittings for process piping shall be cast iron or ductile iron with a minimum pressure rating as follows:
 - 1. All fittings shall be Class 125 (ANSI B16.1) unless otherwise specifically noted. Determine the pressure rating of the fittings based on the test pressures as shown in Section 02661: Pressure Testing of Piping, as follows:
 - a. Cast iron fittings:
 - (1) 3 to 12 inch up to 200 psi.
 - (2) Greater than 12-inch up to 150 psi.
 - (3) Coatings and linings for fittings shall be the same as for pipe material for each type of service.
 - b. Ductile iron fittings: For pressure ratings greater than shown for cast iron fittings, use ductile iron fittings of the pressure class rating required, i.e., 250 or 350 pressure rating.
 - 2. Grooved-end fittings shall conform to AWWA C110 and ANSI B16.1 with grooved ends conforming to AWWA C606, radius cut rigid joints. Fitting material shall conform to ASTM A 48, Class 30, or ASTM A 126, Class B.
- C. Joints (as shown on the Drawings and/or as specified):
 - 1. General: Joints in "runs" of above grade piping or piping located in vaults and structures shall be rigid radius grooved end or flanged. Joints in "runs" of buried piping shall be of the push-on or mechanical-joint type per AWWA C111 or factory restrained joints, except where flanged or grooved end couplings joints are required to connect to valves, meters, and other equipment.
 - 2. Grooved-End Couplings:
 - a. Grooved-end couplings shall be malleable iron, ASTM A 47 (Grade 32510), or ductile iron, ASTM A 536 (Grade 65-45-12).
 - b. Bolts: ASTM A 183, 110,000 psi tensile strength.
 - c. Gaskets: Halogenated butyl rubber or EPDM for water service and Buna-N for sewage service, conforming to ASTM D 2000.
 - d. Couplings: AWWA C606 for rigid radius ductile-iron pipe. Couplings shall be Victaulic Style 31, Gustin-Bacon No. 500, or equal.
 - e. Grooved-end adapter flanges for piping having an operating pressure of 150 psi and less shall be Victaulic Style 341, or equal. Flange dimensions shall conform to ANSI B16.1 Class 125.
 - 3. Flanges:
 - a. Flanges shall be Class 125 per ANSI B16.1 unless otherwise specifically noted. Determine the pressure rating of the fittings based on the test pressures shown in Section 15044: Pressure Testing of Piping.

- b. Gaskets: Fullface, 1/8 inch thick, cloth-inserted rubber: Johns-Manville No. 109, John Crane Co. Style 777, American Toru Seal or equal. Gaskets shall be suitable for a water pressure of 350 psi at a temperature of 180 degrees Fahrenheit (°F).
 - c. Bolts and Nuts for Flanges
 - (1) Bolts and nuts for flanges, flanges in open vaults and structures, and flanges located outdoors above ground shall be Type 316 stainless steel conforming to ASTM A 193, Grade B8 for bolts, and ASTM A 194, Grade 8 for nuts. Bolts and nuts greater than or equal to 1 inch shall be carbon steel, ASTM A 307, Grade B, with cadmium plating, ASTM A 165, Type NS.
 - d. Provide specially drilled flanges when required for connection to existing piping or special equipment.
 - e. Flanges shall be long-hub type screwed tightly on pipe by machine at the foundry prior to facing and drilling. Flange faces shall be coated with a rust inhibitor immediately after facing and drilling. Field assembled screwed on flanges are prohibited.
4. Push-on and mechanical joint (ANSI A21.11):
- a. The plain ends of push-on pipe shall be factory machined to a true circle and chamfered to facilitate fitting the gasket.
 - b. Provide gaskets manufactured from a composition material suitable for exposure to the liquid to be contained within the pipe.
 - c. Each joint shall be complete with rubber gasket, cast iron gland and all required bolts and nuts.
5. Restrained Joints:
- a. Acceptable methods of thrust restraint are restrained "lock type" joints manufactured by the pipe manufacturer or restraint mechanisms utilizing a multiple wedge design (Megalug, or equal). Set screws will not be allowed.
 - b. Pipe joints shall be restrained type as accepted by the City/Engineer and equal to American Flex-Ring or Lok-Ring by American Cast Iron Pipe Company. Restrained joints that require field welding or requiring set screws will not be acceptable.
 - c. Pipe joints shall be restrained each side of the fitting for a continuous distance in accordance with DIPRA "Thrust Restraint Design for Ductile Iron Pipe". Distance restrained shall be based on sand-silt soil type, 3.0 feet of cover and Type 2 laying condition.
 - d. Bolts and nuts for restrained joints shall be Corten, low alloy, high strength steel.

2.02 PIPING ACCESSORIES

A.

1. For outlets larger than 2 inches, provide a tee with a flanged outlet.
2. Provide outlets 2 inches and smaller by tapping and attaching a service clamp. Service clamps shall be as specified herein.

B. Polyethylene Encasement:

1. Polyethylene encasement shall be installed on all ductile iron pipe and fittings within the areas indicated on the Drawings or as directed by the City/Engineer. The bags shall be color coded and in accordance with AWWA C105.

PART 3 – EXECUTION

3.01 INSPECTION AND TESTING

A. All pipe shall be inspected and tested at the foundry.

B. The CITY shall have the right to have any or all piping, fittings or special castings inspected and tested by an independent testing agency at the foundry or elsewhere. Such inspection and testing will be at the CITY'S expense.

C. Mark as rejected and immediately remove from the job site, all pipe lengths showing a crack, damaged lining, or receiving a severe blow that may cause an incipient fracture, even though no such fractures can be seen.

D. Removal of cracked portions:

1. Any pipe showing a distinct crack, but no incipient fracture beyond the limits of the visible crack, may be cut off and the sound portion installed. Cut the pipe at least 12 inches from the visible limits of the crack. Cutting of pipe shall be done by skilled workmen, and in such a manner as to not damage the pipe. Every cut shall be square and smooth, with no damage to the pipe lining. Cut surfaces, shall be recoated as specified for the pipe.

E. Carefully inspect and hammer test all pipe and fittings prior to installation.

3.02 INSTALLATION

A. Assembling joints:

1. Push-on joints:

- a. Insert the gasket into the groove of the bell.
- b. Uniformly apply a thin film of special lubricant over the inner surface of the gasket that will contact the spigot end of the pipe.
- c. Insert the chamfered end of the spigot end into the gasket and push until it seats against the bottom of the bell.

2. Grooved end joints:

- a. Install grooved end pipe and fittings in accordance with the coupling manufacturer's recommendations and the following.
 - b. Clean loose scale, rust, oil, grease, and dirt from the pipe or fitting groove before installing coupling. Apply the coupling manufacturer's gasket lubricant to the gasket exterior, including lips, pipe ends, and housing interiors.
 - c. Fasten coupling alternately and evenly until coupling halves are seated. Use torques as recommended by the coupling manufacturer.
 - 3. Flanged joints:
 - a. Bolt holes of flanges shall straddle the horizontal and vertical centerlines of the pipe. Clean flanges by wire brushing before installing flanged fittings. Clean flange bolts and nuts by wire brushing; lubricate bolts with oil and graphite.
 - b. Insert the nuts and bolts (or studs) finger tighten, and progressively tighten diametrically opposite bolts uniformly around the flange to the proper torque.
 - c. Execute care when tightening joints to prevent undue strain upon valves, pumps and other equipment.
 - d. If flanges leak under pressure testing, loosen or remove the nuts and bolts, reset or replace the gasket, reinstall or retighten the bolts and nuts, and retest the joints. Joints shall be watertight.
 - 4. Mechanical joints:
 - a. Thoroughly clean, with a wire brush, surfaces that will be in contact with the gaskets.
 - b. Lubricate the gasket, bell and spigot by washing with soapy water.
 - c. Slip the gland and gasket, in that order, over the spigot and insert the spigot into the bell until properly seated.
 - d. Evenly seat the gasket in the bell at all points, center the spigot, and firmly press the gland against the gasket.
 - e. Insert the bolts, install the nuts finger tight, and progressively tighten diametrically opposite nuts uniformly around the joints to the proper tension with a torque wrench.
 - 5. Restrained Joints:
 - a. Follow manufacturer's instructions for particular joint installed.
- B. Fabrication:
- 1. Tapped connections:

- a. Make all tapped connections as shown on the Drawings or as directed by the City/Engineer.
 - b. Make all connections watertight and of adequate strength to prevent pullout.
 - c. Drill and tap normal to the longitudinal axis of the pipe.
2. Cutting:
- a. Perform all cutting with machines having rolling wheel cutters or knives designed to cut ductile iron. The use of a hammer and chisel to cut pipe is prohibited.
 - b. After cutting, examine all cut ends for possible cracks.
 - c. Carefully chamfer all cut ends to be used with push-on joints to prevent damage to gaskets when pipe is installed.
- C. Installing Buried Piping:
- 1. Inspect each pipe and fitting before lowering the buried pipe or fitting into the trench. Inspect the interior and exterior protective coatings. Clean ends of pipe thoroughly. Remove foreign matter and dirt from inside of pipe and keep clean during and after laying.
 - 2. Handle pipe in a manner to avoid any damage to the pipe. Do not drop or dump pipe into trenches under any circumstances.
 - 3. When installing piping in trenches, do not deviate more than one inch from line or 1/4 inch from grade. Measure for grade at the pipe invert.
 - 4. Grade the bottom of the trench by hand to the line and grade to which the pipe is to be laid, with allowance for pipe thickness. Remove hard spots that would prevent a uniform thickness of bedding. Before laying each section of the pipe, check the grade with a straightedge and correct any irregularities found. The trench bottom shall form a continuous and uniform bearing and support for the pipe at every point between bell holes, except that the grade may be disturbed for the removal of lifting tackle.
 - 5. At the location of each joint, dig bell (joint) hole dimensions in the bottom of the trench and at the sides to permit visual inspection of the entire project.
 - 6. Keep the trench in a dewatered condition during pipe laying in accordance with Section 02240: Dewatering (During Construction).
 - 7. When the pipe laying is not in progress, including the noon hours, close the open ends of pipe. Do not permit groundwater, animals, or foreign material to enter the pipe.
 - 8. Polyethylene encasement shall be installed in accordance with the manufacturer's instructions, or in a manner acceptable to the City/Engineer. Polyethylene encasement shall overlap the upstream joint by 2 feet and shall be adhered to said joint with 2-inch wide marking tape color-coded to reflect the use of the pipe. Upon installation of the encasement, any slacks, cuts or damaged portions of the polyethylene encasement shall be securely mended with tape.
 - 9. Backfill material shall be the same as specified for pipe without polyethylene encasement; however, extra care should be taken that the backfill be free from cinders, refuse, boulders, rocks, stones, or other materials that could damage the encasement. Special care shall be taken to prevent damage to the polyethylene wrapping when placing backfill.

10. Because exposure to sunlight will deteriorate polyethylene film, such exposure prior to backfilling the wrapped pipe shall be kept to a minimum.

D. Installing Interior Piping

1. All piping and fittings shall be installed true to alignment and rigidly supported thrust anchors shall be provided where required. Any damage to linings shall be repaired to the satisfaction of the City/Engineer before the pipe is installed. Each length of pipe shall be cleaned out before erection.
2. Sleeves shall be installed of proper size for all pipes passing through floors or walls as shown on the Drawings. Where indicated on the Drawings, or required for liquid or gas-tightness, the pipe shall be sealed with mechanical seal equal to Link-Seal as manufactured by Thunderline Corp., Wayne, Michigan.
3. Concrete inserts for hangers and supports shall be furnished and installed in the concrete as it is placed. The inserts shall be, in accordance with the requirements of the piping layout and jointing method and their locations shall be verified from approved piping layout drawings and the structural drawings.
4. Except as otherwise shown on the Drawings either split type couplings or flange joints may be used. Prior to approval of jointing, method layouts for hanger and supports shall be submitted to the City/Engineer for approval.
5. Flanged joints shall be made with bolts, bolt studs with a nut on each end, or studs with nuts where the flange is tapped.
6. All pipe and appurtenances connected to equipment shall be supported in such a manner as to prevent any strain being imposed on the equipment. When manufacturers have indicated requirements that piping loads shall not be transmitted to their equipment, a certification shall be submitted stating that such requirements have been complied with.

E. Pipe deflection:

1. Push-on and mechanical joints:

- a. The maximum permissible deflection of alignment at joints, in inches for 20 foot lengths:

Size of Pipe (in.)	Push-On	Defl(in) Mechanical	Defl (Angle)
4	19	34	
6	21	30	
8	21	22	
10	21	22	
12	21	22	
14	21		3° - 35'
16	21		3° - 35'
18	21		3° - 00'
20	21		3° - 00'
24	21		2° - 23'

- b. The maximum permissible deflections for other lengths shall be in proportion to the above deflections.

2. Flexible and restrained joints: The maximum deflection in any direction shall not exceed the manufacturer's instructions and recommendations.

3.03 CLEANING AND FLUSHING

- A. Prior to the pressure and leakage tests, all piping shall be thoroughly cleaned of all dirt, dust, oil, grease, and other foreign matter.
- B. All lines shall be thoroughly flushed with clean water to clear all lines of foreign matter.

3.04 FIELD TESTING

- A. All field tests shall be made in the presence of the City/Engineer. Except as directed otherwise, all pipelines shall be tested. Pipelines laid in excavation (other than trench excavation) or embedded in concrete, shall be tested prior to backfilling of the excavation or placing of the concrete.
- B. Pressure testing of pipe shall be performed in accordance with Section 02661: Pressure Testing of Piping, herein.

3.05 DISINFECTION

- A. All water pipes and fittings of whatever size and wherever installed on potable water lines shall be thoroughly disinfected prior to being placed in service. Disinfection shall follow the applicable provisions of the procedure established for the disinfection of water mains in AWWA C-651-latest edition, shall be in accordance with both state and local requirements, and shall be in accordance with Section 02650: Disinfection (if applicable).

END OF SECTION

SECTION 02622 – PLASTIC PIPE FOR GRAVITY SERVICE

PART 1 – GENERAL

1.01 DESCRIPTION OF WORK

- A. This Section includes furnishing and installing Plastic Pipe and Fittings for gravity service as shown on the Drawings and as specified herein.

1.02 SUBMITTALS

- A. Provide manufacturer's Certificate of Compliance with specified requirements.

1.03 HANDLING AND STORAGE

- A. All pipe, fittings and accessories shall be loaded and unloaded by lifting with hoists or by skidding in order to avoid shock or damage. Under no circumstances shall materials be dropped. Pipe handled on skidways shall not be rolled or skidded against pipe on the ground. Slings, hooks or pipe tongs shall be padded and used in such a manner as to prevent damage to the exterior surface or interior of the pipe.
- B. Materials, if stored, shall be kept safe from damage. The interior as well as all sealing surfaces of all pipe, fittings, and other appurtenances shall be kept free from dirt or foreign matter at all times.
- C. Pipe stored outside and exposed to prolonged periods of sunlight shall be covered with canvas or other opaque material. Air circulation shall be provided under covering.
- D. Pipe shall not be stacked higher than the limits recommended by the manufacturer. The bottom tiers shall be kept off the ground on timbers, rails, or concrete. Pipe in tiers shall be alternated: bell, plain end; bell, plain end. Pipe shall not be stored close to heat sources.
- E. Gaskets shall be placed in a cool location out of direct sunlight. Gaskets shall not come in contact with petroleum products. Gaskets shall be used on a first-in, first-out basis. Mechanical-joint bolts shall be handled and stored in a manner that will ensure proper use with respect to types and sizes.

PART 2 – PRODUCTS

2.01 PLASTIC PIPE

- A. PVC pipe and fittings for gravity service 15 inch and under shall meet the requirements of ASTM D 3034 SDR 35 or SDR 26.
- B. Joints: Pipe and fittings shall have integral wall bell and spigot joints with flexible elastomeric seals. Joints shall provide a permanent seal against exfiltration or infiltration. The gasketed joint shall be designed so that when assembled the elastomeric gasket located within the bell is compressed radially on the pipe spigot to form a positive seal. The joint shall be designed to avoid displacement of the gasket from the joint during assembly and when in service. If a lubricant is required to facilitate assembly, it shall have no detrimental effect on the gasket or on the pipe.

- C. Gaskets: Gaskets shall be molded into a circular form or extruded to the proper section and then spliced into circular form. They shall consist of a properly processed high grade elastomeric compound of natural rubber, a synthetic elastomer or a blend of both. The gasket shall provide an adequate compressive force against the sealing surfaces of the bell and spigot so as to affect a positive seal under all combinations of joint tolerances. The gasket shall be the only element depended upon to make the joint flexible and water-tight.

PART 3 – EXECUTION

3.01 EXAMINATION

- A. All pipe and appurtenances shall be examined at the point of delivery. Material found to be defective due to manufacture or damage in shipment shall be rejected. Tests as specified in the applicable material standard may be performed to ensure conformance with the standard.

3.02 TRENCH CONSTRUCTION

- A. Alignment and Grade: The pipelines shall be laid and maintained to the lines and grades established by the Drawings and Specifications, with fittings, service connections, manholes and appurtenances at the required locations unless otherwise approved by the ENGINEER.
- B. Underground Conflicts: Prior to excavation, investigation shall be made to the extent necessary to determine the location of existing underground structures and conflicts. Care shall be exercised to avoid damage to existing structures. When obstructions that are not shown on the Drawings are encountered during the progress of work and interfere so that an alteration of the plans is required, the ENGINEER will alter the Drawings or order a deviation in line and grade or arrange for removal, relocation, or reconstruction of the obstructions. When crossing existing pipelines or other structures, alignment and grade shall be adjusted as necessary, with the approval of the ENGINEER, to provide clearance as required by the ENGINEER to prevent future damage or contamination of either structure.
- C. Trench Construction: The trench shall be excavated to the required alignment, depth, and width. Trench preparation shall proceed in advance of pipe installation for only as far as necessary to allow proper pipe installation. The width of the trench at the top of the pipe shall be ample to permit the pipe to be laid and joined properly and allow the backfill to be placed as specified. Trenches shall be of such extra width, when required, to permit the placement of timber supports, sheeting, bracing and appurtenances.
- D. Material for use in the pipe embedment zone shall be Class I, Class II or Class III material as identified in ASTM D2321, Standard Recommended Practice for Underground Installation of Flexible Thermoplastic Sewer Pipe. Bedding material shall be of the Class required to support the trench backfill loads for the depth of cover shown with maximum long term deflection limited to 5.0 percent and compaction of 95 percent Standard Proctor Density. If material meeting this requirement is not available from the trench, satisfactory material shall be furnished and placed without additional compensation.
- E. Holes for the bells shall be provided at each joint but shall not be larger than necessary for joint assembly and assurance that the pipe barrel will lie flat on the trench bottom. Other than noted previously, the trench bottom shall be true and even in order to provide

support for the full length of the pipe barrel, except that a slight depression may be provided to allow withdrawal of pipe slings or other lifting tackle.

- F. When excavation of rock is encountered, all rock shall be removed to provide a clearance of at least 6-inches below and on each side of all pipe and fittings. When excavation is completed, a bed of sand, crushed stone, or earth that is free from stones, large clods, or frozen earth, shall be placed on the bottom of the trench to the previously mentioned depths, leveled, and tamped. These clearances and bedding procedures shall also be observed for pieces of concrete or masonry and other debris of subterranean structures, such as masonry walls, piers, or foundations that may be encountered during excavation. This installation procedure shall be followed when gravel formations containing loose boulders greater than 8 inches in diameter are encountered. In all cases, the specified clearances shall be maintained between the bottom of all pipe and appurtenances and any part, projection, or point of rock, boulder, or stones of sufficient size and placement which, in the opinion of the ENGINEER could cause a fulcrum point.
- G. Should the trench pass over a sewer or other previous excavation, the trench bottom shall be sufficiently compacted to provide support equal to that of the native soil or conform to other regulatory requirements in a manner that will prevent damage to the existing installation.
- H. When the subgrade is found to be unstable or to include ashes, cinders, refuse, organic material, or other unsuitable material, such material shall be removed, to a minimum of 6 inches nor more than 24 inches or to the depth ordered by the ENGINEER and replaced under the directions of the ENGINEER with clean, stable backfill material. The bedding shall be consolidated and leveled in order that the pipe may be installed as specified.
- I. When the bottom of the trench or the subgrade is found to consist of material that is unstable to such a degree that, in the judgment of the ENGINEER it cannot be removed, a foundation for the pipe and/or appurtenance shall be constructed using piling, timber, concrete, or other materials at the direction of the ENGINEER.

3.03 PIPE INSTALLATION

- A. Proper implements, tools, and facilities shall be provided and used for the safe and convenient performance of the work. All pipe and fittings shall be lowered carefully into the trench by means of suitable tools or equipment in such a manner as to prevent damage to pipeline materials. Under no circumstances shall pipeline materials be dropped or dumped into the trench. The trench shall be dewatered prior to installation of the pipe.
- B. Foreign material shall be prevented from entering the pipe while it is being placed in the trench. During laying operations, no debris, tools, clothing, or other materials shall be placed in the pipe.
- C. The outside of the plain end and the inside of the bell shall be wiped clean and dry and be free from dirt, sand, grit, or any foreign material before the pipe is laid.
- D. As each length of pipe is placed in the trench, the joint shall be assembled and the pipe brought to correct line and grade. The pipe shall be secured in place with approved backfill material.
- E. At times when pipe laying is not in progress, the open ends of pipe shall be closed by a watertight plug or other means approved by the ENGINEER. When practical, the plug

shall remain in place until the trench is pumped completely dry. Care shall be taken to prevent pipe flotation should the trench fill with water.

- F. Trench width at the top of pipe, bedding conditions, and backfill placement and compaction shall be such that design loadings on the pipe will not be exceeded.
- G. Joint Assembly: Pipe joints shall be assembled in accordance with the manufacturer's instructions.
- H. Pipe Deflection: Vertical deflection shall be monitored by the use of a rigid "Go-No-Go" device. The device shall be pulled by hand through each section (manhole to manhole). The pulling motion shall be smooth and easy so as to avoid jamming the device if an obstruction is encountered in the line. When the device is not able to go forward, the distance shall be measured from the last manhole and recorded. The device shall then be pulled backwards and that section of sewer main uncovered and recompact according to these specifications. The "Go-No-Go" device shall be constructed to measure a maximum 5.0-percent deflection.
- I. Pipe Cutting: Cutting pipe for the insertion of fittings or closure pieces shall be done in a neat, workmanlike manner without creating damage to the pipe. Ends shall be cut square and perpendicular to the pipe axis. Burrs shall be removed from spigots and ends shall be smoothly beveled. Field cut ends shall be marked for proper depth of joint assembly.

END OF SECTION

SECTION 02623 – PLASTIC PIPE FOR PRESSURE SERVICE

PART 1 – GENERAL

1.01 DESCRIPTION OF WORK

- A. This Section includes materials and methods of installation of Plastic Pipe for pressure service used in Piped Utility Systems.

1.02 SUBMITTALS

- A. Three certified copies of the tests made by the manufacturer or by a reliable commercial laboratory shall be submitted to the ENGINEER with each shipment of pipe.

1.03 HANDLING AND STORAGE

- A. All pipe, fittings, valves, hydrants and accessories shall be loaded and unloaded by lifting with hoists or by skidding in order to avoid shock or damage. Under no circumstances shall materials be dropped. Pipe handled on skidways shall not be rolled or skidded against pipe on the ground. Slings, hooks or pipe tongs shall be padded and used in such a manner as to prevent damage to the exterior surface or interior of the pipe.
- B. Materials, if stored, shall be kept safe from damage. The interior as well as all sealing surfaces of all pipe, fittings, and other appurtenances shall be kept free from dirt or foreign matter at all times. Valves and hydrants shall be drained and stored in a manner that will protect them from damage or freezing.
- C. Pipe stored outside and exposed to prolonged periods of sunlight shall be covered with canvas or other opaque material. Air circulation shall be provided under covering.
- D. Pipe shall not be stacked higher than the limits recommended by the manufacturer. The bottom tiers shall be kept off the ground on timbers, rails, or concrete. Pipe in tiers shall be alternated: bell, plain end; bell, plain end. Pipe shall not be stored close to heat sources.
- E. Gaskets shall be placed in a cool location out of direct sunlight. Gaskets shall not come in contact with petroleum products. Gaskets shall be used on a first-in, first-out basis. Mechanical-joint bolts shall be handled and stored in a manner that will ensure proper use with respect to types and sizes.

PART 2 – PRODUCTS

2.01 PLASTIC PIPE

- A. Pipe for pressure service shall be Class 12454-A or B rigid PVC compound in accordance with the requirements of ASTM D1784. Pipe and appurtenances for use in potable water systems shall bear the seal of approval for potable water use of the National Sanitation Foundation or other accredited testing laboratory.
- B. PVC pipe having a nominal diameter less than 2-inches shall be made of 2000 psi hydrostatic design stress compounds designated PVC 1120 and shall conform to the applicable requirements of ASTM D1785. Threaded pipe and fittings shall be Schedule 80. Threaded fittings shall conform to ASTM D2464. Unthreaded pipe and fittings shall be Schedule 40 with solvent cemented joints. Cemented joints and fittings shall comply with ASTM D2466 and D2855.

- C. PVC pressure rated pipe having a nominal diameter 2-inches or greater, but less than 4-inches, shall be made of 2000 psi hydrostatic design stress compounds designated PVC 1120 and shall conform to ASTM D2241. PVC pipe shall be furnished in 20-foot lengths unless otherwise noted. PVC pipe shall have a standard dimension ratio SDR 14 and a water pressure rating of 200 psi. Pipe couplings shall have a SDR 21 and a water pressure rating of 200 psi. Pipe shall have both ends beveled for use with gasketed couplings or one end beveled and one end with a bell. Couplings and gaskets shall be furnished with each length of pipe. Rubber ring gaskets shall conform to ASTM D3139. Nontoxic gasket lubricant shall be as specified by the manufacturer.
- D. Pressure pipe 4 inches through 60 inches in diameter shall conform to the requirements of AWWA C900 for PVC 1120 pipe with cast iron pipe equivalent outside diameter. Pipe shall be DR18; colored Blue for potable water service. Pipe may be furnished with plain ends for use with elastomeric-gasket couplings or with one end plain and one end with a gasket bell. Couplings and gaskets shall be furnished with the pipe. Gaskets shall conform to ASTM D3139. Nontoxic gasket lubricant shall be as specified by the pipe manufacturer.

2.02 RESTRAINED JOINTS

A. Restrained Joints.

- 1. Restrained joints for use with PVC pipe shall consist of retainer glands fabricated of ductile-iron conforming to ASTM A536. The gland shall be such that it can replace the standard mechanical joint gland and can be used with the standardized mechanical joint bell conforming to ANSI/AWWA A21.11/C111 and ANSI/AWWA A21-53/C153. The retainer glands shall have a pressure rating equal to that of the PVC pipe on which it is used.
- 2. PVC push-on joints adjacent to restrained fittings shall be restrained using harness restraint devices. This harness restraint shall be split to enable installation of the restraint after the spigot has been installed into the bell. The restraint shall consist of a split ring that fits behind the bell, a split restraint ring that installs on the spigot and a number of tie bars to connect the other two parts. Restraint components shall be of ductile-iron conforming to ASTM A536. The restraint ring shall consist of a plurality of individually activated gripping surfaces to hold the spigot and maximize restraint capability.
- 3. Twist off nuts, sized same as the tee-head bolts shall be used to insure proper actuating of restraining devices.

2.03 FITTINGS

A. Fittings for use with PVC pipe 3-inches through 64-inches in diameter shall be ductile-iron fittings conforming to the requirements of ANSI/AWWA C153/A21.53. Bolts for use with mechanical joints shall conform to the requirements of the joint standard. Fittings shall be suitable for a working pressure of the following:

- 1. 3" through 24": 350 psi
- 2. 30" through 48": 250 psi
- 3. 54" through 64": 150 psi

B. Exterior Coating:

- 1. Fittings for buried service and fittings for installation in exposed locations which are not to be painted shall be coated with a bituminous coating approximately 1 mil thick. The finished coating shall be continuous, smooth, neither brittle when

- cold nor sticky when exposed to the sun and shall be strongly adherent to the pipe.
2. Fittings in exposed locations which are to be painted shall be primed with a universal shop primer suitable for use under the finish paint specified.

PART 3 – EXECUTION

3.01 EXAMINATION

A. Excavation:

1. Excavate trenches as specified in Section 02200.
2. All pipe and appurtenances shall be examined at the point of delivery. Material found to be defective due to manufacture or damage in shipment shall be rejected. Tests as specified in the applicable material standard may be performed to ensure conformance with the standard.

3.02 TRENCH CONSTRUCTION

- A. Alignment and Grade: The pipelines shall be laid and maintained to the lines and grades established by the Drawings and Specifications, with fittings and valves at the required locations unless otherwise approved by the ENGINEER. Valve-operating stems shall be oriented to allow proper operation.

- B. Underground Conflicts: Prior to excavation, investigation shall be made to the extent necessary to determine the location of existing underground structures and conflicts. Care shall be exercised to avoid damage to existing structures. When obstructions that are not shown on the drawings are encountered during the progress of work and interfere so that an alteration of the plans is required, the ENGINEER will alter the Drawings or order a deviation in line and grade or arrange for removal, relocation, or reconstruction of the obstructions. When crossing existing pipelines or other structures, alignment and grade shall be adjusted as necessary, with the approval of the ENGINEER, to provide clearance as required by the ENGINEER to prevent future damage or contamination of either structure.

C. Trench Construction:

1. The trench shall be excavated to the required alignment, depth, and width. Trench preparation shall proceed in advance of pipe installation for only as far as necessary to allow proper pipe installation. The width of the trench at the top of the pipe shall be ample to permit the pipe to be laid and joined properly and allow the backfill to be placed as specified.
2. PVC pipe shall be installed with pipe bedding and a compacted envelope as shown on the Drawings. Material used as bedding and in the pipe envelope (pipe embedment zone) shall be Class I, Class II or Class III material as identified in ASTM D-2321. Bedding material shall consist of 4 inches minimum of non-cohesive granular material placed uniformly under the pipe. Bedding material shall be lightly compacted.
3. Material within the haunching area shall be compacted to 95% density within non-paved areas and 98% density within paved areas, according to AASHTO T-180. Excessive compaction shall be avoided if any distortion of the pipe wall is observed. Material above the haunching area may be native material if free of particles larger than 1-1/2 inches. At least 12 inches of backfill material shall be placed over the top of the pipe before compacting directly over the crown of the pipe.

4. Holes for the bells shall be provided at each joint but shall not be larger than necessary for joint assembly and assurance that the pipe barrel will lie flat on the trench bottom. Other than noted previously, the trench bottom shall be true and even in order to provide support for the full length of the pipe barrel, except that a slight depression may be provided to allow withdrawal of pipe slings or other lifting tackle.
5. When excavation of rock is encountered, all rock shall be removed to provide a clearance of at least 6-inches below and on each side of all pipe, valves and fittings. When excavation is completed, a bed of sand, crushed stone, or earth that is free from stones, large clods, or frozen earth, shall be placed on the bottom of the trench to the previously mentioned depths; leveled, and tamped. These clearances and bedding procedures shall also be observed for pieces of concrete or masonry and other debris of subterranean structures, such as masonry walls, piers, or foundations that may be encountered during excavation. This installation procedure shall be followed when gravel formations containing loose boulders greater than 8-inches in diameter are encountered. In all cases, the specified clearances shall be maintained between the bottom of all pipe and appurtenances and any part, projection, or point or rock, boulder, or stones of sufficient size and placement which, in the opinion of the ENGINEER could cause a fulcrum point.
6. Should the trench pass over a sewer or other previous excavation, the trench bottom shall be sufficiently compacted to provide support equal to that of the native soil or conform to other regulatory requirements in a manner that will prevent damage to the existing installation.
7. When the subgrade is found to be unstable or to include ashes, cinders, refuse, organic material, or other unsuitable material, such material shall be removed, to a minimum of at least 4 inches, or to the depth ordered by the ENGINEER and replaced under the directions of the ENGINEER with clean, stable backfill material. The bedding shall be consolidated and leveled in order that the pipe may be installed as specified.
8. When the bottom of the trench or the subgrade is found to consist of material that is unstable to such a degree that, in the judgment of the ENGINEER it cannot be removed, a foundation for the pipe and/or appurtenance shall be constructed using piling, timber, concrete, or other materials at the direction of the ENGINEER.

3.03 PIPE INSTALLATION

- A. Proper implements, tools, and facilities shall be provided and used for the safe and convenient performance of the work. All pipe, fittings, and valves, and hydrants shall be lowered carefully into the trench by means of suitable tools or equipment in such a manner as to prevent damage to pipeline materials. Under no circumstances shall pipeline materials be dropped or dumped into the trench. The trench shall be dewatered prior to installation of the pipe.
- B. The sealing surface of the pipe, the inside of the bell and the gasket shall be cleaned immediately before assembly.
- C. Foreign material shall be prevented from entering the pipe while it is being placed in the trench. During laying operations, no debris, tools, clothing, or other materials shall be placed in the pipe.
- D. As each length of pipe is placed in the trench, the joint shall be assembled and the pipe brought to correct line and grade. The pipe shall be secured in place with approved backfill material.

- E. At times when pipe laying is not in progress, the open ends of the pipe shall be closed by a watertight plug or other means approved by the ENGINEER. When practical, the plug shall remain in place until the trench is pumped completely dry. Care shall be taken to prevent pipe flotation should the trench fill with water.
- F. Trench width at the top of pipe, bedding conditions, and backfill placement and compaction shall be such that design loadings on the pipe will not be exceeded.
- G. Joint Assembly: Pipe joints shall be assembled in accordance with the manufacturer's instructions.
- H. Pipe Deflection: When it is necessary to deflect pipe from a straight line in either the vertical or horizontal plane, or where long radius curves are permitted, the amount of deflection shall not exceed that recommended by the manufacturer.
- I. Pipe Cutting:
 - 1. Cutting pipe for the insertion of valves, fittings, or closure pieces shall be done in a neat, workmanlike manner without creating damage to the pipe. Ends shall be cut square and perpendicular to the pipe axis.
 - 2. Burrs shall be removed from spigots and ends shall be smoothly beveled. Field cut ends shall be marked for proper depth of joint assembly.
- J. Locator Tape: Install all plastic pipe with a locator tape of the type specified.
- K. Thrust Restraint:
 - 1. All plugs, caps, tees, and bends, unless otherwise specified, shall be provided with reaction backing, or restrained joints as specified.
 - 2. Thrust-restraint design pressure shall be equal to 1.5 times the design pressure of the line.

3.04 TESTING

- A. After completion of installation, perform testing in accordance with requirements of Section 02661: Pressure Testing of Piping.

END OF SECTION

SECTION 02661 – PRESSURE TESTING OF PIPING

PART 1 – GENERAL

1.01 DESCRIPTION

- A. Scope of Work: This section specifies the leakage and pressure testing of piping.
- B. Testing Records:
 - 1. Provide record of each piping installation during the testing. These records shall include:
 - a. Date of test.
 - b. Identification of pipeline tested or re-tested.
 - c. Identification of pipeline material.
 - d. Identification of pipe section tested.
 - e. Test pressure
 - f. Remarks: Leaks identified (type and location), types of repairs, or corrections made.
 - g. Certification by CONTRACTOR that the leakage rate measured conformed to the Specifications.
 - h. Signature of Project Manager witnessing pipe test.

1.02 SUBMITTALS

- A. Submit five (5) copies of the test records to the Owner/Engineer upon completion of the testing.

PART 2 – PRODUCTS

2.01 GENERAL

- A. Testing fluid shall be water, unless specified otherwise.
- B. All testing shall be performed in accordance with applicable AWWA Standards (C-600) latest edition.

2.02 MATERIALS AND EQUIPMENT

- A. Provide pressure gauges, pipes, pipe fittings, bulkheads, hydraulic force pumps, meters and graduated containers to perform the hydrostatic testing.
- B. Pressure gauges used shall have been calibrated just prior to their use.

PART 3 – EXECUTION

3.01 TESTING PREPARATION

- A. Pipes shall be in place and anchored before commencing pressure testing.
- B. Conduct hydrostatic tests on exposed and above ground piping after the piping has been installed and attached to the pipe supports, hangers, anchors, expansion joints, valves and meters.
- C. Before conducting hydrostatic tests, flush pipes with water to remove dirt and debris.
- D. Test new pipelines which are to be connected to existing pipelines by isolating the new line from the existing line by means of pipe caps, plugs, special flanges, or blind flanges. After the new line has been successfully tested, and all other tests/certifications/releases have been obtained, remove caps or flanges and connect to the existing piping.

3.02 PIPE FLUSHING

- A. General
 - 1. All pressure mains shall be thoroughly flushed of sand and debris prior to pressure leakage testing. Flushing shall continue until clear water flows from the available point closest to the ends of the mains or at the end of the main itself.
 - 2. Pressure mains 4 inches in diameter and larger shall be cleaned during flushing using a polyurethane plug manufactured of eight (8) lb./cubic foot density blown elastomer with open cell construction. The plug ("pig") shall have a resilient surface that engages the inner surface of the main with a sliding seal. The plug shall be able to reduce itself a minimum of 35 percent of its original cross-sectional area, negotiate bends, short radius elbows, pass through tees, crosses, multiple pipe sizes and valves and shall be abrasion resistant and capable of traveling in either direction.

3.03 HYDROSTATIC TESTS (DUCTILE IRON, PVC AND PCCP PIPE)

- A. General
 - 1. Hydrostatic tests shall consist of a pressure test and a leakage test. Hydrostatic tests shall be conducted on all newly installed pressure pipes, joints, valves and all service lines from tapped connection of main to the curb stops. AIR TESTING of pressure pipes WILL NOT BE PERMITTED under any circumstance. Tests may be made on sections not exceeding 2,000 feet, or as field conditions dictate. Length of the pipe to be tested shall be acceptable to the OWNER. CONTRACTOR shall furnish all necessary equipment and material, make all taps, and furnish all closure pieces in the pipe as required.
 - 2. The CONTRACTOR may conduct hydrostatic tests after the trench has been partially backfilled with the joints left exposed for inspection for his informational purposes only. The hydrostatic tests for acceptance shall only be conducted after the trenches have been completely backfilled and compacted as specified. Where any section of pipe is provided with concrete thrust blocking or encasement, pressure test will not be made until at least seven days have elapsed after the thrust blocking is installed. If high-early cement is used for the concrete thrust blocking, the time may be reduced to 3 days if the OWNER concurs that the concrete has cured and reached adequate strength. When testing mortar-lined or PCCP pipe, fill the pipe to be tested with water and allow it to soak for at least 48 hours to absorb water before conducting the pressure test.

- B. Testing Criteria: All pipe sections to be pressure tested shall be subjected to a hydrostatic pressure of 100 psi. The duration of each pressure test shall be for a period of 2 hours. If during the test, the integrity of the tested line is in question, the OWNER may require a 6-hour pressure test. The basic provisions of AWWA C-600 and C-605/M23 shall be applicable.
- C. Procedure For Pressure Test: Each section of pipe to be tested, as determined by the OWNER, shall be slowly filled with water and the specified test pressure shall be applied by means of a pump connected to the pipe in a satisfactory manner. Before applying the specified test pressure, all air shall be expelled from the pipe. To accomplish this, taps shall be made, and appropriate valves installed to ensure bleeding of all air from the main. If defective pipes, fittings, valves, or hydrants are discovered in consequence of this pressure test, all such items shall be removed and replaced by the CONTRACTOR with sound material and the test shall be repeated until satisfactory results are obtained. Provisions of AWWA C600 and C605/M23, where applicable, shall apply.
- D. Procedure For Leakage Test
- After completion of the pressure test, a leakage test shall be conducted to determine the quantity of water lost by leakage under the specified test pressure. Applicable provisions of AWWA C600 and C605/M23 shall apply.
 - For DUCTILE IRON PIPE, allowable leakage in gallons per hour shall not be greater than that determined by the formula:

$$L = \frac{SD(P)^{1/2}}{133,200}$$

Where:

- L = Allowable leakage, in gallons per hour.
 S = Length of pipe tested, in feet.
 D = Nominal diameter of the pipe, in inches.
 P = Average test pressure during leakage test, in pounds per square inch (gauge).

- For PVC PIPE, allowable leakage in gallons per hour shall not be greater than that determined by the formula:

$$L = \frac{ND(P)^{1/2}}{7,400}$$

Where:

- L = Allowable leakage, in gallons per hour.
 N = Number of joints in the length of pipeline tested.
 D = Nominal diameter of the pipe, in inches.
 P = Average test pressure during leakage test, in pounds per square inch (gauge).

- Leakage is defined as the quantity of water to be supplied in the newly installed pipe or any valved section under test, which is necessary to maintain the specified leakage test pressure after the pipe has been filled with water and the air expelled. Should any test of pipe installed disclose leakage greater than that allowed, CONTRACTOR shall locate and replace or repair the defective joints, pipe or valve until the leakage from subsequent testing is within the specified allowance.

3.04 HYDROSTATIC TESTS (HDPE PIPE)

A. General

1. CONTRACTOR shall test pipelines installed under this Contract in accordance with these specifications prior to acceptance of the pipeline by the OWNER. All field tests shall be made in the presence of the OWNER. Except as otherwise directed, all pipelines shall be tested. All piping to operate under liquid pressure shall be tested in sections of approved length. The pressure testing of an HDPE line section shall be tested separately from the PVC and DIP line sections. Where impractical, the HDPE test section shall include only a minimum amount of PVC and ductile iron pipe within the test section. If at all possible, the PVC and DIP test sections shall be left exposed during the pressure test for visual leakage observation. For these tests, the CONTRACTOR shall furnish clean water, suitable temporary testing plugs or caps, and other necessary equipment, and all labor required. If the CONTRACTOR chooses to pressure test against an existing OWNER water main / valve, the new water main must be disinfected prior to connection to the OWNER line. The OWNER will not be responsible for failure of the pressure test due to the existing valve leaking. The OWNER may elect to furnish suitable pressure gauges for these tests. If not, the CONTRACTOR will furnish suitable pressure gauges, calibrated by an approved testing laboratory, which increments no greater than 2 psi. Gauges used shall be of such size that pressures tested will not register less than 10 percent or more than 90 percent of the gauge capacity. All valved sections shall be hydrostatic tested to insure sealing (leak allowance) of all line valves.
2. Unless it has already been done, the section to pipe to be tested shall be filled with potable water and air shall be expelled from the pipe. If blow-offs or other outlets are not available at high points for releasing air, the CONTRACTOR shall provide 1-inch [minimum taps and blow-off valves (at the 12:00 position)], as necessary. The cost of constructing blow-off valves and plugging them, after a successful pressure test, shall be included in the unit price bid amount for the HDPE pipe.

B. Testing Criteria

1. Hydrostatic testing shall consist of a 150 psig test pressure, based on the elevation of the highest point of the line or section under test. Pressure shall be applied by means of a pump connected to the pipe in a manner satisfactory to the OWNER. The pump, pipe connection and all necessary apparatus shall be furnished by the CONTRACTOR and shall be subject to the approval of the OWNER.
2. Maximum duration for pressure test, including initial and final phase of the test, shall not exceed eight (8) hours. If the test is not completed due to leakage, equipment failure, etc., depressurize the test section, and then allow it to "relax" for at least eight (8) hours before bringing the test section up to test pressure again.

C. Procedure For Pressure Test

1. Initial Phase of Pressure Testing: First, all air must be removed from the test section. The pressure test shall be completed after the line is backfilled. If possible, all flanged or mechanical joint valves and fittings shall be left exposed for visual leak inspection. If possible all PVC and DIP test sections shall be left exposed for visual leak inspection. Initially, the pressure within the test section shall be raised to approximately 160 psi and then allowed to be idle (no additional make-up water / pressure to be injected), for approximately 3 hours. During this 3-hour period, the test section shall be allowed to stabilize and come to an equilibrium stage. No additional make-up water / pressure shall be applied to the test section during this 3-hour stabilization period unless the line pressure drops below 140 psi. In this case,

make-up water / pressure shall only be applied to the test section to maintain a minimum of 140 psi (during the 3-hour stabilization period).

2. Final Phase of Pressure Testing: The final phase of the pressure test shall involve applying make-up water / pressure to achieve an "Initial test pressure" of 150 psi (minimum) / 155 psi (maximum). The test section is then allowed to be idle (no make-up water / pressure is added) for a period of 2 hours. After this 2-hour period, make-up water / pressure is applied and measured to re-establish the "initial test pressure." The quantity of water utilized to re-pump the line shall be measured and compared to the allowable quantities as determined by TABLE 1, shown below. If the actual make-up water quantity is equal to or less than the allowable amount, the pressure test passes. If the actual make-up water quantities are greater than the allowable amount, the pressure test fails.

TABLE 1: ALLOWABLE MAKE-UP AMOUNT (HDPE) PIPE	
Nominal Pipe Size (inches)	Make-up Water Allowance (U.S. Gallons /100 ft. of Pipe) 2-Hour Test
6	0.30
8	0.50
10	0.65
12	1.15
14	1.40
16	1.65
18	2.15
20	2.75
22	3.50
24	4.40
26	5.00
28	5.55
30	6.35
32	7.15
34	8.10
36	9.00
42	11.55
48	13.50
54	15.70

3. In the event a section fails to pass the tests, the CONTRACTOR shall do everything necessary to locate, uncover (even to the extent of uncovering the entire section), and replace the defective pipe, valve, fitting or joint. Visible leaks shall be corrected regardless of total leakage. Lines which fail to meet these tests shall be retested as necessary until test requirements are complied with. All testing shall be performed at the CONTRACTOR'S expense.

3.05 TESTS FOR VALVES

A. General: All valves shall be tested according to the following criteria:

1. Butterfly and plug valves shall be tested in accordance with AWWA C504.
2. Ball valves shall be tested in accordance with AWWA C507.
3. Gate valves shall be tested in accordance with AWWA C509 and C515.

END OF SECTION

SECTION 02740 – BYPASS PUMPING

PART 1 – GENERAL

1.01 DESCRIPTION OF WORK

- A. The work covered by this section consists of providing all labor, equipment, material and supplies and performing all operations required to bypass pump sewage around a manhole, sewer section, force main or pump station in which work is to be performed. The Contractor shall be prepared to bypass pump sewage as part of his operations. The Contractor shall provide all pumps, piping and other equipment necessary to accomplish bypass pumping; perform all construction; obtain all permits; pay all costs; and perform complete restoration of all existing facilities to conditions equal to or better than conditions that existed prior to construction and to the satisfaction of the Engineer and Owner. A backup bypass pump is required. All costs to accomplish bypass pumping, at the required volume, and all associated work including restoration, shall be considered incidental to the work and no additional compensation will be allowed.

1.02 GENERAL

- A. For manual operation of pump stations, the Contractor shall coordinate such operations with the appropriate City personnel. Plugging or blocking of the flow shall only be allowed when the Contractor can demonstrate that the upstream gravity collection system can accommodate the surcharging without any adverse impact.

1.03 SUBMITTALS

- A. The Contractor shall submit a written plan describing his means and methods for flow control and bypass pumping to the Engineer for review.

PART 2 – PRODUCTS

(NOT USED)

PART 3 – EXECUTION

3.01 PLUGGING AND BLOCKING

- A. A sewer line plug shall be inserted into the line upstream of the section being televised or repaired. The plug shall be so designed that all or any portion of the upstream flow can be released. During the television inspections and repair operations, the flow through the line being worked shall be reduced to within the maximum limits stated above. After the work has been completed, the flow shall be restored to normal.

3.02 PUMPING AND BYPASSING

- A. When pumping and bypass pumping is required, as determined by the Engineer, the Contractor shall supply all necessary pumps, conduits and other equipment to divert the flow around the area in which work is to be performed. The bypass system shall be of sufficient capacity to handle existing flow plus additional flow that may occur during rainstorm events. The Contractor will be responsible for furnishing the necessary labor and supervision to set up and operate the pumping and bypassing system. Pumps and equipment shall be continuously monitored by the Contractor during the periods that pumping and bypassing are required. If pumping is required on a 24-hour basis, the engine shall be equipped in a manner to keep noise to a minimum.

3.03 FLOW CONTROL PRECAUTIONS

- A. When flow in a sewer line is plugged, blocked or bypassed by the Contractor, sufficient precautions shall be taken to protect the public health and to protect the sewer lines from damage that might result from sewer surcharging. Further, the Contractor shall take precautions to insure that sewer flow control operations do not cause flooding or damage to public or private property being served by the sewers involved and shall be responsible for any damage resulting from the flow control operations.
- B. Conditions upstream of the plug shall be monitored by the Contractor's representative and the Contractor shall be prepared to immediately start bypass pumping, if needed. Any liquid or solid matter, which is bypass pumped from the sewer collection system, shall be discharged to another sewer manhole or appropriate vehicle or container only. No such liquid or solid matter shall be allowed to be discharged, stored or deposited on the ground, swale, road, stormwater drainage system or open environment. The Contractor shall protect all pumps, conduit and other equipment used for bypass pumping from traffic.
- C. Should the liquid or solid matter from the sewer collection system be spilled, discharged, leaked or otherwise deposited to the open environment as a result of the Contractor's flow control operations, the Contractor shall be responsible for all cleanup and disinfection of the affected area and all costs associated with same. The Contractor shall also be responsible for notifying the sewer system operating personnel and appropriate regulatory agencies and performing all required cleanup operations at no additional cost to the Owner.

END OF SECTION

SECTION 02801 – RESTORATION OF SURFACE IMPROVEMENTS

PART 1 – GENERAL

1.01 DESCRIPTION OF WORK

- A. This Section includes the restoration of driveways, lawn areas, trees and plants, roadways, sprinkler systems, walks and any other existing improvement affected by the proposed work, as shown on the Drawings and as specified.

1.02 QUALITY ASSURANCE

- A. Standards
 - 1. Florida Grades and Standards for Nursery Plants, Part 1:
 - 2. Florida Department of Transportation, Standard Specifications for Road and Bridge Construction (latest Edition), hereafter called the Standard Specifications.
- B. Asphaltic Concrete Mix Designs: Contractor shall provide mix designs prepared by an independent laboratory for each type of material used. Mix designs shall be prepared in accordance with the procedures described in Manual MS-2, Mix Design Methods for Asphalt Concrete, a publication of the Asphalt Institute.

PART 2 – PRODUCTS

2.01 SOD

- A. The sod shall match the existing sod in the area. St. Augustine sod shall be replaced with St. Augustine Floratam. In areas without well established sod, Argentine Bahia shall be used.
- B. The sod shall have well matted roots and be sufficiently thick to secure a dense stand of live grass, with a minimum thickness of two inches. The sod shall be live, fresh and uninjured at the time of planting. It shall be planted as soon as possible after being dug and shall be shaded and kept moist from the time it is dug until it is planted.

2.02 PLANTS

- A. Existing damaged plants shall be replaced by plants of equal type, quality and size whenever possible. All new plants shall be sound, healthy, vigorous and free from defects, decay, disfiguring, bark abrasions, plant diseases, insect pests, their eggs or larvae.
- B. Existing plants may be removed, preserved, and replaced at the Contractors option. Plants shall be handled by an approved nursery.
- C. Plants shall be watered and cared for until new growth appears. Dead and dying plants shall be immediately replaced. Plants used shall be in accordance with the "Grades and Standards", Florida No. 1 or better.
- D. Plants shall conform to the sizes indicated by the OWNER.

2.03 MULCH

- A. Mulch for all planter areas shall be Cypress Bark, clean, bright and free from weeds, moss, sticks, and other debris. Bark size shall not be over 2-1/2-inch diameter.

2.04 WATER

- A. The water used in the performance of this Contract shall be of drinking water quality, clean and free from injurious amounts of oil, acid, alkali, or organic matter.

2.05 PLANTING MIXTURE

- A. The planting mixture, when required, shall consist of a thorough mixture of 40% peat and 60% sand. The peat shall be Florihome peat or equivalent and the sand shall be clean and free from debris of any kind.

2.06 FERTILIZER

- A. Fertilizer shall be pelletized 8-8-8, or equivalent.

2.07 PORTLAND CEMENT

- A. Portland cement used in the performance of restoration work on this Contract shall have a compressive strength of 3000 psi at 28 days and shall conform to the requirements of Section 03300.

PART 3 – EXECUTION

3.01 LANDSCAPING RESTORATION

- A. Lawn Areas: Any lawn area affected by the required work shall be restored to a condition equal to or better than the conditions existing before the commencement of work. Grass areas disturbed by CONTRACTOR shall be restored with sod.
- B. Balled Plants:
 - 1. Plants where required shall be adequately balled with firm natural balls of soil, sized as set forth in "Grades and Standards". Balls shall be firmly wrapped with burlap or equally approved strong cloth. No balled plant will be planted if the ball is cracked or broken before or during the process of planting.
 - 2. Option: Plants may be furnished as container grown instead of balled if all other requirements are met.
- C. Preparation of Plant Pits: All plant pits shall be circular in outline and have vertical sides. Tree pits shall be two feet wider than the width of the ball and one foot deeper than the depth of the ball. Shrubs that are either B&B or in 3 gallon containers shall have pits that are two feet wider than the width of the plant ball and 6-inches deeper than the depth of the ball. Smaller shrubs shall have pits that are at least one foot wider than the width of the plant ball and 6-inches deeper than the ball depth.

D. Setting Plants

1. All plants except as otherwise specified, shall be centered in pits. Deep planting shall be avoided and unless otherwise specified, plants shall be set at such a level that after settlement they will bear the same relation to the required grade as they have to the natural grade before being transplanted.
2. Balled and burlapped plants and palms shall be placed on 6 inches to 12 inches of tamped planting mixture and adjusted so as to be at the proper level. The rope and burlap shall be cut away and the burlap folded down to the bottom of the pit. Very large B&B plants shall remain wrapped until fully backfilled and then just the upper portion of the burlap shall be removed. Backfill of planting mix shall be placed halfway up the pit and then water tamped. After this water has drained away, backfill around the edge of the pit to form a saucer and fill area three times with water.

E. Water: Water to be used initially during plant installation shall be furnished by the CONTRACTOR. The existing irrigation system, where damaged, shall be promptly repaired after the installation of the plants.

F. Sod Placement:

1. Immediately before sod is placed, 8-8-8 fertilizer shall be applied at the rate of approximately 500 pounds per acre, by broadcasting and raking into the planting area.
2. Sod shall be firmly embedded by light tamping. Wherever necessary to prevent an erosion condition caused by vertical edges at the outer limits of the sodded area, the sod shall be tamped so as to produce a featheredge at the outer limits. The sod shall be kept in a moist condition after it is planted. Water shall not be applied between the hours of 8 A.M. and 4 P.M., or when there is danger of freezing.

G. Maintenance: CONTRACTOR shall maintain the planted areas in a satisfactory condition until final acceptance of the project. Such maintenance shall include watering, filling, leveling and repairing of any washed or eroded areas as may be necessary.

3.02 PAVEMENT, CURB AND SIDEWALK REMOVAL

A. Pavement materials shall be removed and separated from other excavated materials. Prior to removal, asphaltic and Portland cement materials shall be saw cut to neat lines parallel to the trench and sufficiently remote from the edge of the trench to prevent settling or breaking off.

3.03 TESTS

A. The CONTRACTOR shall furnish facilities for making all density tests and make such restorations as may be necessary due to test operations. All density tests on backfill or base replacement will be made by a commercial testing laboratory employed by the OWNER and at such locations as may be recommended by the ENGINEER. If the densities as determined by the specified tests fall below the required minimums, the CONTRACTOR shall pay for all retests.

END OF SECTION

SECTION 02802 – IDENTIFICATION TAPE/WIRE FOR BURIED PIPE

PART 1 – GENERAL

1.01 DESCRIPTION

- A. Furnish and install identification tape over the centerline of all buried potable water lines, wastewater force mains, gravity sewers and wastewater reuse mains.

1.02 SUBMITTALS

- A. Submit manufacturer's descriptive literature, illustrations, specifications and other pertinent data.

PART 2 – PRODUCTS

2.01 IDENTIFICATION TAPE

- A. Identification Tape for Ductile Iron and Steel Pipe: Identification tape shall be non-metallic, manufactured of inert polyethylene so as to be highly resistant to alkalies, acids and other destructive agents found in soil, and shall have a minimum thickness of 6 mils with a minimum tensile strength of 22 pounds per inch and a maximum adhesive factor of 40 ounces per inch. Tape width shall be 2 inches and shall have background color specified below, imprinted with black letters. Imprint shall be as specified below and shall repeat itself a minimum of once every 2 feet for entire length of tape.

- B. Identification Tape for Polyvinyl Chloride Pipe: Identification tape shall be non-metallic and manufactured of polyethylene with a minimum thickness of 4 mils. The tape shall be highly resistant to alkalies, acids and other destructive agents found in soil. Tape width shall be 3 inches and shall have background color specified below, imprinted with black letters. Imprint shall be as specified below and shall repeat itself a minimum of once every 2 feet for entire length of tape.

- C. Tape background colors and imprints shall be as follows:

<u>Imprint</u>	<u>Background Color</u>
"Caution Caution – Potable Water Line Buried Below"	Blue
"Caution Caution – Wastewater Force Main Buried Below"	Green
"Caution Caution – Sewer"	Green
"Caution Caution – Reuse Water Main Buried Below"	Lavender
"Caution Caution – Raw Water Main Buried Below"	White

- D. Identification tape shall be "Terra Tape" as manufactured by Reef Industries, Inc., Houston, TX, (800) 231-6074; Seton, Branford, CT, (800) 571-2596; Pro-Line Safety Products, W. Chicago, IL, (800) 554-3424.

2.02 LOCATE WIRE FOR PIPE INSTALLED BY OPEN CUT

- A. In addition to the warning tape, there should be installed a 10-gage single-strand THWN solid copper-clad steel tracing wire. The wire shall be encapsulated in a 30-mil HDPE jacket, shall have break load of 513 pounds and color coded to match the pipe color.

- B. The locate wire shall be connected with either high split bolt connector (Granger GAUGO or equal) and shrink-wrapped to encapsulate the connection. A Proline Dryconn® connector or Copperhead Dryconn Direct Bury Log may also be used.
- C. Color of wire shall match the color coding shown on the table under Paragraph 2.01 of this Specification Section.

2.03 LOCATE WIRE FOR PIPE INSTALLED BY DIRECTIONAL DRILL

- A. Locate wire for directional drill pipe installation shall be a steel core 10-gage, single strand THWN solid copper tracing wire. The wire shall be encapsulated in a 45-mil HDPE jacket color coded to match the color of the pipe. Tracing wire breakload shall be 1,150 pounds.
- B. Three (3) wires shall be installed for each drill.
- C. Color of wire shall match the color coding shown on the table under Paragraph 2.01 of this Specification Section.

PART 3 – EXECUTION

3.01 INSTALLATION OF IDENTIFICATION TAPE

- A. Identification tape shall be installed for all buried pressure mains in accordance with the manufacturer's installation instructions and as specified herein.
- B. For potable, raw, reuse water and force mains, identification tape shall be installed 12 inches above the pipe.
- C. For wastewater or gravity sewers, identification tape shall be continuously spiral-wrapped around the pipe with the bands 12 to 18 inches apart.

3.02 INSTALLATION OF LOCATE WIRE

- A. Install wire as shown on the detail drawings of this project.
- B. Test the locate wire for continuity and submit report documenting the continuity testing. Repair or replace locate wire at failed test locations as directed by OWNER.
- C. CONTRACTOR shall provide the name of the wire testing company to the OWNER for approval.

END OF SECTION

DIVISION 3

CONCRETE

SECTION 03130 - CONCRETE REHABILITATION

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.02 SUMMARY

- A. Section Includes:
 - 1. Type I Repairs
 - 2. Type II Repairs
 - 3. Type III Repairs
 - 4. Type IV Repairs
 - 5. Type V Repairs

1.03 ACTION SUBMITTALS

- A. Product Data: For each type of product. Include construction details, material descriptions, chemical composition, physical properties, test data, and mixing, preparation, and application instructions.

1.04 INFORMATIONAL SUBMITTALS

- A. Qualification Certificates from Manufacturer: The installers must have a minimum of 5 years of experience applying the specified or similar products and submit a certification from the manufacturer of the mortar to be installed.
- B. Material Certificates: For each type of product supplied for mixing or adding to products at Project site.
- C. Product Test Reports: For each proposed product, provide tests performed by manufacturer and witnessed by a qualified testing agency.
- D. Field quality-control reports.

1.05 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Each product manufacturer shall employ factory-trained technical representatives who are available for consultation and Project-site inspection and assistance at no additional cost.
- B. Installer Qualifications: An entity that employs installers and supervisors who are trained and approved by the manufacturer to apply the products proposed for this project.
- C. Maintenance Program: Prepare a written plan for maintenance of work, including each phase or process, protection of surrounding materials during operations, and control of

debris and runoff during the Work. Describe in detail materials, methods, equipment, and sequence of operations to be used for each phase of work.

1.06 DELIVERY, STORAGE AND HANDLING

- A. Comply with manufacturer's written instructions for minimum and maximum temperature requirements and other conditions for storage.
- B. Store cementitious materials off the ground, under cover, in a dry location.
- C. Store aggregates covered and in a dry location; maintain grading and other required characteristics and prevent contamination.

1.07 FIELD CONDITIONS

- A. Environmental Limitations for Epoxies: Do not apply when air and substrate temperatures are outside limits permitted by manufacturer. During hot weather, cool epoxy components before mixing, store mixed products in shade, and cool unused mixed products to retard setting. Do not apply to wet substrates unless approved by manufacturer.
 - 1. Use only ASTM C881 Class A epoxies when substrate temperatures are below or are expected to go below 40 deg F (5 deg C) within 8 hours.
 - 2. Use only ASTM C881 Class A or B epoxies when substrate temperatures are below or are expected to go below 60 deg F (16 deg C) within 8 hours.
 - 3. Use only ASTM C881 Class C epoxies when substrate temperatures are above and are expected to stay above 60 deg F (16 deg C) for 8 hours.
- B. Cold-Weather Requirements for Cementitious Materials: Do not apply unless concrete-surface and air temperatures are above 40 deg F (5 deg C) and will remain so for at least 48 hours after completion of Work.
- C. Cold-Weather Requirements for Cementitious Materials: Comply with the following procedures:
 - 1. When air temperature is below 40 deg F (5 deg C), heat patching-material ingredients and existing concrete to produce temperatures between 40 and 90 deg F (5 and 32 deg C).
 - 2. When mean daily air temperature is between 25 and 40 deg F (minus 4 and plus 5 deg C), cover completed Work with weather-resistant insulating blankets for 48 hours after repair or provide enclosure and heat to maintain temperatures above 32 deg F (0 deg C) within the enclosure for 48 hours after repair.
 - 3. When mean daily air temperature is below 25 deg F (minus 4 deg C), provide enclosure and heat to maintain temperatures above 32 deg F (0 deg C) within the enclosure for 48 hours after repair.
- D. Hot - Weather Requirements for Cementitious Materials: Protect repair work when temperature and humidity conditions produce excessive evaporation of water from patching materials. Provide artificial shade and wind breaks, and use cooled materials as required. Do not apply to substrates with temperatures of 90 deg F (32 deg C) and above.

PART 2 - PRODUCTS

2.01 MATERIALS, GENERAL

- A. Source Limitations: Obtain each color, grade, finish, type, and variety of product from single source with resources to provide products of consistent quality in appearance and physical properties.
- B. VOC Content: Provide materials that comply with VOC limits of authorities having jurisdiction.

2.02 TYPE I REPAIR

Type I Repairs shall be for cracks larger than 1/16" and less than 1/4" in width where no rust stains, spalling or loose concrete is observed and concrete removal is not required.

- A. Concrete Surface Preparation:
 - 1. Route crack to a width of 1/4" and 1/2" depth.
 - 2. Clean out debris and loose concrete; vacuum or blow clear with compressed air.
 - 3. Crack surface must be clean, dry and free of oil, grease and other contaminants. Take precaution to prohibit surface from becoming contaminated prior to product application.
- B. For Crack Repairs:
 - Primer
 - 1. Sikaflex 429
 - 2. Approved equivalent
 - Polyurethane, elastomeric sealant/adhesive:
 - 1. Sikaflex-1A
 - 2. Approved equivalent
- C. For surfaces to be coated reference Section 09 90 00.

2.03 TYPE II REPAIR

Type II Repairs shall be for areas that have concrete section loss where no reinforcing bars have been exposed. This would include cracks greater than 1/4" in width and areas of poor consolidation.

- A. Concrete Surface Preparation:
 - 1. Remove all loose materials, deteriorated concrete, laitance, existing coatings and other bond-inhibiting materials from the surface in accordance with SSPC-SP13/NACE 6 minimum surface profile of ICRI-CSP6.

2. The edges of the repair should be saw cut perpendicular to the surface to a depth of at least $\frac{1}{4}$ ". Break out the complete repair area to a minimum depth of $\frac{1}{4}$ " up to the sawed edge to prevent feather edging. Avoid cutting the reinforcing steel.
 3. Surface must be clean, dry and free of oil, grease and other contaminants. Take precaution to prohibit surface from becoming contaminated prior to product application.
- B. Repair Mortar for repairs less than $\frac{1}{2}$ -inch in thickness:
1. Tnemec Series 218
 2. Sherwin Williams Dura Plate 2300
 3. Sika Sikatop 123 Plus.
- C. Repair Mortar for repairs between $\frac{1}{2}$ inch and 2 inches in thickness:
1. Tnemec Series 217
 2. AW Cook Silatec Microsilica Concrete
 3. SikaRepair 224
- D. For surfaces to be coated reference Section 09 90 00.

2.04 TYPE III REPAIR

Type III Repairs shall be for areas that have concrete section loss up to 4" in depth (>4" shall depth use Type V Repair) where reinforcing bars have been exposed but do not need to be replaced including areas of poor consolidation and where rust stains are observed.

- A. Surface Preparation:
1. Concrete
 - a. Remove all loose materials, deteriorated concrete, laitance, existing coatings and other bond-inhibiting materials from the surface in accordance with SSPC-SP13/NACE 6 minimum surface profile of ICRI-CSP6.
 - b. The edges of the repair should be saw cut perpendicular to the surface to a depth of at least $\frac{1}{4}$ ". Break out the complete repair area to a minimum depth of $\frac{1}{4}$ " up to the sawed edge to prevent feather edging. Avoid cutting the reinforcing steel.
 - c. Surface must be clean, dry and free of oil, grease and other contaminants. Take precaution to prohibit surface from becoming contaminated prior to product application.
 2. Steel Reinforcement
 - a. Remove rust and active corrosion by sandblasting per SSPC SP6 or mechanical wire brushing to produce white metal finish per SSPC SP11.
 - b. Surface must be clean, dry and free of oil, grease and other contaminants. Take precaution to prohibit surface from becoming contaminated prior to product application.

B. Bonding Agent:

1. Concrete Resurface Scrub Coat
 - a. Tnemec Series 217
 - b. AW Cook Silatec Microsilica Concrete.
 - c. Sika Repair 224.
2. Steel Reinforcing
 - a. Sika Armatec 110 EpoCem two coats @ 20 mils DFT each.

C. Repair Mortar:

1. Tnemec Series 217
2. AW Cook Silatec Microsilica Concrete
3. SikaRepair 224

D. For surfaces to be coated reference Section 09 90 00.

2.05 TYPE IV REPAIR

Type IV Repairs shall be for areas that have concrete section loss up to 4" in depth (>4" depth shall use Type V Repair) where reinforcing bars have been exposed and need to be replaced including areas of poor consolidation and where rust stains are observed.

A. Surface Preparation:

1. Concrete
 - a. Remove all loose materials, deteriorated concrete, laitance, existing coatings and other bond-inhibiting materials from the surface in accordance with SSPC-SP13/NACE 6 minimum surface profile of ICRI-CSP6.
 - b. The edges of the repair should be saw cut perpendicular to the surface to a depth of at least 1/4". Break out the complete repair area to a minimum depth of 1/4" up to the sawed edge to prevent feather edging. Avoid cutting the reinforcing steel.
 - c. Surface must be clean, dry and free of oil, grease and other contaminants. Take precaution to prohibit surface from becoming contaminated prior to product application.
2. Steel Reinforcement
 - a. Where section loss of reinforcing bar is more than 25 percent, or 20 percent in two or more adjacent bars, cut bars and remove and replace per structural drawing details. Remove additional concrete as necessary to provide at least 3/4-inch clearance at existing and replacement bars.

Splice replacement bars to existing bars according to ACI 318 (ACI 318M) by lapping, welding, or using mechanical couplings.

- b. Remove remaining rust and active corrosion by sandblasting or mechanical wire brushing to produce white metal finish.
- c. Surface must be clean, dry and free of oil, grease and other contaminants. Take precaution to prohibit surface from becoming contaminated prior to product application.

B. Bonding Agent:

1. Concrete Resurface Scrub Coat

- a. Tnemec Series 217
- b. AW Cook Silatec Microsilica Concrete.
- c. Sika Repair 224.

2. Steel Reinforcing

- a. Sika Armatec 110 EpoCem two coats @ 20 mils DFT each.

E. Repair Mortar:

- 4. Tnemec Series 217
- 5. AW Cook Silatec Microsilica Concrete
- 6. SikaRepair 224

F. For surfaces to be coated reference Section 09 90 00.

2.06 TYPE V REPAIR

Type V Repairs shall be for areas that have concrete section loss greater than 4" in depth.

A. Surface Preparation:

1. Concrete

- a. Remove all loose materials, deteriorated concrete, laitance, existing coatings and other bond-inhibiting materials from the surface in accordance with SSPC-SP13/NACE 6 minimum surface profile of ICRI-CSP6.
- b. The edges of the repair should be saw cut perpendicular to the surface to a depth of at least 2" or to the rebar, whichever is shallower and abraded/roughen saw cut surfaces. Break out the complete repair area to a minimum depth of 2" up to the sawed edge to prevent feather edging. Avoid cutting the reinforcing steel.
- c. Surface must be clean, dry and free of oil, grease and other contaminants. Take precaution to prohibit surface from becoming contaminated prior to product application.

2. Steel Reinforcement
 - a. Where section loss of reinforcing bar is more than 25 percent, or 20 percent in two or more adjacent bars, cut bars and remove and replace per structural drawing details. Remove additional concrete as necessary to provide at least 3/4-inch clearance at existing and replacement bars. Splice replacement bars to existing bars according to ACI 318 (ACI 318M) by lapping, welding, or using mechanical couplings.
 - b. Remove remaining rust and active corrosion by sandblasting or mechanical wire brushing to produce white metal finish.
 - c. Surface must be clean, dry and free of oil, grease and other contaminants. Take precaution to prohibit surface from becoming contaminated prior to product application.
- B. Bonding Agent:
 1. Concrete Resurface Scrub Coat
 - a. Tnemec Series 217
 - b. AW Cook Silatec Microsilica Concrete.
 - c. Sika Repair 224.
 2. Steel Reinforcing
 - a. Sika Armatec 110 EpoCem two coats @ 20 mils DFT each.
- C. Repair Mortar:
 1. Tnemec Series 217
 2. AW Cook Silatec Microsilica Concrete
 3. SikaRepair 224
- D. Shotcrete (as alternative to Repair Mortar)
 1. Shotcrete: Wet mix and dry mix shotcrete shall be applied by experienced nozzlemen certified by American Concrete Institute (ACI) as outlined in ACI certification publication CP-60
 2. Shotcrete Compressive Strength f'c shall be 4,000 psi or greater at 28 days.
- E. For surfaces to be coated reference Section 09 90 00.

PART 3 – EXECUTION

3.01 EXAMINATION

- A. Notify Owner seven days in advance of dates when areas of deteriorated or delaminated concrete and deteriorated reinforcing bars will be located.
- B. Locate areas of deteriorated or delaminated concrete using hammer or chain-drag sounding and mark boundaries. Mark areas for removal by simplifying and squaring off boundaries. At columns and walls make boundaries level and plumb unless otherwise indicated.
- C. Use Nondestructive examination procedure such as Pachometer Testing or Surface Penetrating Radar to locate and determine cover on reinforcing steel so damage to it can be avoided during concrete removal.
- D. Perform surveys as the Work progresses to detect hazards resulting from concrete-maintenance work.

3.02 PREPARATION

- A. Ensure that supervisory personnel are on-site and on duty when concrete maintenance work begins and during its progress.
- B. Preparation for Removal of Deteriorated Concrete: Examine construction to be repaired to determine best methods to safely and effectively perform concrete maintenance work. Examine adjacent work to determine what protective measures will be necessary. Make explorations, probes, and inquiries as necessary to determine condition of construction to be removed in the course of repair.
 - 1. Verify that affected utilities have been disconnected and capped.
 - 2. Inventory and record the condition of items to be removed for reinstallation or salvage.
 - 3. Provide and maintain shoring, bracing, and temporary structural supports as required to preserve stability and prevent unexpected or uncontrolled movement, settlement, or collapse of construction being demolished and construction and finishes to remain.
- C. Protect persons, motor vehicles, surrounding surfaces of building being restored, building site, plants, and surrounding buildings from harm resulting from concrete maintenance work.
 - 1. Comply with each product manufacturer's written instructions for protections and precautions. Protect against adverse effects of products and procedures on people and adjacent materials, components, and vegetation.
 - 2. Use only proven protection methods appropriate to each area and surface being protected.
 - 3. Provide barricades, barriers, and temporary directional signage to exclude public from areas where concrete maintenance work is being performed.
 - 4. Erect temporary protective covers over walkways and at points of pedestrian and vehicular entrance and exit that must remain in service during course of concrete maintenance work.

5. Contain dust and debris generated by concrete maintenance work and prevent it from reaching the public or adjacent surfaces.
 6. Use water-mist sprinkling and other wet methods to control dust only with adequate, approved procedures and equipment that ensure that such water will not create a hazard or adversely affect other building areas or materials.
 7. Protect floors and other surfaces along haul routes from damage, wear, and staining.
 8. Provide supplemental sound-control treatment to isolate removal and dismantling work from other areas of the building.
 9. Protect adjacent surface and equipment by covering them with heavy polyethylene film and waterproof masking tape. If practical, remove items, store, and reinstall after potentially damaging operations are complete.
 10. Neutralize and collect alkaline and acid wastes for disposal off Owner's property.
 11. Dispose of debris and runoff from operations by legal means and in a manner that prevents soil erosion, undermining of paving and foundations, damage to landscaping, and water penetration into building interiors.
- D. Existing Drains: Prior to the start of work in an area, test drainage system to ensure that it is functioning properly. Notify Engineer immediately of inadequate drainage or blockage. Do not begin work in an area until the drainage system is in working order.
1. Prevent solids such as aggregate or mortar residue from entering the drainage system. Clean out drains and drain lines that become sluggish or blocked by sand or other materials resulting from concrete maintenance work.
 2. Protect drains from pollutants. Block drains or filter out sediments, allowing only clean water to pass.
- E. Concrete Removal:
1. Provide shoring, bracing, and supports as necessary. Strengthen or add new supports when required during progress of removal work. Do not overload structural elements with debris.
 2. Saw-cut perimeter of areas indicated for removal to a depth of at least $\frac{1}{4}$ " deep. Make cuts perpendicular to concrete surfaces and no deeper than cover on reinforcement.
 3. Remove deteriorated and delaminated concrete by breaking up and dislodging from reinforcement.
 4. Remove additional concrete if necessary to provide a depth of removal of at least $\frac{1}{4}$ " deep over entire removal area.
 5. Where half or more of the perimeter of reinforcing bar is exposed, bond between reinforcing bar and surrounding concrete is broken, or reinforcing bar is corroded, remove concrete from entire perimeter of bar and to provide at least a $\frac{3}{4}$ -inch clearance around bar.
 6. Test areas where concrete has been removed by tapping with hammer, and remove additional concrete until unsound and disbonded concrete is completely removed.
 7. Provide surfaces with a fractured profile of at least $\frac{1}{4}$ " in depth that are approximately perpendicular or parallel to original concrete surfaces. At columns and walls, make top and bottom surfaces level unless otherwise directed.
 8. Thoroughly clean removal areas of loose concrete, dust, and debris.

3.03 APPLICATION

- A. General: Comply with manufacturer's written instructions and recommendations for application of products, including surface preparation.

3.04 FIELD QUALITY CONTROL

- A. Contractor will coordinate with the Owner and Engineer to allow for them to observe that the repairs are being conducted in accordance with the Contract Documents.

3.05 MANUFACTURER REPRESENTATION

- A. The product manufacturer(s)' representative will be required to attend the following to observe and provide guidance on the installation of the repair system:
 - 1. One (1) Pre-installation Meeting for each repair system to be installed
 - 2. One (1) Substantial Completion Walkthrough

END OF SECTION

SECTION 03300 – CAST-IN-PLACE CONCRETE

PART 1 – GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.
- B. Code references
 - 1. Florida Building Code (FBC) 2020 Edition.
 - 2. ACI 301, "Structural Concrete for Buildings."
 - 3. ACI 318, "Building Code Requirements for Reinforced Concrete."
 - 4. ACI 350, "Code Requirements for Environmental Engineering Concrete Structures"

1.02 SUMMARY

- A. Section includes cast-in-place concrete, including formwork, reinforcement, concrete materials, mixture design, placement procedures, and finishes, for the following:
 - 1. Minor equipment pads and pipe encasements.
 - 2. Structural Concrete – All other concrete.
- B. Related Sections:
 - 1. Section 02220 "Excavation, Backfill, Fill and Grading for Structures" for fill under slabs-on-grade and bottom slabs and footings. Section 07100 Waterproofing, Dampproofing and Caulking.
 - 2. Section 07920 "Sealants and Caulking" for concrete joint applications.
 - 3. Section 09900 "Paintings and Special Coatings" for all interior and exterior coating liquid containment structures applications.

1.03 DEFINITIONS

- A. Cementitious Materials: Portland cement alone or in combination with one or more of the following: blended hydraulic cement, fly ash and other pozzolans, ground granulated blast-furnace slag, and silica fume; subject to compliance with requirements.

1.04 ACTION SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Submittals:
 - 1. Design Mixtures: Submit concrete mixture proportions, characteristics and location for use for each concrete mixture. Submittal shall include documentation indicating the proposed concrete proportions will produce an average compressive strength equal to or greater than the required average compressive strength and shall consist of field strength records (field test data) or trial mixtures in accordance with ACI 301, 4.2.3.4.a or 4.2.3.4.b, respectively. Submit

alternate design mixtures when characteristics of materials, project conditions, weather, test results, or other circumstances warrant adjustments.

2. Indicate amounts of mixing water to be withheld for later addition at Project site.
- C. Steel Reinforcement Shop Drawings: Placing drawings that detail fabrication, bending, and placement. Include bar sizes, lengths, material, grade, bar schedules, stirrup spacing, bent bar diagrams, bar arrangement, splices and laps, mechanical connections, tie spacing, hoop spacing, and supports for concrete reinforcement.
- D. Formwork Shop Drawings: Prepared by or under the supervision of a qualified professional engineer detailing fabrication, assembly, and support of formwork.
 1. Shoring and Reshoring: Indicate proposed schedule and sequence of stripping formwork, shoring removal, and reshoring installation and removal.
- E. Construction Joint Layout: Indicate proposed construction joints required to construct the structure.
 1. Location of construction joints is subject to approval of the Engineer.
- F. Samples: None.

1.05 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For Installer, manufacturer and testing agency.
- B. Welding certificates.
- C. Material Certificates: For each of the following, signed by manufacturers:
 1. Cementitious materials.
 2. Admixtures.
 3. Form materials and form-release agents.
 4. Steel reinforcement and accessories.
 5. Waterstops.
 6. Curing compounds.
 7. Floor and slab treatments.
 8. Bonding agents.
 9. Adhesives.
 10. Vapor retarders.
 11. Semi rigid joint filler.
 12. Joint-filler strips.
 13. Repair materials.
- D. Material Test Reports: For the following, from a qualified testing agency, indicating compliance with requirements:
 1. Aggregates. Include service record data indicating absence of deleterious expansion of concrete due to alkali aggregate reactivity.
- E. Floor surface flatness and levelness measurements indicating compliance with specified tolerances.

- F. Field quality-control reports.
- G. Minutes of pre-installation conference.

1.06 QUALITY ASSURANCE

- A. Installer Qualifications: A qualified installer who employs on Project personnel qualified as ACI-certified Flatwork Technician and Finisher and a supervisor who is an ACI-certified Concrete Flatwork Technician.
- B. Manufacturer Qualifications: A firm experienced in manufacturing ready-mixed concrete products and that complies with ASTM C 94/C 94M requirements for production facilities and equipment.
 - 1. Manufacturer certified according to NRMCA's "Certification of Ready Mixed Concrete Production Facilities."
- C. Testing Agency Qualifications: An independent agency, acceptable to authorities having jurisdiction, qualified according to ASTM C 1077 and ASTM E 329 for testing indicated.
 - 1. Personnel conducting field tests shall be qualified as ACI Concrete Field Testing Technician, Grade 1, according to ACI CP-1 or an equivalent certification program.
 - 2. Personnel performing laboratory tests shall be ACI-certified Concrete Strength Testing Technician and Concrete Laboratory Testing Technician - Grade I. Testing Agency laboratory supervisor shall be an ACI-certified Concrete Laboratory Testing Technician - Grade II.
- D. Source Limitations: Obtain each type or class of cementitious material of the same brand from the same manufacturer's plant, obtain aggregate from single source, and obtain admixtures from single source from single manufacturer.
- E. Welding Qualifications: Qualify procedures and personnel according to AWS D1.4/D 1.4M, "Structural Welding Code - Reinforcing Steel."
- F. ACI Publications: Comply with the following unless modified by requirements in the Contract Documents:
 - 1. ACI 301, "Specifications for Structural Concrete."
 - 2. ACI 117, "Specifications for Tolerances for Concrete Construction and Materials."
 - 3. ACI 318, "Building Code Requirements for Reinforced Concrete."
 - 4. ACI 350, "Environmental Engineering Concrete Structures."
 - 5. ACI 305, "Hot Weather Concreting."
 - 6. ACI 306, "Cold Weather Concreting."
- G. Concrete Testing Service: Engage a qualified independent testing agency to perform material evaluation tests and to design concrete mixtures.
- H. Mockups: None.
- I. Pre-installation Conference: Conduct conference at Project site.

1. Before submitting design mixtures, review concrete design mixture and examine procedures for ensuring quality of concrete materials. Require representatives of each entity directly concerned with cast-in-place concrete to attend, including the following:
 - a. Contractor's superintendent.
 - b. Independent testing agency responsible for concrete design mixtures.
 - c. Ready-mix concrete manufacturer.
 - d. Concrete subcontractor.
 - e. Special concrete finish subcontractor.
2. Review special inspection and testing and inspecting agency procedures for field quality control, concrete finishes and finishing, cold- and hot-weather concreting procedures, curing procedures, construction contraction and isolation joints, and joint-filler strips, semi rigid joint fillers, forms and form removal limitations, shoring and reshoring procedures, vapor-retarder installation, anchor rod and anchorage device installation tolerances, steel reinforcement installation, floor and slab flatness and levelness measurement, concrete repair procedures, and concrete protection.

1.07 DELIVERY, STORAGE, AND HANDLING

- A. Steel Reinforcement: Deliver, store, and handle steel reinforcement to prevent bending and damage. Avoid damaging coatings on steel reinforcement, if applicable.
- B. Waterstops: Store water stops under cover to protect from moisture, sunlight, dirt, oil, and other contaminants.

PART 2 - PRODUCTS

2.01 FORM-FACING MATERIALS

- A. Smooth-Formed Finished Concrete: Form-facing panels that will provide continuous, true, and smooth concrete surfaces. Furnish in largest practicable sizes to minimize number of joints.
 1. Plywood, metal, or other approved panel materials.
 2. Exterior-grade plywood panels, suitable for concrete forms, complying with DOC PS 1, and as follows:
 - a. High-density overlay, Class 1 or better.
 - b. Medium-density overlay, Class 1 or better; mill-release agent treated and edge sealed.
 - c. Structural 1, B-B or better; mill oiled and edge sealed.
 - d. B-B (Concrete Form), Class 1 or better; mill oiled and edge sealed.
- B. Rough-Formed Finished Concrete: Plywood, lumber, metal, or another approved material. Provide lumber dressed on at least two edges and one side for tight fit.
- C. Forms for Cylindrical Columns, Pedestals, and Supports: Metal, glass-fiber-reinforced plastic, paper, or fiber tubes that will produce surfaces with gradual or abrupt irregularities not exceeding specified formwork surface class. Provide units with sufficient wall thickness to resist plastic concrete loads without detrimental deformation.

- D. Pan-Type Forms: Glass-fiber-reinforced plastic or formed steel, stiffened to resist plastic concrete loads without detrimental deformation.
- E. Void Forms: Biodegradable paper surface, treated for moisture resistance, structurally sufficient to support weight of plastic concrete and other superimposed loads.
- F. Chamfer Strips: Wood, metal, PVC, or rubber strips, 3/4 by 3/4 inch, minimum.
- G. Rustication Strips: Wood, metal, PVC, or rubber strips, kerfed for ease of form removal.
- H. Form-Release Agent: Commercially formulated form-release agent that will not bond with, stain, or adversely affect concrete surfaces and will not impair subsequent treatments of concrete surfaces.
 - 1. Formulate form-release agent with rust inhibitor for steel form-facing materials.
- I. Form Ties: Factory-fabricated, removable or snap-off metal or glass-fiber-reinforced plastic form ties designed to resist lateral pressure of fresh concrete on forms and to prevent spalling of concrete on removal.
 - 1. Furnish units that will leave no corrodible metal closer than 1 inch to the plane of exposed concrete surface.
 - 2. Furnish ties that, when removed, will leave holes no larger than 1 inch in diameter in concrete surface.
 - 3. Furnish ties for liquid containment structures that have an integral water stop that is tightly welded to the tie.
 - 4. Furnish ties for exposed concrete that are the cone-washer type. The cones shall be made of approved wood or plastic. Common wire will not be allowed for form ties

2.02 STEEL REINFORCEMENT

- A. Recycled Content of Steel Products: Postconsumer recycled content plus one-half of pre-consumer recycled content not less than 25 percent.
- B. Reinforcing Bars: ASTM A 615/A 615M, Grade 60 (Grade 420), deformed.
- C. Low-Alloy-Steel Reinforcing Bars: None.
- D. Galvanized Reinforcing Bars: None.
- E. Epoxy-Coated Reinforcing Bars: None.
- F. Stainless-Steel Reinforcing Bars: None.
- G. Steel Bar Mats: None.
- H. Plain-Steel Wire: ASTM A 82/A 82M. None.
- I. Deformed-Steel Wire: ASTM A 496/A 496M.
- J. Epoxy-Coated Wire: None.

- K. Plain-Steel Welded Wire Reinforcement: ASTM A 185/A 185M, plain, fabricated from as-drawn steel wire into flat sheets.
- L. Deformed-Steel Welded Wire Reinforcement: None.
- M. Galvanized-Steel Welded Wire Reinforcement: None.
- N. Epoxy-Coated Welded Wire Reinforcement: None.

2.03 REINFORCEMENT ACCESSORIES

- A. Joint Dowel Bars: ASTM A 615/A 615M, Grade 60 (Grade 420), plain-steel deformed bars, cut true to length with ends square and free of burrs.
- B. Bar Supports: Bolsters, chairs, spacers, and other devices for spacing, supporting, and fastening reinforcing bars and welded wire reinforcement in place. Manufacture bar supports from steel wire, plastic, or precast concrete according to CRSI's "Manual of Standard Practice," of greater compressive strength than concrete and as follows:
 - 1. For concrete surfaces exposed to view where legs of wire bar supports contact forms, use CRSI Class 1 plastic-protected steel wire or CRSI Class 2 stainless-steel bar supports.

2.04 CONCRETE MATERIALS

- A. Cementitious Material: Use the following cementitious materials, of the same type, brand, and source, throughout Project:
 - 1. Portland Cement: ASTM C 150, Type II, gray, no substituted are allowed. Cement replacement by weight can be up 20% of the total weight, replace with Fly Ash and/or Slag.
 - a. Fly Ash: ASTM C 618, Class F.
 - b. Slag: ASTM 989, Grade 120
 - 2. Blended Hydraulic Cements: ASTM C595, Type IP (MS), specifically excluding type IS (≥ 70) which is not intended as principal cementing constituents in concrete. ASTM C595 cements that incorporate ASTM 1157 cements are not allowed.
- B. Normal-Weight Aggregates: ASTM C 33, Provide aggregates from a single source with documented service record data of at least 10 years' satisfactory service in similar applications and service conditions using similar aggregates and cementitious materials.
 - 1. Fine Aggregate: Free of materials with deleterious reactivity to alkali in cement. Use Clean, sharp, natural silica sand free of loam, clay, lumps, and other deleterious substances. Dune sand, bank run sand, and manu-factured sand are not acceptable.
 - 2. Coarse Aggregate: Clean, uncoated, processed aggregate containing no clay, mud, loam, or foreign matter. Coarse aggregate shall comply with the following:

- a. Crushed stone, processed from natural rock or stone.
 - b. Washed gravel, either natural or crushed. Slag, pit gravel, and bank-run gravel are not allowed.
 - c. Coarse Aggregate Size: ASTM C33/C33M, No. 57 stone, unless otherwise approved by ENGINEER.
- C. Water: ASTM C 94/C 94M and potable.

2.05 ADMIXTURES

- A. Air-Entraining Admixture: ASTM C 260.
- B. Chemical Admixtures: Provide admixtures certified by manufacturer to be compatible with other admixtures and that will not contribute water-soluble chloride ions exceeding those permitted in hardened concrete. Do not use calcium chloride or admixtures containing calcium chloride.
 - 1. Water-Reducing Admixture: ASTM C 494/C 494M, Type A.
 - 2. Retarding Admixture: ASTM C 494/C 494M, Type B.
 - 3. Water-Reducing and Retarding Admixture: ASTM C 494/C 494M, Type D.
 - 4. High-Range, Water-Reducing Admixture: ASTM C 494/C 494M, Type F.
 - 5. High-Range, Water-Reducing and Retarding Admixture: ASTM C 494/C 494M, Type G.
 - 6. Plasticizing and Retarding Admixture: ASTM C 1017/C 1017M, Type II.

2.06 WATERSTOPS

- A. Flexible PVC Waterstops: CE CRD-C 572, with factory-installed metal eyelets, for embedding in concrete to prevent passage of fluids through joints. Factory fabricated corners, intersections, and directional changes.
 - 1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - a. BoMetals, Inc.
 - b. Greenstreak.
 - c. Vinylex Corp.
 - 2. Profile: Ribbed with center bulb.
 - 3. Dimensions: 6 inches by 3/8 inch thick or 9 inches by 3/8 inch thick; nontapered.
- B. Self-Expanding Rubber Strip Waterstops: Manufactured rectangular or trapezoidal strip, bentonite-free hydrophilic polymer modified chloroprene rubber, for adhesive bonding to concrete.
 - 1. Products: Subject to compliance with project requirements, available products that may be incorporated into the Work include, but are not limited to, the following:
 - a. Adeka Ultra Seal/OCM, Inc.; Adeka Ultra Seal.
 - b. Sika/Greenstreak; Hydrotite.

- c. Vinylex Corp.; Swellseal.
 - d. Sika; Sika Swell S-2.
 - e. CETCO Waterstop-RX
- C. Self-sealing, non-swelling preformed joint sealant Waterstop: Shall provide a lasting, watertight bond on both fresh and cured concrete surfaces.
 - 1. Products: Henry Company; Synko-Flex Waterstop.
- D. Retrofit waterstops shall TPE material type. An acceptable product is Sika Westec Envirostop TPE-R installed per manufacturers instructions. Other products may be considered subject to compliance with project requirements.

2.07 VAPOR RETARDERS

- A. Sheet Vapor Retarder: ASTM E 1745, Class C. Include manufacturer's recommended adhesive or pressure-sensitive joint tape.
 - 1. Products: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to, the following:
 - a. Fortifiber Building Systems Group; Moistop Plus.
 - b. Raven Industries Inc.; Vapor Block 6.
 - c. Reef Industries, Inc.; Griffolyn Type-65 or Type-85.
 - d. Stego Industries, LLC; Stego Wrap, 10 mil Class C.
- B. Granular Fill: Clean mixture of crushed stone or crushed or uncrushed gravel; ASTM D 448, Size 57, with 100 percent passing a 1-1/2-inch (37.5-mm) sieve and 0 to 5 percent passing a No. 8 (2.36-mm) sieve.

2.08 LIQUID FLOOR TREATMENTS

- A. VOC Content: Liquid floor treatments shall have a VOC content of 200 g/L or less when calculated according to 40 CFR 59, Subpart D (EPA Method 24).
- B. Penetrating Liquid Floor Treatment: Clear, chemically reactive, waterborne solution of inorganic silicate or silicate materials and proprietary components; odorless; that penetrates, hardens, and densifies concrete surfaces.
 - 1. Products: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to, the following:
 - a. ChemMasters; Chemisil Plus.
 - b. ChemTec Int'l; ChemTec One.
 - c. Conspec by Dayton Superior; Intraseal.
 - d. Curecrete Distribution Inc.; Ashford Formula.
 - e. Dayton Superior Corporation; Day-Chem Sure Hard (J-17).
 - f. Edoco by Dayton Superior; Titan Hard.
 - g. Euclid Chemical Company (The), an RPM company; Euco Diamond Hard.

- C. Penetrating Liquid Floor Treatments for Polished Concrete Finish: Clear, waterborne solution of inorganic silicate or silicate materials and proprietary components; odorless; that penetrates, hardens, and is suitable for polished concrete surfaces.
 - 1. Products: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to, the following:
 - a. Advanced Floor Products; Retro-Plate 99.
 - b. L&M Construction Chemicals, Inc.; FGS Hardener Plus.
 - c. QuestMark, a division of CentiMark Corporation; DiamondQuest Densifying Impregnator Application.

2.09 CURING MATERIALS

- A. Absorptive Cover: AASHTO M 182, Class 2, burlap cloth made from jute or kenaf, weighing approximately 9 oz./sq. yd. (305 g/sq. m) when dry.
- B. Moisture-Retaining Cover: ASTM C 171, polyethylene film or white burlap-polyethylene sheet.
- C. Water: Potable.
- D. Clear, Waterborne, Membrane-Forming Curing Compound: ASTM C 309, Type 1, Class B, dissipating. Allowed for non-liquid containment structures.
 - 1. Products: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to, the following:
 - a. BASF Construction Chemicals - Building Systems; Kure 200.
 - b. ChemMasters; Safe-Cure Clear.
 - c. Conspec by Dayton Superior; W.B. Resin Cure.
 - d. Dayton Superior Corporation; Day-Chem Rez Cure (J-11-W).
 - e. Edoco by Dayton Superior; Res X Cure WB.
 - f. Euclid Chemical Company (The), an RPM company; Kurez W VOX; TAMMSCURE WB 30C.
 - g. L&M Construction Chemicals, Inc.; L&M Cure R.
 - h. Meadows, W. R., Inc.; 1100-CLEAR.
 - i. SpecChem, LLC; Spec Rez Clear.
 - j. Symons by Dayton Superior; Resi-Chem Clear.

2.10 RELATED MATERIALS

- A. Expansion- and Isolation-Joint-Filler Strips: Provide preformed expansion joint filler complying with ASTM D 1752, Type I (spong rubber) or Type II (cork).
- B. Semi rigid Joint Filler: Two-component, semi rigid, 100 percent solids, epoxy resin with a Type A shore durometer hardness of 80 aromatic polyurea with a Type A shore durometer hardness range of 90 to 95 per ASTM D 2240.
- C. Bonding Agent: ASTM C 1059/C 1059M, Type II, non-redispersible, acrylic emulsion or styrene butadiene.

- D. Epoxy Bonding Adhesive: ASTM C 881, two-component epoxy resin, capable of humid curing and bonding to damp surfaces, of class suitable for application temperature and of grade to suit requirements, and as follows:
 - 1. Types I and II, non-load bearing and Types IV and V, load bearing, for bonding hardened or freshly mixed concrete to hardened concrete.
- E. Reglets: Fabricate reglets of not less than 0.022 thick, galvanized-steel sheet. Temporarily fill or cover face opening of reglet to prevent intrusion of concrete or debris.
- F. Dovetail Anchor Slots: Hot-dip galvanized-steel sheet, not less than 0.034 inch thick, with bent tab anchors. Temporarily fill or cover face opening of slots to prevent intrusion of concrete or debris.

2.11 REPAIR MATERIALS

- A. Repair Underlayment: Cement-based, polymer-modified, self-leveling product that can be applied in thicknesses from 1/8 inch and that can be feathered at edges to match adjacent floor elevations.
 - 1. Cement Binder: ASTM C 150, portland cement or hydraulic or blended hydraulic cement as defined in ASTM C 219.
 - 2. Primer: Product of underlayment manufacturer recommended for substrate, conditions, and application.
 - 3. Aggregate: Well-graded, washed gravel, 1/8 to 1/4 inch or coarse sand as recommended by underlayment manufacturer.
 - 4. Compressive Strength: Not less than 4500 psi at 28 days when tested according to ASTM C 109/C 109M.
- B. Repair Overlayment: Cement-based, polymer-modified, self-leveling product that can be applied in thicknesses from 1/4 inch and that can be filled in over a scarified surface to match adjacent floor elevations.
 - 1. Cement Binder: ASTM C 150, portland cement or hydraulic or blended hydraulic cement as defined in ASTM C 219.
 - 2. Primer: Product of topping manufacturer recommended for substrate, conditions, and application.
 - 3. Aggregate: Well-graded, washed gravel, 1/8 to 1/4 inch or coarse sand as recommended by topping manufacturer.
 - 4. Compressive Strength: Not less than 4500 psi at 28 days when tested according to ASTM C 109/C 109M.

2.12 CONCRETE MIXTURES, GENERAL

- A. Prepare design mixtures for each type and strength of concrete, proportioned on the basis of laboratory trial mixture or field test data, or both, according to ACI 301. Reference Section 1.04.
 - 1. Use a qualified independent testing agency for preparing and reporting proposed mixture designs based on laboratory trial mixtures.

- B. Cementitious Materials: Use fly ash and/or slag as needed to reduce the total amount of portland cement, which would otherwise be used. Limit percentage, by weight, of cementitious materials other than portland cement in concrete as follows:
 - 1. Fly Ash only: 20 percent by weight.
 - 2. Slag only: 20 percent by weight.
 - 3. Fly Ash + Slag: 20 percent by weight.
- C. Limit water-soluble, chloride-ion content in hardened concrete to 0.06 percent by weight of cement.
- D. Admixtures: Use admixtures according to manufacturer's written instructions.
 - 1. Use high-range water-reducing or plasticizing admixture in concrete, as required, for placement and workability.
 - 2. Use water-reducing and retarding admixture when required by high temperatures, low humidity, or other adverse placement conditions.
 - 3. Use water-reducing admixture in pumped concrete, concrete for heavy-use industrial slabs and parking structure slabs, concrete required to be watertight, and concrete with a water-cementitious materials ratio below 0.42.
 - 4. Use corrosion-inhibiting admixture in concrete mixtures where indicated.
- E. Color Pigment: If required by Architectural contract drawings, add color pigment to concrete mixture according to manufacturer's written instructions and to result in hardened concrete color consistent with approved mockup.

2.13 CONCRETE MIXTURES

- A. Minor equipment pads and pipe encasements:
 - 1. Minimum Compressive Strength: 3000 psi at 28 days.
 - 2. Concrete mixture proportions in accordance with accepted design mixes. Reference Section 1.04.
- B. Structural Concrete:
 - 1. Minimum Compressive Strength: Reference Design Criteria Sheet S-01.
 - 2. Concrete mixture proportions in accordance with accepted design mixes. Reference Section 1.04.
 - 3. Concrete mixes at walls, foundations that are subjected to hydrostatic pressures and water bearing walls and slabs at containment structures shall have Xypex Admin C-500 Red Admixture with Red Oxide pigment for confirmation. Dosage rate shall meet the manufacturer's recommendation of 1% to 1.5% by weight of cement.

2.14 FABRICATING REINFORCEMENT

- A. Fabricate steel reinforcement according to CRSI's "Manual of Standard Practice."

2.15 CONCRETE MIXING

- A. Ready-Mixed Concrete: Measure, batch, mix, and deliver concrete according to ASTM C 94/C 94M, and furnish batch ticket information.
 - 1. When air temperature is between 85 and 90 deg F (30 and 32 deg C), reduce mixing and delivery time from 1-1/2 hours to 75 minutes; when air temperature is above 90 deg F (32 deg C), reduce mixing and delivery time to 60 minutes.

PART 3 – EXECUTION

3.01 FORMWORK

- A. Design, erect, shore, brace, and maintain formwork, according to ACI 301, to support vertical, lateral, static, and dynamic loads, and construction loads that might be applied, until structure can support such loads.
- B. Construct formwork so concrete members and structures are of size, shape, alignment, elevation, and position indicated, within tolerance limits of ACI 117.
- C. Limit concrete surface irregularities, designated by ACI 347 as abrupt or gradual, as follows:
 - 1. Class A, 1/8 inch for smooth-formed finished surfaces.
 - 2. Class B, 1/4 inch for rough-formed finished surfaces.
- D. Construct forms tight enough to prevent loss of concrete mortar.
- E. Fabricate forms for easy removal without hammering or prying against concrete surfaces. Provide crush or wrecking plates where stripping may damage cast concrete surfaces. Provide top forms for inclined surfaces steeper than 1.5 horizontal to 1 vertical.
 - 1. Install keyways, reglets, recesses, and the like, for easy removal.
 - 2. Do not use rust-stained steel form-facing material.
- F. Set edge forms, bulkheads, and intermediate screed strips for slabs to achieve required elevations and slopes in finished concrete surfaces. Provide and secure units to support screed strips; use strike-off templates or compacting-type screeds.
- G. Provide temporary openings for cleanouts and inspection ports where interior area of formwork is inaccessible. Close openings with panels tightly fitted to forms and securely braced to prevent loss of concrete mortar. Locate temporary openings in forms at inconspicuous locations.
- H. Chamfer exterior corners and edges of permanently exposed concrete.
- I. Form openings, chases, offsets, sinkages, keyways, reglets, blocking, screeds, and bulkheads required in the Work. Determine sizes and locations from trades providing such items.
- J. Clean forms and adjacent surfaces to receive concrete. Remove chips, wood, sawdust, dirt, and other debris just before placing concrete.

- K. Retighten forms and bracing before placing concrete, as required, to prevent mortar leaks and maintain proper alignment.
- L. Coat contact surfaces of forms with form-release agent, according to manufacturer's written instructions, before placing reinforcement.

3.02 EMBEDDED ITEMS

- A. Place and secure anchorage devices and other embedded items required for adjoining work that is attached to or supported by cast-in-place concrete. Use setting drawings, templates, diagrams, instructions, and directions furnished with items to be embedded.
 - 1. Install anchor rods, accurately located, to elevations required and complying with tolerances in Section 7.5 of AISC's "Code of Standard Practice for Steel Buildings and Bridges."
 - 2. Install reglets to receive waterproofing and to receive through-wall flashings in outer face of concrete frame at exterior walls, where flashing is shown at lintels, shelf angles, and other conditions.
 - 3. Install dovetail anchor slots in concrete structures as indicated.

3.03 REMOVING AND REUSING FORMS

- A. General: Formwork for sides of beams, walls, columns, and similar parts of the Work that does not support weight of concrete may be removed after cumulatively curing at not less than 50 deg F (10 deg C) for 24 hours after placing concrete. Concrete has to be hard enough to not be damaged by form-removal operations and curing and protection operations need to be maintained.
 - 1. Leave formwork for beam soffits, joists, slabs, and other structural elements that supports weight of concrete in place until concrete has achieved at least 75 percent of its 28-day design compressive strength.
 - 2. Remove forms only if shores have been arranged to permit removal of forms without loosening or disturbing shores.
- B. Clean and repair surfaces of forms to be reused in the Work. Split, frayed, delaminated, or otherwise damaged form-facing material will not be acceptable for exposed surfaces. Apply new form-release agent.
- C. When forms are reused, clean surfaces, remove fins and laitance, and tighten to close joints. Align and secure joints to avoid offsets. Do not use patched forms for exposed concrete surfaces unless approved by Architect.

3.04 VAPOR RETARDERS

- A. Sheet Vapor Retarders: Place, protect, and repair sheet vapor retarder according to ASTM E 1643 and manufacturer's written instructions.
 - 1. Lap joints 6 inches and seal with manufacturers recommended tape.
- B. Bituminous Vapor Retarders: if applicable.

3.05 STEEL REINFORCEMENT

- A. General: Comply with CRSI's "Manual of Standard Practice" for placing reinforcement.
 - 1. Do not cut or puncture vapor retarder. Repair damage and reseal vapor retarder before placing concrete.
- B. Clean reinforcement of loose rust and mill scale, earth, ice, and other foreign materials that would reduce bond to concrete.
- C. Accurately position, support, and secure reinforcement against displacement. Locate and support reinforcement with bar supports to maintain minimum concrete cover. Do not tack weld crossing reinforcing bars.
 - 1. Weld reinforcing bars according to AWS D1.4/D 1.4M, where indicated.
- D. Set wire ties with ends directed into concrete, not toward exposed concrete surfaces.
- E. Install welded wire reinforcement in longest practicable lengths on bar supports spaced to minimize sagging. Lap edges and ends of adjoining sheets at least one mesh spacing. Offset laps of adjoining sheet widths to prevent continuous laps in either direction. Lace overlaps with wire.
- F. Zinc-Coated Reinforcement: Repair cut and damaged zinc coatings with zinc repair material according to ASTM A 780. Use galvanized steel wire ties to fasten zinc-coated steel reinforcement.

3.06 JOINTS

- A. General: Construct joints true to line with faces perpendicular to surface plane of concrete.
- B. Construction Joints: Install so strength and appearance of concrete are not impaired, at locations indicated or as approved by Architect.
 - 1. Place joints perpendicular to main reinforcement. Continue reinforcement across construction joints unless otherwise indicated. Do not continue reinforcement through sides of strip placements of floors and slabs.
 - 2. Form keyed joints as indicated. Embed keys at least 1-1/2 inches into concrete.
 - 3. Locate joints for beams, slabs, joists, and girders in the middle third of spans. Offset joints in girders a minimum distance of twice the beam width from a beam-girder intersection.
 - 4. Locate horizontal joints in walls and columns at underside of floors, slabs, beams, and girders and at the top of footings or floor slabs.
 - 5. Space vertical joints in walls as indicated. Locate joints beside piers integral with walls, near corners, and in concealed locations where possible.
 - 6. Use a bonding agent at locations where fresh concrete is placed against hardened or partially hardened concrete surfaces.
 - 7. Use epoxy-bonding adhesive at locations where fresh concrete is placed against hardened or partially hardened concrete surfaces.

- C. Contraction Joints in Slabs-on-Grade: Form weakened-plane contraction joints, sectioning concrete into areas as indicated. Construct contraction joints for a depth equal to at least one-fourth of concrete thickness as follows:
 - 1. Grooved Joints: Form contraction joints after initial floating by grooving and finishing each edge of joint to a radius of 1/8 inch. Repeat grooving of contraction joints after applying surface finishes. Eliminate groover tool marks on concrete surfaces.
 - 2. Sawed Joints: Form contraction joints with power saws equipped with shatterproof abrasive or diamond-rimmed blades. Cut 1/8 inch wide joints into concrete when cutting action will not tear, abrade, or otherwise damage surface and before concrete develops random contraction cracks.
- D. Isolation Joints in Slabs-on-Grade: After removing formwork, install joint-filler strips at slab junctions with vertical surfaces, such as column pedestals, foundation walls, grade beams, and other locations, as indicated.
 - 1. Extend joint-filler strips full width and depth of joint, terminating flush with finished concrete surface unless otherwise indicated.
 - 2. Terminate full-width joint-filler strips not less than 1/2 inch or more than 1 inch below finished concrete surface where joint sealants, specified in Section 07920 "Joint Sealants," are indicated.
 - 3. Install joint-filler strips in lengths as long as practicable. Where more than one length is required, lace or clip sections together.
- E. Doweled Joints: Install dowel bars and support assemblies at joints where indicated. Lubricate or asphalt coat one-half of dowel length to prevent concrete bonding to one side of joint.

3.07 WATERSTOPS

- A. Flexible Waterstops: Install in construction joints and at other joints indicated to form a continuous diaphragm. Install in longest lengths practicable. Support and protect exposed water stops during progress of the Work. Field fabricate joints in water stops according to manufacturer's written instructions.
- B. Self-Expanding Strip Waterstops: Install in construction joints and at other locations indicated, according to manufacturer's written instructions, adhesive bonding, mechanically fastening, and firmly pressing into place. Install in longest lengths practicable.

3.08 CONCRETE PLACEMENT

- A. Before placing concrete, verify that installation of formwork, reinforcement, and embedded items is complete and that required inspections have been performed.
- B. Do not add water to concrete during delivery, at Project site, or during placement unless approved by Engineer.
- C. Before test sampling and placing concrete, water may be added at Project site, subject to limitations of ACI 301.

1. Do not add water to concrete after adding high-range water-reducing admixtures to mixture.
- D. Deposit concrete continuously in one layer or in horizontal layers of such thickness that no new concrete will be placed on concrete that has hardened enough to cause seams or planes of weakness. If a section cannot be placed continuously, provide construction joints as indicated. Deposit concrete to avoid segregation.
1. Deposit concrete in horizontal layers of depth to not exceed formwork design pressures and in a manner to avoid inclined construction joints.
 2. Consolidate placed concrete with mechanical vibrating equipment according to ACI 301.
 3. Do not use vibrators to transport concrete inside forms. Insert and withdraw vibrators vertically at uniformly spaced locations to rapidly penetrate placed layer and at least 6 inches into preceding layer. Do not insert vibrators into lower layers of concrete that have begun to lose plasticity. At each insertion, limit duration of vibration to time necessary to consolidate concrete and complete embedment of reinforcement and other embedded items without causing mixture constituents to segregate.
- E. Deposit and consolidate concrete for floors and slabs in a continuous operation, within limits of construction joints, until placement of a panel or section is complete.
1. Consolidate concrete during placement operations so concrete is thoroughly worked around reinforcement and other embedded items and into corners.
 2. Maintain reinforcement in position on chairs during concrete placement.
 3. Screed slab surfaces with a straightedge and strike off to correct elevations.
 4. Slope surfaces uniformly to drains where required.
 5. Begin initial floating using bull floats or darbies to form a uniform and open-textured surface plane, before excess bleed water appears on the surface. Do not further disturb slab surfaces before starting finishing operations.
- F. Cold-Weather Placement: Comply with ACI 306.1 and as follows. Protect concrete work from physical damage or reduced strength that could be caused by frost, freezing actions, or low temperatures.
1. When average high and low temperature is expected to fall below 40 deg F (4.4 deg C) for three successive days, maintain delivered concrete mixture temperature within the temperature range required by ACI 301.
 2. Do not use frozen materials or materials containing ice or snow. Do not place concrete on frozen subgrade or on subgrade containing frozen materials.
 3. Do not use calcium chloride, salt, or other materials containing antifreeze agents or chemical accelerators unless otherwise specified and approved in mixture designs.
- G. Hot-Weather Placement: Comply with ACI 301 and as follows:
1. Maintain concrete temperature below 90 deg F (32 deg C) at time of placement. Chilled mixing water or chopped ice may be used to control temperature, provided water equivalent of ice is calculated to total amount of mixing water. Using liquid nitrogen to cool concrete is Contractor's option.

2. Fog-spray forms, steel reinforcement, and subgrade just before placing concrete. Keep subgrade uniformly moist without standing water, soft spots, or dry areas.

3.09 MISCELLANEOUS CONCRETE ITEMS

- A. Filling In: Fill in holes and openings left in concrete structures after work of other trades is in place unless otherwise indicated. Mix, place, and cure concrete, as specified, to blend with in-place construction. Provide other miscellaneous concrete filling indicated or required to complete the Work.
- B. Curbs: Provide monolithic finish to interior curbs by stripping forms while concrete is still green and by steel-troweling surfaces to a hard, dense finish with corners, intersections, and terminations slightly rounded.
- C. Equipment Bases and Foundations:
 1. Coordinate sizes and locations of concrete bases with actual equipment provided.
 2. Install dowel rods to connect concrete base to concrete floor. Unless otherwise indicated, install dowel rods on 12-inch centers around the full perimeter of concrete base.
 3. For supported equipment, install epoxy-coated anchor bolts that extend through concrete base, and anchor into structural concrete substrate.
 4. Prior to pouring concrete, place and secure anchorage devices. Use setting drawings, templates, diagrams, instructions, and directions furnished with items to be embedded.
 5. Cast anchor-bolt insert into bases. Install anchor bolts to elevations required for proper attachment to supported equipment.

3.10 CONCRETE PROTECTING AND CURING

- A. General: Protect freshly placed concrete from premature drying and excessive cold or hot temperatures. Comply with ACI 306.1 for cold-weather protection and ACI 301 for hot-weather protection during curing.
- B. Evaporation Retarder: Apply evaporation retarder to unformed concrete surfaces if hot, dry, or windy conditions cause moisture loss approaching 0.2 lb/sq. ft. x h before and during finishing operations. Apply according to manufacturer's written instructions after placing, screeding, and bull floating or darbying concrete, but before float finishing.
- C. Formed Surfaces: Cure formed concrete surfaces, including underside of beams, supported slabs, and other similar surfaces. If forms remain during curing period, moist cure after loosening forms. If removing forms before end of curing period, continue curing for the remainder of the curing period.
- D. Unformed Surfaces: Begin curing immediately after finishing concrete. Cure unformed surfaces, including floors and slabs, concrete floor toppings, and other surfaces.
- E. Cure concrete according to ACI 308.1, by one or a combination of the following methods:
 1. Moisture Curing: Keep surfaces continuously moist for not less than seven days with the following materials:

- a. Water.
 - b. Continuous water-fog spray.
 - c. Absorptive cover, water saturated, and kept continuously wet. Cover concrete surfaces and edges with 12-inch lap over adjacent absorptive covers.
- 2. Moisture-Retaining-Cover Curing: Cover concrete surfaces with moisture-retaining cover for curing concrete, placed in widest practicable width, with sides and ends lapped at least 12 inches, and sealed by waterproof tape or adhesive. Cure for not less than seven days. Immediately repair any holes or tears during curing period using cover material and waterproof tape.
 - a. Moisture cure or use moisture-retaining covers to cure concrete surfaces to receive floor coverings.
 - b. Moisture cure or use moisture-retaining covers to cure concrete surfaces to receive penetrating liquid floor treatments.
 - c. Cure concrete surfaces to receive floor coverings with either a moisture-retaining cover or a curing compound that the manufacturer certifies will not interfere with bonding of floor covering used on Project.
- 3. Curing Compound: Apply uniformly in continuous operation by power spray or roller according to manufacturer's written instructions. Recoat areas subjected to heavy rainfall within three hours after initial application. Maintain continuity of coating and repair damage during curing period.
 - a. Removal: After curing period has elapsed, remove curing compound without damaging concrete surfaces by method recommended by curing compound manufacturer.
- 4. Curing and Sealing Compound: Apply uniformly to floors and slabs indicated in a continuous operation by power spray or roller according to manufacturer's written instructions. Recoat areas subjected to heavy rainfall within three hours after initial application. Repeat process 24 hours later and apply a second coat. Maintain continuity of coating and repair damage during curing period.

3.11 JOINT FILLING

- A. Prepare, clean, and install joint filler according to manufacturer's written instructions.
 - 1. Defer joint filling until concrete has aged at least one month. Do not fill joints until construction traffic has permanently ceased.
- B. Remove dirt, debris, saw cuttings, curing compounds, and sealers from joints; leave contact faces of joint clean and dry.
- C. Install semi rigid joint filler full depth in saw-cut joints and at least 2 inches deep in formed joints. Overfill joint and trim joint filler flush with top of joint after hardening.

3.12 CONCRETE SURFACE REPAIRS

- A. Defective Concrete: Repair and patch defective areas when approved by Architect. Remove and replace concrete that cannot be repaired and patched to Architect's approval.
- B. Patching Mortar: Mix dry-pack patching mortar, consisting of one part portland cement to two and one-half parts fine aggregate passing a No. 16 sieve, using only enough water for handling and placing.
- C. Repairing Formed Surfaces: Surface defects include color and texture irregularities, cracks, spalls, air bubbles, honeycombs, rock pockets, fins and other projections on the surface, and stains and other discolorations that cannot be removed by cleaning.
 - 1. Immediately after form removal, cut out honeycombs, rock pockets, and voids more than 1/2 inch in any dimension to solid concrete. Limit cut depth to 3/4 inch. Make edges of cuts perpendicular to concrete surface. Clean, dampen with water, and brush-coat holes and voids with bonding agent. Fill and compact with patching mortar before bonding agent has dried. Fill form-tie voids with patching mortar or cone plugs secured in place with bonding agent.
 - 2. Repair defects on surfaces exposed to view by blending white portland cement and standard portland cement so that, when dry, patching mortar will match surrounding color. Patch a test area at inconspicuous locations to verify mixture and color match before proceeding with patching. Compact mortar in place and strike off slightly higher than surrounding surface.
 - 3. Repair defects on concealed formed surfaces that affect concrete's durability and structural performance as determined by Architect.
- D. Repairing Unformed Surfaces: Test unformed surfaces, such as floors and slabs, for finish and verify surface tolerances specified for each surface. Correct low and high areas. Test surfaces sloped to drain for trueness of slope and smoothness; use a sloped template.
 - 1. Repair finished surfaces containing defects. Surface defects include spalls, popouts, honeycombs, rock pockets, crazing and cracks in excess of 0.01 inch wide or that penetrate to reinforcement or completely through unreinforced sections regardless of width, and other objectionable conditions.
 - 2. After concrete has cured at least 14 days, correct high areas by grinding.
 - 3. Correct localized low areas during or immediately after completing surface finishing operations by cutting out low areas and replacing with patching mortar. Finish repaired areas to blend into adjacent concrete.
 - 4. Correct other low areas scheduled to receive floor coverings with a repair underlayment. Prepare, mix, and apply repair underlayment and primer according to manufacturer's written instructions to produce a smooth, uniform, plane, and level surface. Feather edges to match adjacent floor elevations.
 - 5. Correct other low areas scheduled to remain exposed with a repair topping. Cut out low areas to ensure a minimum repair topping depth of 1/4 inch to match adjacent floor elevations. Prepare, mix, and apply repair topping and primer according to manufacturer's written instructions to produce a smooth, uniform, plane, and level surface.
 - 6. Repair defective areas, except random cracks and single holes 1 inch or less in diameter, by cutting out and replacing with fresh concrete. Remove defective

areas with clean, square cuts and expose steel reinforcement with at least a 3/4-inch clearance all around. Dampen concrete surfaces in contact with patching concrete and apply bonding agent. Mix patching concrete of same materials and mixture as original concrete except without coarse aggregate. Place, compact, and finish to blend with adjacent finished concrete. Cure in same manner as adjacent concrete.

7. Repair random cracks and single holes 1 inch or less in diameter with patching mortar. Groove top of cracks and cut out holes to sound concrete and clean off dust, dirt, and loose particles. Dampen cleaned concrete surfaces and apply bonding agent. Place patching mortar before bonding agent has dried. Compact patching mortar and finish to match adjacent concrete. Keep patched area continuously moist for at least 72 hours.
- E. Perform structural repairs of concrete, subject to Engineer's approval, using epoxy adhesive and patching mortar.
- F. Repair materials and installation not specified above may be used, subject to Engineer's approval.

3.13 FIELD QUALITY CONTROL

- A. Testing and Inspecting: Owner will engage a qualified testing and inspecting agency to perform field tests and inspections and prepare test reports.
- B. Testing and Inspecting: Engage a qualified testing and inspecting agency to perform tests and inspections and to submit reports.
- C. Inspections:
 1. Steel reinforcement placement.
 2. Steel reinforcement welding.
 3. Headed bolts and studs.
 4. Verification of use of required design mixture.
 5. Concrete placement, including conveying and depositing.
 6. Curing procedures and maintenance of curing temperature.
 7. Verification of concrete strength before removal of shores and forms from beams and slabs.
 8. Water levels for hydraulic structures.
- D. Concrete Tests: Testing of composite samples of fresh concrete obtained according to ASTM C 172 shall be performed according to the following requirements:
 1. Testing Frequency: Obtain one composite sample for each day's pour of each concrete mixture exceeding 5 cu. yd., but less than 25 cu. yd., plus one set for each additional 50 cu. yd. or fraction thereof.
 - a. When frequency of testing will provide fewer than five compressive-strength tests for each concrete mixture, testing shall be conducted from at least five randomly selected batches or from each batch if fewer than five are used.

2. Slump: ASTM C 143/C 143M; one test at point of placement for each composite sample, but not less than one test for each day's pour of each concrete mixture. Perform additional tests when concrete consistency appears to change.
3. Air Content: ASTM C 231, pressure method, for normal-weight concrete; one test for each composite sample, but not less than one test for each day's pour of each concrete mixture.
4. Concrete Temperature: ASTM C 1064/C 1064M; one test hourly when air temperature is 40 deg F (4.4 deg C) and below and when 80 deg F (27 deg C) and above, and one test for each composite sample.
5. Unit Weight: ASTM C 567, fresh unit weight of structural lightweight concrete; one test for each composite sample, but not less than one test for each day's pour of each concrete mixture.
6. Compression Test Specimens: ASTM C 31/C 31M.
 - a. Cast and laboratory cure two sets of two standard cylinder specimens for each composite sample.
 - b. Cast and field cure two sets of two standard cylinder specimens for each composite sample.
7. Compressive-Strength Tests: ASTM C 39/C 39M; test one set of two laboratory-cured specimens at 7 days and one set of two specimens at 28 days.
 - a. Test one set of two field-cured specimens at 7 days and one set of two specimens at 28 days.
 - b. A compressive-strength test shall be the average compressive strength from a set of two specimens obtained from same composite sample and tested at age indicated.
8. When strength of field-cured cylinders is less than 85 percent of companion laboratory-cured cylinders, Contractor shall evaluate operations and provide corrective procedures for protecting and curing in-place concrete.
9. Strength of each concrete mixture will be satisfactory if every average of any three consecutive compressive-strength tests equals or exceeds specified compressive strength and no compressive-strength test value falls below specified compressive strength by more than 500 psi.
10. Test results shall be reported in writing to Engineer, concrete manufacturer, and Contractor within 48 hours of testing. Reports of compressive-strength tests shall contain Project identification name and number, date of concrete placement, name of concrete testing and inspecting agency, location of concrete batch in Work, design compressive strength at 28 days, concrete mixture proportions and materials, compressive breaking strength, and type of break for both 7- and 28-day tests.
11. Nondestructive Testing: Impact hammer, sonoscope, or other nondestructive device may be permitted by Engineer but will not be used as sole basis for approval or rejection of concrete.
12. Additional Tests: Testing and inspecting agency shall make additional tests of concrete when test results indicate that slump, air entrainment, compressive strengths, or other requirements have not been met, as directed by Engineer. Testing and inspecting agency may conduct tests to determine adequacy of concrete by cored cylinders complying with ASTM C 42/C 42M or by other methods as directed by Engineer.

13. Additional testing and inspecting, at Contractor's expense, will be performed to determine compliance of replaced or additional work with specified requirements.
 14. Correct deficiencies in the Work that test reports and inspections indicate do not comply with the Contract Documents.
- E. Measure floor and slab flatness and levelness according to ASTM E 1155 (ASTM E 1155M) within 48 hours of finishing.

3.14 PROTECTION OF LIQUID FLOOR TREATMENTS

- A. Protect liquid floor treatment from damage and wear during the remainder of construction period. Use protective methods and materials, including temporary covering, recommended in writing by liquid floor treatments installer.

END OF SECTION

SECTION 03301 - ANCHOR SYSTEMS

PART 1 – GENERAL

1.01 DESCRIPTION

A. Scope:

1. CONTRACTOR shall provide all labor, materials, equipment, and incidentals as shown, specified, and required to furnish and install anchor systems.
2. This Section includes all anchor systems required for the Work, but not specified under other Sections.

B. Coordination:

1. Review installation procedures under this and other Sections and coordinate installation of items to be installed with or before anchor systems Work.

1.02 REFERENCES

A. Standards referenced in this Section are:

1. ACI 318, Building Code Requirements for Structural Concrete.
2. ANSI B212.15, Cutting Tools - Carbide-tipped Masonry Drills And Blanks For Carbide-tipped Masonry Drills.
3. ANSI/MSS SP-58, Pipe Hangers and Supports - Materials, Design, Manufacture, Selection, Application, and Installation.
4. ASTM A194/A194M, Specification for Carbon and Alloy Steel Nuts for Bolts for High Pressure or High Temperature Service, or Both.
5. ASTM A276, Specification for Stainless Steel Bars and Shapes.
6. ASTM A493, Specification for Stainless Steel Wire and Wire Rods for Cold Heading and Cold Forging.
7. ASTM A563, Specification for Carbon and Alloy Steel Nuts.
10. ASTM A1011/A1011M, Specification for Steel, Sheet and Strip, Hot-Rolled, Carbon, Structural, High-Strength Low-Alloy, High-Strength Low-Alloy with Improved Formability, and Ultra-High Strength.
11. ASTM B633, Specification for Electrodeposited Coatings of Zinc on Iron and Steel.
12. ASTM C307, Test Method for Tensile Strength of Chemical-Resistant Mortar, Grouts, and Monolithic Surfacing.
13. ASTM C881/C881M, Specification for Epoxy-Resin-Base Bonding Systems for Concrete.
14. ASTM 0695, Test Method for Compressive Properties of Rigid Plastics.
15. ASTM 0790, Test Methods for Flexural Properties of Unreinforced and reinforced Plastics and Electrical Insulating Materials.
16. ASTM E329, Specification for Agencies Engaged in Construction Inspection, Testing, or Special Inspection.
17. ASTM E488, Test Methods for Strength of Anchors in Concrete and Masonry Elements.
18. ASTM F593, Specification for Stainless Steel Bolts, Hex Cap Screws, and Studs.
19. ASTM F594, Specification for Stainless Steel Bolts, Hex Cap Screws, and studs.
20. ASTM F1554, Specification for Anchor Bolts, Steel, 36, 55 and 105-ksi Yield Strength.
21. ICC-ES AC58, Acceptance Criteria for Adhesive Anchors in Masonry Elements.

22. ICC-ES AC60, Acceptance Criteria for Anchors in Unreinforced Masonry Elements.
23. ICC-ES AC308, Acceptance Criteria for Post-Installed Adhesive Anchors in Concrete Elements.
24. ISO 3506-1, Mechanical Properties of Corrosion-Resistant Stainless Steel Fasteners -- Part 1: Bolts, Screws and Studs.
25. NSF/ANSI 61, Drinking Water System Components- Health Effects.

1.03 QUALITY ASSURANCE

A. Qualifications:

1. Testing Laboratory: Shall comply with ASTM E329 and shall be experienced in tension testing of post-installed anchoring systems.
2. Post-installed Anchor Installer: Shall be experienced and trained by post-installed anchor system manufacturer in proper installation of manufacturer's products. Product installation training by distributors or manufacturer's representatives is unacceptable unless the person furnishing the training is qualified as a trainer by the anchor manufacturer.

1.04 SUBMITTALS

A. In accordance with Division 1 requirements, submit the following:

1. Shop Drawings:
 - a. Listing of all anchor systems products intended for use in the Work including product type, intended location in the Project, and embedded lengths.
2. Product Data:
 - a. Manufacturer's specifications, load tables, dimension diagrams, acceptable base material conditions, acceptable drilling methods, and acceptable bored hole conditions.
 - b. When required by ENGINEER, copies of valid ICC ES reports that presents load-carrying capacities and installation requirements for anchor systems.
 - c. Post installed anchors shall be epoxy adhesive type. Mechanical wedge type anchors are not allowed.

B. Informational Submittals: Submit the following:

1. Certificates:
 - a. For each type of anchor bolt or threaded rod, submit copies of laboratory test reports and other data required to demonstrate compliance with the Contract Documents.
 - 1) Reports shall demonstrate compliance with ductile steel element definition of ACI 350, Appendix D, Section D.1.

b. Post-installed anchor system manufacturer's certification that installer received training in the proper installation of manufacturer's products required for the Work.

c. For each adhesive anchor installer, submit ACI/CRSI Adhesive Anchor Installer Certification.

2. Manufacturer's Instructions:

a. Installation instructions for each anchor system product proposed for use, including bore hole cleaning procedures and adhesive injection, cure and gel time tables, and temperature ranges (storage, installation and in-service).

1.05 DELIVERY, STORAGE AND HANDLING

A. Storage and Protection:

1. Keep materials dry during delivery and storage.
2. Store adhesive materials within manufacturer's recommended storage temperature range.
3. Protect anchor systems from damage at the Site. Protect products from corrosion and deterioration.

PART 2 – PRODUCTS

2.01 SYSTEM PERFORMANCE

A. General:

1. At all locations, provide stainless steel type 316 anchor systems.
2. Stainless Steel Nuts:
 - a. For anchor bolts and adhesive anchors, provide ASTM A194/A194M, Grade SS stainless steel nuts for stainless steel anchors used for anchoring equipment, gates, and weirs, and other locations, if any, where the attachment will require future removal for operation or maintenance. Provide lock washer or double nuts on each anchorage device provided for equipment, as required by equipment manufacturer.
3. Materials that can contact potable water or water that will be treated to become potable shall be listed in NSF/ANSI 61.

B. Design Criteria

1. Size, Length, and Load-carrying Capacity: Comply with the Contract Documents. When size, length or load-carrying capacity of anchor system is not otherwise shown or indicated, provide the following:
 - a. Anchor Bolts: Provide size, length, and capacity required to carry design load based on values and requirements of Paragraph 3.2.A of this Section. For conditions outside limits of critical edge distance and spacing in Paragraph 3.2.A of this Section, minimum anchor bolt embedment as shown or indicated in Paragraph 3.2.A of this Section

apply and capacity shall be based on requirements of Laws and Regulations, including applicable building codes.

- b. Adhesive Anchors and Concrete Inserts: Provide size, length, type, and capacity required to carry design load. Anchor capacity shall be based on the procedures required by the building code in effect at the Site. Where Evaluation Service Reports issued by the ICC Evaluation Service are required in this Section, anchor capacities shall be based on design procedure required in the applicable ICC Evaluation Service Report.

- 1) General: Determine capacity considering reductions due to installation and inspection procedures, embedment length, strength of base fastening materials, spacing, and edge distance, as indicated in the manufacturer's design guidelines. For capacity determination, concrete shall be assumed to be in the cracked condition, unless calculations demonstrate that the anchor system will be installed in an area that is not expected to crack under any and all conditions of design loading.
- 2) Concrete Adhesive Anchors: Unless otherwise shown or indicated in the Contract Documents or approved by ENGINEER, provide minimum embedment depth, edge distance and spacing as recommended by the manufacturer.
- 3) Concrete Masonry Adhesive Anchors: Unless otherwise shown or indicated in the Contract Documents or approved by ENGINEER, provide minimum anchor spacing and edge distance as indicated in anchor manufacturer's instructions.

- 2. Design Loads. Comply with the Contract Documents. When design load of supported material, equipment, or system is not otherwise shown or indicated, provide the following:

- a. Equipment Anchors: Use design load recommended by equipment manufacturer. When equipment can be filled with fluid, use loads that incorporate equipment load and load imposed by fluid.
- b. Pipe Hangers and Supports: Use full weight of pipe, and fluid contained in pipe that are tributary to the support plus the full weight of valves and accessories located between the hanger or support being anchored and the next hanger or support.
- c. Hangers and Supports for Electrical Systems, and HVAC, Plumbing, and Fire Suppression Systems and Piping: Use the full weight of supported system that is tributary to the support plus the full weight of accessories located between the hanger or support being anchored and the next hanger or support. When piping or equipment is to be filled with fluid, anchor systems shall be sized to support such loads in addition to the weight of the equipment, piping, or system, as applicable.
- d. Delegated Design: When anchor systems are used for supporting materials, equipment, or systems delegated to a design professional retained by CONTRACTOR, Subcontractor, or Supplier, provide anchor system suitable for loads indicated in delegated design documents and consistent with the design intent expressed in the Contract Documents.

C. Application:

1. Anchor Bolts:

- a. Where anchor bolt is shown or indicated, use cast-in-place anchor bolt unless another anchor type is approved by ENGINEER.
- b. Provide anchor bolts as shown or indicated, or as required to secure structural element to appropriate anchor surface.

2. Concrete Adhesive Anchors:

- a. Use where adhesive anchors are shown or indicated for installation in concrete.
- b. Suitable for use where subject to vibration.
- c. Suitable for use in exterior locations or locations subject to freezing.
- d. Suitable for use in submerged, intermittently submerged, or buried locations.
- e. Do not use in overhead applications, unless otherwise shown or approved by ENGINEER.
- f. Do not use for pipe hangers, unless otherwise shown or approved by ENGINEER.

3. Concrete Masonry Adhesive Anchors:

- a. Use where adhesive anchors are shown or indicated for installation in grout-filled or hollow masonry units.
- b. Suitable for use where subject to vibration.
- c. Suitable for use in exterior locations or locations subject to freezing.
- d. Do not use for pipe hangers, unless otherwise shown or approved by ENGINEER.

4. Concrete Inserts:

- a. Use only where shown or indicated in the Contract Documents.
- b. Allowed for use to support pipe hangers and pipe supports for pipe size and loading recommended by the concrete insert manufacturer.

2.02 MATERIALS

A. Anchor Bolts:

- 1. All locations: Provide stainless steel straight threaded rods complying with ASTM F593, AISI Type 316, Condition A, with ASTM F594, AISI Type 316, stainless steel nuts. Embedded anchor bolts shall be headed type and hooked bolts are unacceptable.

- a. Stainless steel straight threaded rod shall comply with ductility requirements of ACI 350 or ACI 318 Appendix D, Section 0.3.3.
 - 2. Equipment: Provide anchor bolts complying with material requirements of this Section and equipment manufacturer's requirements relative to size, embedment length, and anchor bolt projection. Anchor bolts shall be straight threaded rods with washers and nuts as specified in this Section. Hooked bolts are unacceptable.
 - 3. Anchoring of Structural Elements: Provide anchor bolts of size, material, and strength shown or indicated in the Contract Documents.
- B. Concrete Adhesive Anchors:
- 1. General:
 - a. Adhesive anchors shall consist of threaded rods anchored into hardened concrete using an adhesive system.
 - 2. Products and Manufacturers: Provide one of the following:
 - a. HIT-HY 200 Adhesive Anchoring System, by Hilti Fastening Systems, Inc.
 - b. C6 Adhesive Anchoring System by Red Head.
 - 3. Adhesives
 - a. Epoxy adhesives shall comply with physical requirements of ASTM C881/C881M, Type IV, Grade 2 and 3, Class A, B, and C, except gel times.
 - b. Adhesives shall have a current evaluation report by ICC Evaluation Service for use in both cracked and uncracked concrete with seismic recognition for SOC A through F as tested and assessed in accordance with ICC-ES AC308.
 - 4. Anchor:
 - a. Provide continuously-threaded, AISI Type 316 stainless steel adhesive anchor rod. Threaded rods shall comply with the concrete adhesive anchor manufacturer's specifications as included in the ICC Service Evaluation Report for the anchor submitted. Nuts shall have specified proof load stresses equal to or greater than the minimum tensile strength of the stainless steel threaded rod used.
 - b. Stainless steel threaded rod shall comply with ductility requirements of ACI 350 or ACI 318 Appendix D, Section D.3.3.
- C. Concrete Masonry Adhesive Anchors:
- 1. General:
 - a. Grout-filled concrete masonry adhesive anchors shall consist of threaded rods anchored into grout-filled concrete block masonry using an adhesive system.

- b. Hollow concrete masonry adhesive anchors shall consist of threaded rods with a cylindrical mesh steel or plastic screen tube anchored into hollow concrete block masonry using an adhesive system.
- 2. Products and Manufacturers: Provide one of the following:
 - a. HBU-38 Umbrella Insert with A7 Adhesive, by Red Head.
 - b. Acrylic-Tie Adhesive, by Simpson Strong-Tie Company, Inc.
- 3. Adhesive:
 - a. Adhesive system shall use two-component adhesive mix.
 - b. Hybrid adhesives shall comply with the following:
 - 1) ASTM D695 compressive yield strength greater than 7,200 psi on a seven-day cure.
 - c. Adhesives shall have current ICC Evaluation Service Report for use in grout-filled concrete masonry, tested and assessed in accordance with ICC-ES AC 58 and TCC-ES AC 60.
- 4. Anchor:
 - a. Provide stainless steel adhesive anchor rod complying with ASTM F593, AISI Type 316, Condition CW, with ASTM F594, AISI Type 316 stainless steel nuts.
- 5. Mesh Screen Tube (for hollow masonry applications):
 - a. Provide with mesh size, length, and diameter as specified by adhesive anchor manufacturer.
- D. Concrete Inserts:
 - 1. Manufacturers: Provide products of one of the following:
 - a. Unistrut Corporation
 - b. Cooper B-Line, Inc.
 - c. Anvil International, Inc.
 - 2. Spot Concrete Inserts:
 - a. Provide inserts recommended by insert manufacturer for required loading. Inserts shall comply with ANSI/MSS SP-58, malleable iron, Type 18. Spot inserts shall allow for lateral adjustment and have means for attachment to forms. Provide nuts compatible with insert and to suit threaded hanger rod sizes.

3. Continuous Concrete Inserts:
 - a. Provide inserts recommended by insert manufacturer for required loading. Inserts shall be continuous type and shall be manufactured from minimum 2-gage cold-formed channel sections, complying with ASTM A1011/A1011M, stainless steel, Grade 33, complete with Styrofoam inserts, end caps, and means for attaching to forms. Provide channel nuts compatible with insert suitable for threaded hanger rod sizes.
4. Provide inserts with plain finish.

PART 3- EXECUTION

3.01 INSPECTION

- A. Examine conditions under which materials will be installed and advise ENGINEER in writing of conditions detrimental to proper and timely completion of the Work. Do not proceed with the Work until unsatisfactory conditions are corrected.

3.02 INSTALLATION

- A. Anchor Bolts:
 1. Provide anchor bolts as shown or indicated in the Contract Documents, or as required to secure structural element to the appropriate anchor surface.
 2. Locate and accurately set anchor bolts using templates or other devices as required, prior to placing concrete. Wet setting of anchor bolts is unacceptable.
 3. Protect threads and shank from damage during installation and subsequent construction operations.
- B. Adhesive Anchors-General:
 1. Prior to drilling, locate existing reinforcing steel in vicinity of proposed holes. If reinforcing conflicts with proposed hole location, obtain ENGINEER's approval of alternate hole locations to avoid drilling through or damaging existing reinforcing bars.
- C. Adhesive Anchors:
 1. Comply with manufacturer's written installation instructions and the following.
 2. Drill holes to adhesive system manufacturer's recommended drill bit diameter to the specified depth. Drill holes in hammering and rotation mode with carbide-tipped drill bits that comply with the tolerances of ANSI B212.15. Core-drilled holes are unacceptable.
 3. Before setting adhesive anchor, hole shall be made free of dust and debris by method recommended by adhesive anchor system manufacturer. Hole shall be brushed with adhesive system manufacturer-approved brush and blown clean with clean, dry, oil-free compressed air to remove all dust and loose particles. Hole shall be dry as defined by adhesive system manufacturer.
 4. Before injecting adhesive, obtain ENGINEER's concurrence that hole is dry and free of oil and other contaminants.
 5. Prior to injecting adhesive into the drilled hole, dispense to a location appropriate for such waste, an initial amount of adhesive from the mixing nozzle, until adhesive is uniform color.

6. Inject adhesive into hole through injection system mixing nozzle and necessary extension tubes, placed to bottom of hole. Discharge end shall be withdrawn as adhesive is placed but kept immersed to prevent formation of air pockets. Fill hole to depth that ensures that excess material is expelled from hole during anchor placement.
7. Twist anchors during insertion into partially-filled hole to guarantee full wetting of rod surface with adhesive. Insert rod slowly to avoid developing air pockets.
8. Provide adequate curing in accordance to adhesive system manufacturer's requirements prior to continuing with adjoining Work that could place load on installed adhesive anchors. Do not begin adjoining Work until adhesive anchors are successfully tested or when allowed by ENGINEER.
9. Limitations:
 - a. At time of anchor installation, concrete shall have compressive strength (f'_c) of not less than 2,500 psi.
 - b. At time of anchor installation, concrete shall have age of not less than 21 days.
 - c. Installation Temperature: Comply with manufacturer's instructions for installation temperature requirements. Provide temporary protection and other measures, such as heated enclosures, necessary to ensure that base material temperature complies with anchor systems manufacturer's requirements during installation and curing of adhesive anchor system.
 - d. Oversized Holes: Advise ENGINEER immediately if size of drilled hole is larger than recommended by anchor system manufacturer. Cost of corrective measures, including but not limited to redesign of anchors due to decreased anchor capacities, shall be paid by CONTRACTOR.
 - e. Embedment depths shall be based on installation in normal-weight concrete with compressive strength of 2,500 psi when embedded in existing concrete, and 4,000 psi when embedded in new concrete.

F. Concrete Inserts:

1. Comply with concrete insert manufacturer's installation instructions.
2. Inserts shall be flush with slab bottom surface.
3. Protect embedded items from damage during concrete placing. Ensure that embedded items are securely fastened to prevent movement during concrete placing, and ensure that embedded items do fill with concrete during concrete placing.
4. Inserts intended for piping greater than four-inch diameter shall be provided with hooked rods attached to concrete reinforcing.

G. Anti-Seizing Compound:

1. Provide anti-seizing compound in accordance with anti-seizing compound manufacturer's installation instructions, at locations indicated in Paragraph 2.1.B of this Section.
2. Do not use anti-seizing compound at locations where anchor bolt or adhesive anchor will contact potable water or water that will be treated to become potable.

3.03 CLEANING

- A. After embedding concrete is placed, remove protection and clean bolts and inserts.

3.04 FIELD QUALITY CONTROL

A. Site Tests – Adhesive Anchors

1. CONTRACTOR will employ independent testing agency to perform field quality tensile testing of production adhesive anchors at the Site, unless otherwise specified.
 - a. Testing shall comply with ASTM E488.
 - b. Test at least ten percent of all types of adhesive anchors. If one or more adhesive anchors fail the test, CONTRACTOR shall pay cost of testing, or at ENGINEER's option CONTRACTOR may arrange for testing paid by CONTRACTOR, for all adhesive anchors of same diameter and type installed on the same day as the failed anchor. If anchors installed on the same day as the failed anchor also fail the test, ENGINEER may require retesting of all anchors of the same diameter and type installed in the Work. CONTRACTOR shall be responsible for retesting costs.
 - c. ENGINEER will direct which adhesive anchors are to be tested and indicate test load to be used.
 - d. Apply test loads with hydraulic ram.
 - e. Displacement of post-installed anchors shall not exceed $D/10$, where D is nominal diameter of anchor being tested.

B. Manufacturer's Services:

1. Provide at the Site services of qualified adhesive manufacturer's representative during initial installation of adhesive anchor systems to train CONTRACTOR's personnel in proper installation procedures. Manufacturer's representative shall observe to confirm that installer demonstrates proper installation procedures for adhesive anchors and adhesive material.

END OF SECTION

SECTION 03350 – CONCRETE FINISHES

PART 1 - GENERAL

1.01 SCOPE OF WORK

Furnish all labor, materials, equipment and incidentals required to finish cast-in-place concrete surfaces as specified herein.

1.02 SUBMITTALS

Submit to the County as provided in the Contract Documents, the proposed chemical hardener manufacturer's surface preparation and application procedures.

1.03 SCHEDULE OF FINISHES

- A. Concrete for the Project shall be finished in the various specified manners either to remain as natural concrete or to receive an additional applied finish or material under another Section.
- B. The base concrete for the following conditions shall be finished as noted and as further specified herein:
 - 1. Exterior, exposed concrete slabs and stairs - broomed finish.
 - 2. Interior, exposed concrete slabs - steel trowel finish.
 - 3. Concrete on which process liquids flow or in contact with sludge - steel trowel finish.
 - 4. Concrete where not exposed in the finished work and not scheduled to receive an additional applied finish or material - off-form finish.
 - 5. Provide concrete surfaces to be left exposed such as walls, columns, beams and joists with smooth rubbed finish.

1.04 RESPONSIBILITY FOR CHANGING FINISHES

- A. The surface finishes specified for concrete to receive additional applied finishes or materials are the finishes required for the proper application of the actual products specified under other Sections. Where different products are approved for use, it shall be the Contractor's responsibility to determine if changes in finishes are required and to provide the proper finishes to receive these products.
- B. Changes in finishes made to accommodate product different from those specified shall be performed at no additional cost to the County. Submit the proposed new finishes and their construction methods to the County for approval.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Portland cement and component materials required for finishing the concrete surfaces shall be as specified in the Contract Documents.
- B. Hardener shall be Lapidolith as manufactured by Sonneborn Building Products or approved equal. Hardener shall be used on all floors, stair treads and platforms.

PART 3 - EXECUTION

3.01 FORMED SURFACES

- A. Forms shall not be stripped before the concrete has attained a strength of at least 50 percent of the ultimate design strength. This is equivalent to approximately five "100 day-degrees" of moist curing.
- B. Care shall be exercised to prevent damaging edges or obliterating the lines of chamfers, rustications, or corners when removing the forms or doing any work adjacent thereto.
- C. Clean all exposed concrete surfaces and adjoining work stained by leakage of concrete, to the satisfaction of the County.
- D. Off-form finish. Fins and other projections shall be removed as approved. Tie cone holes and other minor defects shall be filled with non-shrink grout specified under the Contract Documents.

3.02 FLOORS AND SLABS

- A. Floors and slabs shall be screeded to the established grades and shall be level with a tolerance of 1/8-inch when checked with a 10 foot straight edge, except where drains occur, in which case floors shall be pitched to drains as indicated. Failure to meet either of above shall be cause for removal, grinding, or other correction as approved by the County.
- B. Following screeding as specified above, power steel trowel as follows:
 - 1. Immediately after final screeding, a dry cement/sand shake in the proportion of 2-sacks of portland cement to 350-pounds of coarse natural concrete sand shall be sprinkled evenly over the surface at the rate of approximately 500 pounds per 1,000 square feet of floor. Neat, dry cement shall not be sprinkled on the surface. This shake shall be thoroughly floated into the surface with an approved disc type power compacting machine weighing at least 200 pounds if a 20-inch disc is used or 300 pounds if a 24-inch disc is used (such as a "Kelly Float" as manufactured by the Weisner-Rapp Corporation of Buffalo, New York). A mechanical blade-type float or trowel is not acceptable for this work.
NOTE: This operation (application of the cement/sand shake) may be eliminated at the discretion of the County if the base slab concrete exhibits adequate fattiness and homogeneity.
 - 2. In lieu of power steel troweling, small areas as defined by the County shall be compacted by hand steel troweling with the dry cement/sand shake as ordered.
 - 3. The floor or slab shall be compacted to a smooth surface and the floating operation continued until sufficient mortar is brought to the surface to fill all voids. The surfaces shall be tested with a straight edge to detect high and low spots which shall be eliminated.
 - 4. Compaction shall be continued only until thorough densification is achieved and a small amount of mortar is brought to the surface. Excessive floating shall be avoided.
- C. After Paragraph 3.02 A and B procedures are accomplished, floors and slabs for particular conditions shall be completed as scheduled in one of the following finishes:
 - 1. Wood float finish. Hand wood float, maintaining the surface tolerance to provide a grained, nonslip finish as approved.

2. Broomed finish. Hand wood float maintaining the surface tolerance and then broom with a stiff bristle broom in the direction of drainage to provide a nonslip finish as approved.
 3. Steel trowel finish. Hand steel trowel to a perfectly smooth, hard even finish free from high or low spots or other defects as approved.
- D. Floors, stair treads and platforms shall be given a floor hardener. Application shall be according to manufacturer's instructions.

3.03 APPROVAL OF FINISHES

- A. All concrete surfaces will be inspected during the finishing process by the County.
- B. Surfaces which, in the opinion of the County, are unsatisfactory shall be refinished or reworked until approved by the County.

END OF SECTION

SECTION 03600 – GROUTING

PART 1 - GENERAL

1.01 DESCRIPTION OF WORK

- A. This Section includes grouting of equipment bases and such locations as shown on the Drawings and as specified.
- B. The types of grouting include the following:
 - 1. Portland Cement Grout
 - 2. Non-shrink, Non-expanding Grout

1.02 DELIVERY AND STORAGE

- A. Prevent damage to or contamination of grouting materials during delivery, handling and storage.
- B. Store all grouting materials in undamaged condition with seals and labels intact as packaged by the manufacturer.

1.03 SUBMITTALS

- A. All submittals shall be in accordance with Specification 01340 – Shop Drawings, Project Data and Samples.

PART 2 - PRODUCTS

2.01 PREMIXED GROUTS

- A. Portland Cement Grout
- B. (For grouting CMU cells and similar items – $f'c=3000$ psi minimum)
 - 1. Portland Cement: ASTM C150, Type II
 - 2. Sand: ASTM C33, Fine Aggregate
 - 3. Water: Potable
 - 4. Pea Gravel: ASTM C33. Coarse aggregate, graded so that at least 90% passes 3/8-inch sieve and 90% is retained by a number 4 sieve.
- C. (Grout Mortar for use as fillets and leveling)
 - 1. Portland Cement: ASTM C150, Type II
 - 2. Sand: ASTM C33, Fine Aggregate (Marson's sand)
 - 3. Water: Potable
 - 4. Mix 1-part Portland cement to 3-parts sand.
- D. Pre-Mixed non-shrink, Non-expanding Grout (Nonmetallic). Non-shrink grout as shown on the Drawings shall be a mixture of selected silica sands, Portland cement, water reducing agents, plasticizing and shrinkage compensating agents. Grout shall be nonmetallic non-corrosive, non-staining and comply with CRD-C-588, Type D.

- E. The grout shall be non-shrink in accordance with ASTM C827, ASTM C191, and ASTM C109. The water-grout ratio shall be approximately 8 to 10 quarts of water per cubic foot of grout adjustable for varying job conditions.
- F. Grout shall not contain calcium chloride or other salt; aluminum or other metals; chemical additives, gypsum or expansive cements. Grout shall not expand after set.
- G. Grout shall be used and applied in accordance with the manufacturer's written instructions.
- H. Subject to compliance with requirements provide from the following:
 - 1. L&M Construction Chemicals, Inc. – Crystex
 - 2. Grout Corp. - Five Star Non-shrink Grout or equivalent

2.02 NONSHRINK GROUT

- A. Non-shrink grout shall conform to the following requirements:
 - 1. Manufactured under rigid quality control specifically for grout used in transferring heavy loads.
 - 2. Contain nonmetallic aggregates specially graded to minimize bleeding.
 - 3. Have an initial setting time of approximately one hour at 70°F.
 - 4. Produce no settlement or drying shrinkage at 3 days or later.
 - 5. Have higher strength at all ages than plain cement grout of the same flowability.
 - 6. Resist attack by oil and water and have lower absorption than plain cement grout of the same flowability.
 - 7. Minimum compressive strength, in accordance with ASTM C-109, shall be 2500 psi after 1 day and 7000 psi after 28 days.

2.03 MIXES

- A. For less than 2-inch clearance, or where size or shape of space makes grouting difficult, grout mix shall consist of Portland cement, fine aggregate and water.
- B. For greater than 2-inch clearances where coarse aggregate will not obstruct free passage of the grout, extend grout by adding 50 pounds of pea gravel per 100 pounds grout material.
- C. Use minimum amount of water necessary to produce a flowable grout without causing either segregation or bleeding.
- D. Portland cement mortar for raked-out edges of non-shrink grout: one part Portland cement, two parts sand and 0.50 part water by weight.

2.04 MIXING

- A. Mix grout in accordance with manufacturer's printed specifications.
- B. Mix grouting materials and water in a mechanical mixer for no less than 3-minutes.
- C. Mix grout as close to the work area as possible and transport the mixture quickly and in a manner that does not permit segregation of materials.
- D. After the grout has been mixed, do not add more water for any reason.

PART 3 – EXECUTION

3.01 PROCEDURES

- A. Installation methods and procedures shall be approved by Engineer and shall be in accordance with manufacturer's printed specifications before work is begun.

3.02 SURFACE PREPARATION

- A. Surface preparation shall be in accordance with manufacturer's printed specifications.
- B. Remove defective concrete, laitance, dirt, oil, grease and other foreign material from concrete surfaces by bush-hammering, chipping, or other similar means, until a sound, clean concrete surface is achieved.
- C. Lightly roughen the concrete, but not enough to interfere with the proper placement of grout. Cover concrete areas with waterproof membrane until ready to grout. Immediately before grouting remove waterproof membranes and clean any contaminated surfaces.
- D. Remove foreign materials from metal surfaces in contact with grout. Align, level and maintain final positioning of all components to be grouted.
- E. Saturate concrete surfaces with clean water; remove excess water and leave none standing.

3.03 PLACING

- A. Placing shall be in accordance with manufacturer's printed specifications.
- B. Place non-shrink grouting material quickly and continuously by the most practical means permissible; pouring, pumping or under gravity pressure.
- C. Do not use either pneumatic-pressure or dry packing methods without written permission of the Engineer.
- D. Apply grout from one side only to avoid entrapping air.
- E. Final installation shall be thoroughly compacted and free from air pockets.
- F. Do not vibrate the placed grout mixture or allow it to be placed if the area is being vibrated by nearby equipment.
- G. Do not remove leveling shims for at least 48 hours after grout has been placed. After shims have been removed, fill voids with plain cement-sand grout.
- H. After non-shrink grout has reached initial set, rake out exposed edges approximately 1-inch into the grouted area and paint with Portland cement mortar.

3.04 CURING

- A. Cure grout for 3-days after placing by keeping wet and covering with curing paper or by another approved method.

END OF SECTION

DIVISION 5

METALS

SECTION 05500 - METAL FABRICATIONS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.02 SUMMARY

- A. Section Includes:
 - 1. Steel framing and supports for mechanical and electrical equipment.
 - 2. Steel framing and supports for applications where framing and supports are not specified in other Sections.
 - 3. Miscellaneous steel trim including steel angle corner guards and steel edgings.
 - 4. Metal bollards.
 - 5. Loose bearing and leveling plates for applications where they are not specified in other Sections.
- B. Products furnished, but not installed, under this Section include the following:
 - 1. Anchor bolts, steel pipe sleeves, slotted-channel inserts, and wedge-type inserts indicated to be cast into concrete.
 - 2. Steel weld plates and angles for casting into concrete for applications where they are not specified in other Sections.
- C. Related Requirements:
 - 1. Division 03 - Concrete for installing anchor bolts, steel pipe sleeves, slotted-channel inserts, wedge-type inserts, and other items cast into concrete.

1.03 COORDINATION

- A. Coordinate selection of shop primers with topcoats to be applied over them. Comply with paint and coating manufacturers' written recommendations to ensure that shop primers and topcoats are compatible with one another.
- B. Coordinate installation of metal fabrications that are anchored to or that receive other work. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors, that are to be embedded in concrete or masonry. Deliver such items to Project site in time for installation.

1.04 ACTION SUBMITTALS

- A. Product Data: For the following:
 - 1. Galvanizing coating products.
 - 2. Grout.
- B. Shop Drawings: Show fabrication and installation details. Include plans, elevations, sections, and details of metal fabrications and their connections. Show anchorage and accessory items. Provide Shop Drawings for the following:

1. Steel framing and supports for mechanical and electrical equipment.
2. Steel framing and supports for applications where framing and supports are not specified in other Sections.
3. Miscellaneous steel trim including steel angle corner guards and steel edgings.
4. Metal bollards.
5. Loose steel bearing plates.

1.05 INFORMATIONAL SUBMITTALS

- A. Mill Certificates: Signed by stainless-steel manufacturers, certifying that products furnished comply with requirements.
- B. Welding certificates
- C. Galvanizing coating certificates.
- D. Manufacturers literature for post-installed anchors.

1.06 QUALITY ASSURANCE

- A. Welding Qualifications: Qualify procedures and personnel according to the following:
 1. AWS D1.1/D1.1M, "Structural Welding Code - Steel."
 2. AWS D1.6/D1.6M, "Structural Welding Code - Stainless Steel."
 3. All field welding shall be inspected by a Certified Welding Inspector (CWI), Hired and paid for by the Contractor.

1.07 FIELD CONDITIONS

- A. Field Measurements: Verify actual locations of walls and other construction contiguous with metal fabrications by field measurements before fabrication.

PART 2 - PRODUCTS

2.01 PERFORMANCE REQUIREMENTS

- A. Thermal Movements: Allow for thermal movements from ambient and surface temperature changes acting on exterior metal fabrications by preventing buckling, opening of joints, overstressing of components, failure of connections, and other detrimental effects.
 1. Temperature Change: 120 deg F (67 deg C), ambient; 180 deg F (100 deg C), material surfaces.

2.02 METALS

- A. Metal Surfaces, General: Provide materials with smooth, flat surfaces unless otherwise indicated. For metal fabrications exposed to view in the completed Work, provide materials without seam marks, roller marks, rolled trade names, or blemishes.
- B. Steel Plates, Shapes, and Bars: ASTM A36/A36M. Wide Flange Sections: ASTM A572/ASTM A572M.
- C. Stainless-Steel Sheet, Strip, and Plate: ASTM A240/A240M or ASTM A666, Type 316L.

- D. Stainless-Steel Bars and Shapes: ASTMA276, Type 316L.
- E. Rolled-Steel Floor Plate: ASTM A786/A786M, rolled from plate complying with ASTM A36/A36M or ASTM A283/A283M, Grade C or D.
- F. Rolled-Stainless-Steel Floor Plate: ASTM A793.
- G. Steel Tubing: ASTM A500/A500M, cold-formed steel tubing.
- H. Steel Pipe: ASTM A53/A53M, Standard Weight (Schedule 40) unless otherwise indicated.
- I. Slotted Channel Framing: Cold-formed metal box channels (struts) complying with MFMA-4.
 - 1. Size of Channels: 1-5/8 by 1-5/8 inches or As indicated.
 - 2. Material: Galvanized steel, ASTM A653/A 653M, commercial steel, Type B structural steel, Grade 33 (Grade 230), with G90 (Z275) coating; 0.108-inch 0.079-inch 0.064-inch nominal thickness.

2.03 FASTENERS

- A. General: Unless otherwise indicated, provide Type 316 stainless-steel fasteners for exterior use and zinc-plated fasteners with coating complying with ASTM B633 or ASTM F1941 (ASTM F1941M), Class Fe/Zn5, at exterior walls. Select fasteners for type, grade, and class required.
 - 1. Provide stainless-steel fasteners.
- B. Steel Bolts and Nuts: Regular hexagon-head bolts, ASTM A307, Grade A (ASTM F568M, Property Class 4.6); with hex nuts, ASTM A563 (ASTM A563M); and flat washers.
- C. Steel Bolts and Nuts: Regular hexagon-head bolts, ASTM A325, Type 3 (ASTM A325M, Type 3); with hex nuts, ASTM A563, Grade C3 (ASTM A563M, Class 8S3); and flat washers.
- D. Stainless-Steel Bolts and Nuts: Regular hexagon-head annealed stainless-steel bolts, ASTM F593 (ASTM F738M); with hex nuts, ASTM F594 (ASTM F836M); and flat washers; Alloy Group 1 (A1).
- E. Anchor Bolts: ASTM F1554, Grade 36, of dimensions indicated; with nuts, ASTM A563 (ASTM A563M); and flat washers.
 - 1. Hot-dip galvanize or provide mechanically deposited, zinc coating where item being fastened is indicated to be galvanized.
- F. Anchors, General: Anchors capable of sustaining, without failure, a load equal to six times the load imposed when installed in unit masonry and four times the load imposed when installed in concrete, as determined by testing according to ASTM E488/E488M, conducted by a qualified independent testing agency.
- G. Cast-in-Place Anchors in Concrete: Either threaded type or epoxy adhesive type unless otherwise indicated; galvanized ferrous castings, either ASTM A47/A47M malleable iron or ASTM A27/A27M cast steel. Provide bolts, washers, and shims as needed, all hot-dip galvanized per ASTM F2329.

- H. Post-Installed Anchors: Torque-controlled epoxy adhesive anchors.
 - 1. Material for All Locations and Where Stainless Steel Is Indicated: Alloy Group 1 (A1) stainless-steel bolts, ASTM F593 (ASTM F738M), and nuts, ASTM F594 (ASTM F836M).
- I. Slotted-Channel Inserts: Cold-formed, hot-dip galvanized-steel box channels (struts) complying with MFMA-4, 1-5/8 by 7/8 inches by length indicated with anchor straps or studs not less than 3 inches long at not more than 8 inches o.c. Provide with temporary filler and tee-head bolts, complete with washers and nuts, all zinc-plated to comply with ASTM B633, Class Fe/Zn5, as needed for fastening to inserts.

2.04 MISCELLANEOUS MATERIALS

- A. Shop Primer for Galvanized Steel: Primer formulated for exterior use over zinc-coated metal and compatible with finish paint systems indicated.
- B. Galvanizing Repair Paint: High-zinc-dust-content paint complying with SSPC-Paint 20 and compatible with paints specified to be used over it.
- C. Non-shrink, Nonmetallic Grout: Factory-packaged, non-staining, noncorrosive, nongaseous grout complying with ASTM C1107/C1107M. Provide grout specifically recommended by manufacturer for interior and exterior applications.
- D. Concrete: Comply with requirements in Section 03300 "Cast-in-Place Concrete" for normal-weight, air-entrained, concrete with a minimum 28-day compressive strength of 4500 psi or greater.

2.05 FABRICATION, GENERAL

- A. Shop Assembly: Preassemble items in the shop to greatest extent possible. Disassemble units only as necessary for shipping and handling limitations. Use connections that maintain structural value of joined pieces. Clearly mark units for reassembly and coordinated installation.
- B. Cut, drill, and punch metals cleanly and accurately. Remove burrs and ease edges to a radius of approximately 1/32 inch unless otherwise indicated. Remove sharp or rough areas on exposed surfaces.
- C. Form bent-metal corners to smallest radius possible without causing grain separation or otherwise impairing work.
- D. Form exposed work with accurate angles and surfaces and straight edges.
- E. Weld corners and seams continuously to comply with the following:
 - 1. Use materials and methods that minimize distortion and develop strength and corrosion resistance of base metals.
 - 2. Obtain fusion without undercut or overlap.
 - 3. Remove welding flux immediately.
 - 4. At exposed connections, finish exposed welds and surfaces smooth and blended so no roughness shows after finishing and contour of welded surface matches that of adjacent surface.

- F. Form exposed connections with hairline joints, flush and smooth, using concealed fasteners or welds where possible. Where exposed fasteners are required, use Phillips flat-head (countersunk) fasteners unless otherwise indicated. Locate joints where least conspicuous.
- G. Fabricate seams and other connections that are exposed to weather in a manner to exclude water. Provide weep holes where water may accumulate.
- H. Cut, reinforce, drill, and tap metal fabrications as indicated to receive finish hardware, screws, and similar items.
- I. Provide for anchorage of type indicated; coordinate with supporting structure. Space anchoring devices to secure metal fabrications rigidly in place and to support indicated loads.
- J. Where units are indicated to be cast into concrete or built into masonry, equip with integrally welded steel strap anchors, 1/8 by 1-1/2 inches, with a minimum 6-inch embedment and 2-inch hook, not less than 8 inches from ends and corners of units and 24 inches o.c., unless otherwise indicated.

2.06 MISCELLANEOUS FRAMING AND SUPPORTS

- A. General: Provide steel framing and supports not specified in other Sections as needed to complete the Work.
- B. Fabricate units from steel shapes, plates, and bars of welded construction unless otherwise indicated. Fabricate to sizes, shapes, and profiles indicated and as necessary to receive adjacent construction.
 - 1. Fabricate units from slotted channel framing where indicated.
 - 2. Furnish inserts for units installed after concrete is placed.
- C. Galvanize miscellaneous framing and supports where indicated.

2.07 MISCELLANEOUS STEEL TRIM

- A. Unless otherwise indicated, fabricate units from steel shapes, plates, and bars of profiles shown with continuously welded joints and smooth exposed edges. Miter corners and use concealed field splices where possible.
- B. Provide cutouts, fittings, and anchorages as needed to coordinate assembly and installation with other work.
 - 1. Provide with integrally welded steel strap anchors for embedding in concrete or masonry construction.

2.08 METAL BOLLARDS

- A. Fabricate metal bollards from Schedule 80 steel pipe 1/4-inch wall-thickness rectangular steel tubing steel shapes, as indicated.
 - 1. Cap bollards with 1/4-inch thick steel plate.
 - 2. Where bollards are indicated to receive controls for door operators, provide cutouts for controls and holes for wire.

3. Where bollards are indicated to receive light fixtures, provide cutouts for fixtures and holes for wire.
- B. Fabricate bollards with 3/8-inch thick steel baseplates for bolting to concrete slab. Drill baseplates at all four corners for 3/4-inch anchor bolts.
 1. Where bollards are to be anchored to sloping concrete slabs, angle baseplates for plumb alignment of bollards.
- C. Fabricate sleeves for bollard anchorage from steel pipe or tubing with 1/4-inch thick steel plate welded to bottom of sleeve. Make sleeves not less than 8 inches deep and 3/4 inch larger than OD of bollard.
- D. Fabricate internal sleeves for removable bollards from Schedule 40 steel pipe or 1/4-inch wall-thickness steel tubing with an OD approximately 1/16 inch less than ID of bollards. Match drill sleeve and bollard for 3/4-inch steel machine bolt.

2.09 LOOSE BEARING AND LEVELING PLATES

Provide loose bearing and leveling plates for steel items bearing on concrete construction. Drill plates to receive anchor bolts and for grouting.

- A. Galvanize plates.

2.10 STEEL WELD PLATES AND ANGLES

- A. Provide steel weld plates and angles not specified in other Sections, for items supported from concrete construction as needed to complete the Work. Provide each unit with no fewer than two integrally welded steel strap anchors for embedding in concrete.

2.11 FINISHES, GENERAL

- A. Finish metal fabrications after assembly.
- B. Finish exposed surfaces to remove tool and die marks and stretch lines, and to blend into surrounding surface.

2.12 STEEL AND IRON FINISHES

- A. Galvanizing: Hot-dip galvanize items as indicated to comply with ASTM A153/A153M for steel and iron hardware and with ASTM A123/A123M for other steel and iron products.
 1. Do not quench or apply post galvanizing treatments that might interfere with paint adhesion.
- B. Preparation for Shop Priming Galvanized Items: After galvanizing, thoroughly clean railings of grease, dirt, oil, flux, and other foreign matter, and treat with metallic phosphate process.

PART 3 - EXECUTION

3.01 INSTALLATION, GENERAL

- A. Cutting, Fitting, and Placement: Perform cutting, drilling, and fitting required for installing metal fabrications. Set metal fabrications accurately in location, alignment, and elevation;

with edges and surfaces level, plumb, true, and free of rack; and measured from established lines and levels.

- B. Fit exposed connections accurately together to form hairline joints. Weld connections that are not to be left as exposed joints but cannot be shop welded because of shipping size limitations. Do not weld, cut, or abrade surfaces of exterior units that have been hot-dip galvanized after fabrication and are for bolted or screwed field connections.
- C. Field Welding: Comply with the following requirements:
 - 1. Use materials and methods that minimize distortion and develop strength and corrosion resistance of base metals.
 - 2. Obtain fusion without undercut or overlap.
 - 3. Remove welding flux immediately.
 - 4. At exposed connections, finish exposed welds and surfaces smooth and blended so no roughness shows after finishing and contour of welded surface matches that of adjacent surface.
- D. Fastening to In-Place Construction: Provide anchorage devices and fasteners where metal fabrications are required to be fastened to in-place construction. Provide threaded fasteners for use with concrete and masonry inserts, toggle bolts, through bolts, lag screws, wood screws, and other connectors.
- E. Provide temporary bracing or anchors in formwork for items that are to be built into concrete, masonry, or similar construction.

3.02 INSTALLING MISCELLANEOUS FRAMING AND SUPPORTS

- A. General: Install framing and supports to comply with requirements of items being supported, including manufacturers' written instructions and requirements indicated on Shop Drawings.
- B. Install pipe columns on concrete footings and slabs with grouted baseplates. Position and grout column baseplates as specified in "Installing Bearing and Leveling Plates" Article.
 - 1. Grout baseplates of columns supporting steel girders after girders are installed and leveled.

3.03 INSTALLING METAL BOLLARDS

- A. Fill metal-capped bollards solidly with concrete and allow concrete to cure seven days before installing.
 - 1. Do not fill removable bollards with concrete.
- B. Anchor bollards to existing construction with expansion anchors, anchor bolts or through bolts. Provide four 3/4-inch bolts at each bollard unless otherwise indicated.
 - 1. Embed anchor bolts at least 4 inches in concrete.
- C. Anchor bollards in concrete with pipe sleeves preset and anchored into concrete or in formed or core-drilled holes not less than 8 inches deep and 3/4 inch larger than OD of bollard. Fill annular space around bollard solidly with non-shrink grout; mixed and placed

to comply with grout manufacturer's written instructions. Slope grout up approximately 1/8 inch toward bollard.

- D. Anchor bollards in place with concrete footings. Center and align bollards in holes 3 inches above bottom of excavation. Place concrete and vibrate or tamp for consolidation. Support and brace bollards in position until concrete has cured.
- E. Anchor internal sleeves for removable bollards in concrete by inserting in pipe sleeves preset into concrete or formed or core-drilled holes not less than 8 inches deep and 3/4 inch larger than OD of sleeve. Fill annular space around internal sleeves solidly with non-shrink grout; mixed and placed to comply with grout manufacturer's written instructions. Slope grout up approximately 1/8 inch toward internal sleeve.
- F. Anchor internal sleeves for removable bollards in place with concrete footings. Center and align sleeves in holes 3 inches above bottom of excavation. Place concrete and vibrate or tamp for consolidation. Support and brace sleeves in position until concrete has cured.
- G. Place removable bollards over internal sleeves and secure with 3/4-inch machine bolts and nuts. After tightening nuts, drill holes in bolts for inserting padlocks. Owner furnishes padlocks.
- H. Fill bollards solidly with concrete, mounding top surface to shed water.
 - 1. Do not fill removable bollards with concrete.

3.05 INSTALLING BEARING AND LEVELING PLATES

- A. Clean concrete and masonry bearing surfaces of bond-reducing materials, and roughen to improve bond to surfaces. Clean bottom surface of plates.
- B. Set bearing and leveling plates on wedges, shims, or leveling nuts. After bearing members have been positioned and plumbed, tighten anchor bolts. Do not remove wedges or shims but, if protruding, cut off flush with edge of bearing plate before packing with non-shrink grout. Pack grout solidly between bearing surfaces and plates to ensure that no voids remain.

3.06 ADJUSTING AND CLEANING

- A. Touchup Painting: Immediately after erection, clean field welds, bolted connections, and abraded areas. Paint uncoated and abraded areas with the same material as used for shop painting to comply with SSPC-PA 1 for touching up shop-painted surfaces.
 - 1. Apply by brush or spray to provide a minimum 2.0-mil dry film thickness.
- B. Galvanized Surfaces: Clean field welds, bolted connections, and abraded areas and repair galvanizing to comply with ASTM A780/A780M.

END OF SECTION

SECTION 05531 - ACCESS HATCHES

PART 1 - GENERAL

1.01 SCOPE OF WORK

- A. Furnish all labor, equipment and incidentals required and install access hatches as shown on the Drawings and specified herein. Prefabricated access hatches and frames shall be sized as shown on the drawings.

1.02 COORDINATION

- A. The work in this Section shall be completely coordinated with the work of other Sections. Verify at the site both the dimensions and work of other trades adjoining items of work in this Section before fabrication and installation of items herein specified.
- B. Furnish to the pertinent trades all items included under this Section that are to be built into the work of other Sections.

1.03 SUBMITTALS

- A. Detail fabrication shop drawings, provided for assemblies indicated in the Contract Documents, showing sizes of members, method of assembly, anchorage, and connection to other members shall be submitted to the Owner's Representative for approval before fabrication.

1.04 FIELD MEASUREMENTS

- A. Field measurements shall be taken at the site to verify or supplement indicated dimensions and to insure proper fitting of all items.

1.05 REFERENCED SPECIFICATIONS

- A. Unless otherwise specified, materials shall conform to the following:

Aluminum (Extruded Shapes)	6061-T6 (Alum. alloy)
Aluminum Bar Structural	6061-T6 (Alum. alloy)
Bolts and Nuts	ASTM 276 Stainless Steel, Type 316
Fasteners Stainless	AISI, Type 316
Steel Plate and Sheet Wire	AISI, Type 316
Welding Rods for Steel/Alum.	AWS Spec. for Arc Welding

PART 2 - PRODUCTS

2.01 ANCHORS, BOLTS AND FASTENING DEVICES

- A. Anchors, bolts, etc., shall be furnished as necessary for installation of the work of this Section.
- B. The bolts used to attach the various members to the anchors shall be the sizes shown or required. Stainless steel shall be attached to concrete or masonry by means of 316 stainless steel machine bolts, and iron or 316 stainless steel shall be attached with 316 stainless steel machine bolts unless otherwise specifically noted.

- C. Post installed anchors shall be adhesive Hilti HIT-HY 200, Red Head C6 with ASTM F593 316SS threaded rods or equivalent. Expansion or mechanical anchors are not allowed.

2.02 ALUMINUM ITEMS

- A. Prefabricated aluminum hatches shall be manufactured by Bilco, Halliday, US Foundry or approved equal. Hatches shall be double or single leaf type as shown on drawings. Hatches shall be watertight. All hatches shall be provided with fall proof grating inserts.
- B. Aluminum Hatches: Entry access and pump removal hatches shall be flush aluminum access doors. Hatches shall be extruded frame and drain. Frames shall be 1/4" (min.) aluminum with strap anchors. Cover shall be 1/4" (min.) aluminum diamond or checker skid resistant surface pattern plate, reinforced to withstand a live load of 300 psf or HS-20 wheel load whichever produces the greater stress with stainless steel hinges bolted to the underside and torsion rods or spring operators for ease of operation and the cover shall open to 90 degrees and lock automatically in the position. A vinyl grip handle shall be provided to release the cover for closing. Hardware shall be stainless steel. Factory finish shall be a mill finish with bituminous coating applied to exterior of the frame. Manufacturer shall guarantee against defects in material or workmanship for a period of five years (min.). Covers shall be equipped with recessed lifting handle which lies flush with the door surface, and a stainless steel staple which may be used to secure the door with a padlock when closed.
- C. Miscellaneous aluminum shapes and plates shall be fabricated as shown. If angle frames are provided for hatches, assembly shall be furnished complete with welded strap anchors attached. Furnish all miscellaneous aluminum shown, but not otherwise detailed. Structural shapes and extruded items shall conform to the detail dimensions on the Plans within the tolerances published by the American Aluminum Association.

PART 3 - EXECUTION

3.01 FABRICATION

- A. All metal work for access hatches shall be formed true to detail, with clean, straight, sharply defined profiles and smooth surfaces of uniform color and texture and free from defects impairing strength or durability.
- B. Connections and accessories shall be of sufficient strength to safely withstand stresses and strains to which they will be subjected. Steel accessories and connection to steel or cast iron shall be steel, unless otherwise specified. Threaded connections shall be made so that the threads are concealed by fitting.
- C. The face of welds shall be dressed flush and smooth. Exposed joints shall be close fitting and jointed where least conspicuous.
- D. Welding of parts shall be in accordance with the Standard Code of Arc and Gas Welding in Building Construction of the AWS and shall only be done where shown, specified, or permitted by the Engineer. All welding shall be done only by welders certified as to their ability to perform welding in accordance with the requirements of the AWS Code. Component parts of built-up members to be welded shall be adequately supported and clamped or held by other adequate means to hold the parts in proper relation for welding.
- E. Welding of aluminum work shall be on the unexposed side as much as possible in order to prevent pitting or discoloration.

- F. All aluminum finish exposed surfaces, except as specified below, shall have manufacturer's standard mill finish. A coating of methacrylate lacquer shall be applied to all aluminum shipment from the factory.
- G. Castings shall be of good quality, strong, tough, even-grained, smooth, free from scale, lumps, blisters, sand holes, and defects of any kind which render them unfit for the service for which they are intended. Castings shall be thoroughly cleaned and will be subjected to a hammer inspection in the field by the Engineer. All finished surfaces shown on the Drawings and/or specified shall be machined to a true plane surface and shall be true and seat at all points without rocking. Allowances shall be made in the patterns so that the thickness specified or shown shall not be reduced in obtaining finished surfaces. Castings will not be acceptable if the actual weight is less than 95 percent of the theoretical weight computed from the dimensions shown. The Contractor shall provide facilities for weighing castings in the presence of the Engineer showing true weights, certified by the supplier.

3.02 INSTALLATION

- A. Install all furnished items embedded in concrete. Items to be attached to concrete after such work is completed shall be installed in accordance with the details shown. All dimensions shall be verified at the site before fabrication is started.
- B. Where aluminum is embedded in concrete, apply a heavy coat of approved bitumastic troweling mastic in accordance with the manufacturer's instructions prior to installation.

END OF SECTION

DIVISION 9

FINISHES

SECTION 09900 – PAINTING

PART 1 – GENERAL

1.01 SCOPE OF WORK

- A. The Contractor shall furnish all labor, tools, materials, equipment, scaffolding or other structures and incidentals necessary to complete this Contract in its entirety.
- B. The work includes painting and finishing of all interior and exterior exposed items above and below grade and submerged surfaces, such as concrete, structural steel, miscellaneous metals, ceilings, walls, floors, doors, frames, transoms, roof fans, construction signs, guardrails, posts, fittings, valves, tanks, equipment and all other work obviously required to be painted unless otherwise specified herein or on the Drawings. The omission of minor items in the Schedule of Work shall not relieve the Contractor of his obligation to include such items where they come within the general intent of the Specification as stated herein.
- C. The following items shall not be painted:
 - 1. Any code-requiring labels, such as Underwriter's Laboratories and Factory Mutual, or any equipment identification, performance rating, name or nomenclature plates.
 - 2. Any moving parts of operating units, mechanical and electrical parts, such as valve and damper operators, linkages, sinkages, sensing devices, motor and fan shafts, unless otherwise indicated.
 - 3. Aluminum handrails (except where in contact with concrete) walkways, windows, louvers and grating unless otherwise specified herein.
 - 4. Signs and nameplates.
 - 5. Finish hardware.
 - 6. Chain link fence.
 - 7. Piping buried in the ground or embedded in concrete.
 - 8. Concealed surfaces of pipe or crawl space.
 - 9. Nonferrous metals, unless specifically noted otherwise.
 - 10. Electrical switchgear and motor control centers.
 - 11. Stainless steel angles, tubes, pipe, etc.
 - 12. Products with polished chrome, aluminum, nickel or stainless steel finish.
 - 13. Plastic switch plates and receptacle plates.
 - 14. Flexible couplings, lubricated bearing surfaces, insulation and metal and plastic pipe interior.
 - 15. Sprinkler heads.
 - 16. Lifting chain on cranes and hoists
 - 17. Electrical cable, festooned conductor system, cables, collector pole brackets, etc.
- D. All work shall be done in strict accordance with this Specification, the Design Drawings and the painting package, including manufacturer's printed instructions.
- E. The Contractor will obtain, at its own expense, all permits, licenses and inspections and shall comply with all laws, codes, ordinances, rules and regulations promulgated by authorities having jurisdiction which may bear on the Work. This compliance will include Federal Public Law 91-596 more commonly known as the "Occupational Safety and Health Act of 1970".

1.02 DEFINITIONS

- A. Field Painting is the painting of or rebuilt items at the job site. Field painting shall be the responsibility of the Contractor.
- B. Shop Painting is the painting of or rebuilt items in the shop prior to delivery to the jobsite.
- C. Abbreviations The abbreviations and definitions listed below, when used in this specification, shall have the following meanings:
 - 1. SSPC - Steel Structures Painting Council
 - 2. Exterior - Outside, exposed to weather
 - 3. Interior Dry - Inside, concealed or protected from weather
 - 4. Interior Wet - Inside, subject to immersion services
 - 5. ASTM - American Society of Test Materials
 - 6. NACE - National Association of Corrosion Engineers
 - 7. NSF - National Sanitation Foundation
 - 8. AWWA - American Water Works Association
- D. Dry Film Thickness shall be in Mils.

1.03 RESOLUTION OF CONFLICTS

- A. It shall be the responsibility of the Contractor to arrange a meeting prior to the start of painting, or flooring installation between the Contractor, the Paint Manufacturer, whose products are to be used, and the Owner. All aspects of surface preparation, application and coating systems as covered by this Specification will be reviewed at this meeting.
- B. Clarification shall be requested promptly from the Owner when instructions are lacking, conflicts occur in the Specifications, or the procedure seems improper or inappropriate for any reason.
- C. Copies of all manufacturer's instructions and recommendations shall be furnished to the Owner by the Painting Contractor.
- D. It shall be the responsibility of the Coating Manufacturer to have their factory representative meet in person with the Contractor and Owner a minimum of three times during the job as a consultant on surface preparation, mil thickness of coating and proper application of coating unless meeting is determined to be unnecessary by the Owner.

1.04 SUBMITTALS

- A. Contractor shall submit catalog data and cut sheets for the painting system being used if not the TNEMEC materials specified.
- B. Samples as detailed in 3.01 B shall be submitted regardless of system being used, showing each color to be used.
- C. Hazardous Material Disposal documentation shall be submitted if applicable.

PART 2 – PRODUCTS

2.01 EQUIPMENT

- A. Effective oil and water separators shall be used in all compressed air lines serving spray painting and sandblasting operations to remove oil or moisture from the air before it is used. Separators shall be placed as far as practicable from the compressor.
- B. All equipment for application of the paint and the completion of the work shall be furnished by the Contractor in first-class condition and shall comply with recommendations of the paint manufacturer.
- C. Contractor will provide free of charge to the Owner a "Nordson-Mikrotest" or "Positest" dry film thickness gauge for ferrous metal and an OG232 "Tooke" gauge or equal for non-ferrous and cementitious surface, to be used to inspect coatings by the Owner and Contractor. The gauges may be used by the Contractor and returned each day to the Owner. Owner will return gauges to Contractor at completion of job.

2.02 MATERIALS

- A. All materials specified herein are manufactured by the TNEMEC Company, Inc., North Kansas City, Missouri. These products are specified to establish standards of quality and are approved for use on this Project.
- B. Equivalent materials of other manufacturers may be substituted on approval of the Owner. Requests for substitution shall include manufacturer's literature for each product giving the name, generic type, descriptive information and evidence of satisfactory past performance and an independent laboratory certification that their product meets the performance criteria of the specified materials.
- C. Abrasion - Fed. Test Method Std. No. 141, Method 6192, CS-17 Wheel, 1,000 grams load.
- D. Adhesion - Elcometer Adhesion Tester.
- E. Exterior Exposure - Exposed at 45 degrees facing the ocean (South Florida Marine Exposure)
- F. Hardness - ASTM D3363-74
- G. Humidity - ASTM D2247-68
- H. Salt Spray (Fog) - ASTM B117-73
- I. Standard practice for Operating the Severe Wastewater Analysis Testing Apparatus ASTM G210-13.
- J. Substitutions which decrease the total film thickness, change the generic type of coating, or fail to meet the performance criteria of the specified materials shall not be approved. Prime and finish coats of all surfaces shall be furnished by the same manufacturer.
- K. All coatings to be shop applied must meet the requirements for volatile organic compounds (VOC) of not more than 3.5 lbs/gallon after thinning.
- L. Colors, where not specified, shall be as selected by the Owner or their Representative.

- M. All coatings in contact with potable water need to be NSF Certified in accordance with ANSI/NSF Standard 61.

PART 3 – EXECUTION

3.01 INSPECTION OF SURFACES

- A. Before application of the prime coat and each succeeding coat, all surfaces to be coated shall be subject to inspection by the Owner. Any defects or deficiencies shall be corrected by the Contractor before application of any subsequent coating.
- B. Samples of surface preparation and of painting systems shall be furnished by the Contractor to be used as a standard throughout the job, unless omitted by the Owner.
- C. When any appreciable time has elapsed between coatings, previously coated areas shall be carefully inspected by the Owner, and where, in his opinion, surfaces are damaged or contaminated, they shall be cleaned and recoated at the Contractor's expense. Recoating times of manufacturer's printed instructions shall be adhered to.
- D. Coating thickness shall be determined by the use of a properly calibrated "Nordson-Mikrotest" "Positest" Coating Thickness Gauge (or equal) for ferrous metal or an OG232 "Tooke" Paint Inspection gauge (or equal) for non-ferrous and cementitious surfaces. Please note that use of the "Tooke" gauge is classified as a destructive test.

3.02 SURFACE PREPARATION

- A. The surface shall be cleaned as specified for the paint system being used. All cleaning shall be as outlined in the Society for Protective Coatings (SSPC) Surface Preparation Specification, and the International Concrete Repair Institute (ICRI) unless otherwise noted. If surfaces are subject to contamination, other than mill scale or normal atmospheric rusting, the surfaces shall be pressure washed, and acid or caustic pH residues neutralized, in addition to the specified surface preparation.

3.03 STANDARDS FOR SURFACE PREPARATION

- A. Chemical and/or Solvent Cleaning: Remove all grease, oil, salt, acid, alkali, dirt, dust, wax, fat, foreign matter and contaminants, etc. by one of the following methods: steam cleaning, alkaline cleaning, or volatile solvent cleaning.
- B. Hand Tool Cleaning: Removal of loose rust, loose mill scale and loose paint to a clean sound substrate by hand chipping, scraping, sanding and wire brushing.
- C. Power Tool Cleaning: Removal of loose rust, loose mill scale and loose paint to a clean sound substrate by power tool chipping, descaling, sanding, wire brushing and grinding.
- D. Flame Cleaning: Dehydrating and removal of rust, loose mill scale and some light mill scale by use of flame, followed by wire brushing.
- E. White Metal Blast Cleaning: Complete removal of all mill scale, rust, rust scale, previous coating, etc., leaving the surface a uniform gray-white color.
- F. Commercial Grade Blast Cleaning: Complete removal of all dirt, rust scale, mill scale, foreign matter and previous coating, etc., leaving only shadows and/or streaks caused by rust stain and mill scale oxides. At least 66% of each square inch of surface area is to be free of all visible residues, except slight discoloration.

- G. Brush-Off Blast Cleaning: Removal of rust scale, loose mill scale, loose rust and loose coatings, leaving tightly-bonded mill scale, rust and previous coatings. On concrete surfaces, brush-off blast cleaning shall remove all laitance, form oils and solid contaminants. Blasting should be performed sufficiently close to the surface so as to open up surface voids, bugholes, air pockets and other subsurface irregularities, but so as not to expose underlying aggregate.
- H. Pickling: Complete removal of rust and mill scale by acid pickling, duplex pickling or electrolytic pickling (may reduce the resistance of the surface to corrosion, if not to be primed immediately).
- I. Near-White Blast Cleaning: Removal of all rust scale, mill scale, previous coating, etc., leaving only light stains from rust, mill scale and small specks of previous coating. At least 95% of each square inch of surface area is to be free of all visible residues and the remainder shall be limited to slight discoloration.
- J. Power Tool Cleaning to Bare Metal: Complete removal of rust, rust scale, mill scale, foreign matter and previous coatings, etc., to a standard as specified on a Commercial Grade Blast Cleaning (SSPC-SP-6, NACE-3) by means of power tools that will provide the proper degree of cleaning and surface profile.
- K. Surface Preparation of Concrete (SSPC-SP13)
- L. Visual standards "Pictorial Surface Preparation Standards for Painting Steel Surfaces", and the National Association of Corrosion Engineer, "Blasting Cleaning Visual Standards" TM-01-70 and TM-01-75 shall be considered as standards for proper surface preparation.
- M. Oil, grease, soil, dust, etc., deposited on the surface preparation that has been completed shall be removed prior to painting according to Solvent Cleaning under this Specification.
- N. Weld flux, weld spatter and excessive rust scale shall be removed by Power Tool Cleaning as per these Specifications.
- O. All weld seams, sharp protrusions and edges shall be ground smooth prior to surface preparation or application of any coatings.
- P. All areas requiring field welding shall be masked off prior to shop coating, unless waived by the Owner.
- Q. All areas which require field touch-up after erection, such as welds, burnbacks, and mechanically damaged areas, shall be cleaned by thorough Power Tool as specified in these Specifications.
- R. Touch-up systems will be same as original specification except that approved manufacturer's organic zinc-rich shall be used in lieu of inorganic zinc where this system was originally used. Also strict adherence to manufacturer's complete touch-up recommendations shall be followed. Any questions relative to compatibility of products shall be brought to the Owner's attention; otherwise, Contractor assumes full responsibility.

3.04 PRETREATMENTS

- A. When specified, the surface shall be pretreated in accordance with the specified pretreatment prior to application of the prime coat of paint.

3.05 STORAGE

- A. Materials shall be delivered to the job site in the original packages with seals unbroken and with legible unmutated labels attached. Packages shall not be opened until they are inspected by the Owner and required for use. All painting materials shall be stored in a clean, dry, well-ventilated place, protected from sparks, flame, direct rays of the sun or from excessive heat. Paint susceptible to damage from low temperatures shall be kept in a heated storage space when necessary. The Contractor shall be solely responsible for the protection of the materials stored by himself at the job site. Empty coating cans shall be required to be neatly stacked in an area designated by the Owner and removed from the job site on a schedule determined by the Owner. Owner may request a notarized statement from Contractor detailing all materials used on the Project.

3.06 PREPARATION OF MATERIALS

- A. Mechanical mixers, capable of thoroughly mixing the pigment and vehicle together, shall mix the paint prior to use where required by manufacturer's instructions; thorough hand mixing will be allowed for small amounts up to one gallon. Pressure pots shall be equipped with mechanical mixers to keep the pigment in suspension, when required by manufacturer's instructions. Otherwise, intermittent hand mixing shall be done to assure that no separation occurs. All mixing shall be done in accordance with SSPC Vol. 1, Chapter 4, "Practical Aspects, Use and Application of Paints" and/or with manufacturer's recommendations.
- B. Catalysts or thinners shall be as recommended by the manufacturer and shall be added or discarded strictly in accordance with the manufacturer's instruction.

3.07 APPLICATION

- A. Paint shall be applied only on thoroughly dry surfaces and during periods of favorable weather, unless otherwise allowed by the paint manufacturer. Except as provided below, painting shall not be permitted when the atmospheric temperature is below 50 deg F, or when freshly painted surfaces may be damaged by rain, fog, dust, or condensation, and/or when it can be anticipated that these conditions will prevail during the drying period.
- B. No coatings shall be applied unless surface temperature is a minimum of 5 Degrees above dew point; temperature must be maintained during curing.
- C. See Coating Schedule, paragraph 3.20, for actual coating systems to be used on this project.

3.08 DEW POINT CALCULATION CHART

DEW POINT CALCULATION CHART

Ambient Air Temperature - Fahrenheit

Relative Humidity	20	30	40	50	60	70	80	90	100	110	120
90%	18	28	37	47	57	67	77	87	97	107	117
85%	17	26	36	45	55	65	76	84	95	104	113
80%	16	25	34	44	54	63	73	82	93	102	110
75%	15	24	33	42	52	62	71	80	91	100	108
70%	13	22	31	40	50	60	68	78	88	96	105
65%	12	20	29	38	47	57	66	76	85	93	103
60%	11	29	27	36	45	55	64	73	83	92	101
55%	9	17	25	34	43	53	61	70	80	89	98
50%	6	15	23	31	40	50	59	67	77	86	94
45%	4	13	21	29	37	47	56	64	73	82	91
40%	1	11	18	26	35	43	52	61	69	78	87
35%	-2	8	16	23	31	40	48	57	65	74	83

SURFACE TEMPERATURE AT WHICH CONDENSATION OCCURS

Dew Point

Temperature at which moisture will condense on surface. No coatings should be applied unless surface temperature is a minimum of 5deg above this point. Temperature must be maintained during curing.

Example

If air temperature is 70 deg F and relative humidity is 65%, the dew point is 57 deg F. No coating should be applied unless surface temperature is 62 deg F minimum.

- A. No coating shall be applied unless the relative humidity is below 85%.
- B. Suitable enclosures to permit painting during inclement weather may be used if provisions are made to control atmospheric conditions artificially inside the enclosure, within limits suitable for painting throughout the painting operations.
- C. Field painting in the immediate vicinity of, or on, energized electrical and rotating equipment, and equipment and/or pipes in service shall not be performed without the approval of the Owner.
- D. Extreme care shall be exercised in the painting of all operable equipment, such as valves, electric motors, etc., so that the proper functioning of the equipment will not be affected.
- E. The Contractor's scaffolding shall be erected, maintained and dismantled without damage to structures, machinery, equipment or pipe. Drop cloths shall be used where required to protect buildings and equipment. All surfaces required to be clear for visual observation shall be cleaned immediately after paint application.

- F. Painting shall not be performed on insulated pipe within three (3) feet of insulation operations or on insulation whose covering and surface coat have not had time to set and dry. Painting shall not be performed on uninsulated pipe within one (1) foot of any type of connection until the connection has been made, except as directed by the Owner.
- G. The prime coat shall be applied immediately following surface preparation and in no case later than the same working day. All paint shall be applied by brushing, paint mitt and roller, conventional spraying, or airless spraying, using equipment approved by the paint manufacturer.
- H. Each coat of paint shall be recoated as per manufacturer's instructions. Paint shall be considered recoatable when an additional coat can be applied without any detrimental film irregularities such as lifting or loss of adhesion.
- I. Surfaces that will be inaccessible after assembly shall receive either the full specified paint system or three shop coats of the specified primer before assembly.
- J. Finish colors shall be in accordance with the COLOR SCHEDULE and shall be factory mixed (i.e., there shall be no tinting by the Contractor, unless authorized by the Owner).
- K. All edges and weld seams in immersion service shall receive a "stripe coat" (applied by brush) of the 2nd coat prior to application of the full 2nd coat.
- L. All open seams in the roof area of tanks shall be filled after application of the topcoat with a flexible caulking such as Sika Flex 1A.

3.09 WORKMANSHIP

- A. The Contractor must show proof that all employees associated with this Project shall have been employed by the Contractor for a period not less than six (6) months.
- B. Painting shall be performed by experienced painters in accordance with the recommendations of the paint manufacturer. All paint shall be uniformly applied without sags, runs, spots, or other blemishes. Work which shows carelessness, lack of skill, or is defective in the opinion of the Owner, shall be corrected at the expense of the Contractor.
- C. The Contractor shall provide the names of at least three other projects of similar size and scope that they have successfully completed under their current company name.

3.10 APPLICATION OF PAINT

- A. By Brush and/or Rollers
 - 1. Top quality, properly styled brushes and rollers shall be used. Rollers with a baked phenol core shall be utilized.
 - 2. The brushing or rolling shall be done so that a smooth coat as nearly uniform in thickness as possible is obtained. Brush or roller strokes shall be made to smooth the film without leaving deep or detrimental marks.
 - 3. Surfaces not accessible to brushes or rollers may be painted by spray, by dauber or sheepskins, and paint mitt.
 - 4. It may require two coats to achieve the specified dry film thickness if application is by brush and roller.

B. Air, Airless or Hot Spray

1. The equipment used shall be suitable for the intended purpose, shall be capable of properly atomizing the paint to be applied and shall be equipped with suitable pressure regulators and gauges.
2. Paint shall be applied in a uniform layer, with a 50% overlap pattern. All runs and sags should be brushed out immediately or the paint shall be removed and the surface resprayed.
3. High build coatings should be applied by a cross-hatch method of spray application to ensure proper film thickness of the coating.
4. Areas inaccessible to spray shall be brushed; if also inaccessible to brush, daubs or sheepskins shall be used, as authorized by the manufacturer.
5. Special care shall be taken with thinners and paint temperatures so that paint of the correct formula reaches the receiving surface.
6. Nozzles, tips, etc., shall be of sizes and designs as recommended by the manufacturer of the paint being sprayed.
7. The first coat on concrete surfaces in immersion service should be sprayed and back rolled.

3.11 PROTECTION AND CLEANUP

- A. It shall be the responsibility of the Contractor to protect at all times, in areas where painting is being done, floors, materials of other crafts, equipment, vehicles, fixtures, and finished surfaces adjacent to paint work. Cover all electric plates, surface hardware, nameplates, gauge glasses, etc., before start of painting work.
- B. At the option of the Owner during the course of this project, the Contractor will contain all spent abrasives, old paint chips, paint overspray and debris by means suitable to the Owner, including, but not limited to, full shrouding of the area.
- C. If shrouding is required, the Contractor must provide a complete design of the intended shroud or cover. Care must be taken not to modify or damage the structure during the use of the shroud. If damage should occur, the Contractor is held responsible for all repairs.
- D. At completion of the work, remove all paint where spilled, splashed, spattered, sprayed or smeared on all surfaces, including glass, light fixtures, hardware, equipment, painted and unpainted surfaces.
- E. After completion of all painting, the Contractor shall remove from job site all painting equipment, surplus materials and debris resulting from this work.
- F. The Contractor is responsible for the removal and proper disposal of all hazardous materials from the job site in accordance with Local, State and Federal requirements as outlined by the Environmental Protection Agency.
- G. A notarized statement shall be presented to the Owner that all hazardous materials have been disposed of properly including, but not limited to: name of disposal company, disposal site, listing of hazardous materials, weights of all materials, cost per pound and EPA registration number.

3.12 TOUCH-UP MATERIALS

- A. The Contractor shall provide at the end of the Project at least one (1) gallon of each generic topcoat in each color as specified by the Owner for future touch-up. Two gallons may be required for (2) component materials.

3.13 ON-SITE INSPECTION

- A. During the course of this Project, the Owner will reserve the option of incorporating the services of a NACE Level III inspection service. The inspection service will be responsible for assuring the proper execution of this Specification by the successful Contractor.

3.14 STEEL - STRUCTURAL, TANKS, PIPES AND EQUIPMENT

A. EXTERIOR EXPOSURE (NON-IMMERSION)

1. System No. 1095-1: Epoxy/High Build Urethane

This system is to be generally applied to ferrous metals and ductile iron pipes. The 3rd coat is dependent on the exposure – for buried areas use an extra coat of high-solids epoxy, for UV-exposed and non-immersion areas use an aliphatic acrylic urethane.

Surface Preparation: SSPC-SP6 Commercial Blast Cleaning

Shop Coat: Series N140 or Series N69	3.0 - 5.0
2nd Coat: Series N69 Hi-Build Epoxoline II	3.0 - 5.0
3rd Coat (Buried or Immersion Areas Only): Series N69	3.0 – 5.0
3rd Coat: (Non-Immersion Areas Only) Series 1095	<u>3.0 - 5.0</u>
Dry Film Thickness	9.0 - 15.0
Minimum	10.0 Mils

2. System No. 1095-2: High Build Urethane for Marginally Cleaned Surfaces or Topcoating Existing System

This system can be used over factory finish paint or cover non-sandblasted steel and offer the high performance of a urethane coating. Specify Series 1074U Endura-Shield for gloss finish.

Surface Preparation: SSPC-SP6 Commercial Blast Cleaning or SSPC-SP3 Power Tool Cleaning

Shop Coat: Manufacturer Standard Primer (or existing coating)	3.0-5.0
2nd Coat: 135 Chembuild	3.0 - 5.0
3rd Coat: 1095-Color Endura-Shield	<u>2.0 - 3.0</u>
Dry Film Thickness	8.0 - 13.0
Minimum	9.5 Mils

3. System 90-97: Zinc/Epoxy/Urethane

Series 90-97 Tneme-Zinc is an organic zinc-rich primer that can be used for field touch up of a zinc primer or for touch up of galvanized surfaces that are damaged.

Surface Preparation: SSPC-SP6 Commercial Blast Cleaning

Shop Coat: 90-97 Theme-Zinc	2.5 - 3.5
2nd Coat: 66 Hi-Build Epoxoline	2.0 - 3.0
3rd Coat: 1095 Endurashield	<u>2.0 - 3.0</u>
Dry Film Thickness	6.5 - 9.5
Minimum	8.0 Mils

B. INTERIOR EXPOSURE (NON-IMMERSION)

1. System No. 66HS-1: High Build Epoxy

Primer coat must be touched-up before second coat is applied. Substitute Series 161HS for low temperature cure or quick recoats. Use this system for interior exposed, non submerged metals.

Surface Preparation: SSPC-SP6 Commercial Blast Cleaning

Shop Coat: 66HS-1211 Epoxoline Primer	3.0 - 5.0
2nd Coat: 66HS-Color Hi-Build Epoxoline	<u>4.0 - 6.0</u>
Dry Film Thickness	7.0 - 11.0
Minimum	9.0 Mils

2. System No. 66HS-2: High Build Epoxy (Over OEM Finishes)

Surface Preparation: Spot SSPC-SP6 Commercial Blast Cleaning or SSPC- SP11 Power Tool Cleaning to Bare Metal

Shop Coat: Manufacturer's Standard (or existing coating)	1.0 - 2.0
2nd Coat: 27WB	2.5 - 4.0
3rd Coat: 66HS-Color Hi-Build Epoxoline	<u>2.0 - 4.0</u>
Dry Film Thickness	5.5 - 10.0
Minimum	7.0 Mils

C. IMMERSION

1. System No. 104-1: High Solids Epoxy (Non-Potable Water)

Primer coat must be touched-up before second coat is applied. Scarify the surface before top coating if the Series 66HS has been exterior-exposed for 60 days or longer. Substitute Series 161HS for low temperature cure or quick recoats.

Surface Preparation: SSPC-SP10 Near-White Blast Cleaning

Shop Coat: 66HS-1211 Epoxoline Primer	3.0 - 5.0
2nd Coat: 104-Color Hi-Build Epoxoline	6.0-8.0
3rd Coat: 104-Color Hi-Build Epoxoline	<u>6.0-8.0</u>
Dry Film Thickness	15.0 - 21.0
Minimum	11.0 Mils

2. System No. 20HS-1: Epoxy-Polyamide (Potable Water)

This system meets American Water Works Association AWWA D 102 Inside Paint System Number 1. Series 20HS meets the requirements of approval for potable water use as established by the National Sanitation Foundation Standard 61. Substitute Series FC20HS for low temperature cure or quick recoats.

Surface Preparation: SSPC-SP10 Near-White Blast Cleaning

Shop Coat:20HS-WH02 Pota-Pox (Tank White)	3.0 - 5.0
2nd Coat: 20HS-1255 Pota-Pox (Beige)	4.0 - 6.0
3rd Coat: 20HS-WH02 Pota-Pox (Tank White)	<u>4.0 - 6.0</u>
Dry Film Thickness	11.0-17.0
Minimum	12.0 Mils

3.15 GALVANIZED STEEL - PIPE AND MISCELLANEOUS FABRICATIONS

A. EXTERIOR / (NON-IMMERSION)

System No. 1095-3: Epoxy/High Build Urethane

First coat to be close to the same color as the finish color.

Surface Preparation: SSPC-SP1 Solvent Cleaning, followed by Sweep Abrasive Blasting (SSPC-SP7)

1st Coat: Series N69 Hi-Build Epoxoline	2.0 – 4.0
2 nd Coat: Series 1095 Endura-Shield	<u>2.0 - 4.0</u>
Dry Film Thickness	4.0 - 8.0
Minimum	4.5 Mils

B. INTERIOR EXPOSURE (NON IMMERSION) AND ALUMINUM IN CONTACT WITH CONCRETE

System No. 66HS-3: Polyamide Epoxy

Surface Preparation: SSPC-SP1 Solvent Cleaning

1st Coat: 66HS-Color Hi-Build Epoxoline	2.0 - 4.0
2nd Coat: 66HS-Color Hi-Build Epoxoline	<u>2.0 - 4.0</u>
Dry Film Thickness	4.0 - 8.0
Minimum	5.0 Mils

3.16 CONCRETE

A. EXTERIOR - ABOVE GRADE

1. System No. 1026-1: Acrylic Emulsion Low Sheen

If semi-gloss finish is desired, use Series 1029 Tneme-Cryl SG as the second coat.

Surface Preparation: Allow concrete to cure for 28 days. Surface must be clean and dry.

1st Coat: 1026-Color Tneme-Cryl	2.0 - 3.0
2nd Coat:1026-Color Tneme-Cryl	<u>2.0 - 3.0</u>
Dry Film Thickness	4.0 - 6.0

Minimum 5.0 Mils

2. System No. 156-1: Modified Acrylic Elastomer

If texture is needed, use 157 Enviro-Crete TX (medium texture) For application over previously applied coatings, use TNEMEC Series 151 Elasto-Grip at 1.0 - 2.5 mils DFT prior to the application of Series 156 Enviro-Crete.

Existing Conditions: Prior to coating, bare concrete shall have a "broom" or "rubbed" finish and be free of bugholes. If necessary, apply Tnemec Series 218 in accordance with the manufacturer's recommendations to achieve this finish.

Surface Preparation: Surface must be clean and dry.

1st Coat: 156-Color Enviro-Crete	4.0 - 8.0
2nd Coat: 156-Color Enviro-Crete	<u>4.0 - 8.0</u>
Dry Film Thickness	8.0 - 16.0
Minimum	10.0 Mils

B. EXTERIOR - BELOW GRADE

1. System No. 46-31: Coal Tar-Epoxy

Surface Preparation: Surface shall be clean and dry.

One Coat:	46H-413 Hi-Build Tneme-Tar
Dry Film Thickness	14.0 - 20.0

C. EXTERIOR/INTERIOR EXPOSURE (NON-IMMERSION)

1. System No. 1026-2: Acrylic Emulsion, Low Sheen (Interior/Exterior)

For Semi-Gloss finish, use 1029-Color Tneme-Cryl S/G.

Surface Preparation: Surface shall be clean and dry. Allow concrete to cure for 28 days.

Block Filler (CMU only): 1254 Epoxoblock	125 SF/GL
1st Coat: 1026-Color Tneme-Cryl	2.0 - 3.0
2nd Coat: 1026-Color Tneme-Cryl	<u>2.0 - 3.0</u>
Dry Film Thickness	4.0 - 6.0
Minimum	5.0 Mils
*Does not include Block Filler	

2. System No. 66HS-4: Epoxy-Polyamide (Interior)

Surface Preparation: Surfaces shall be clean and dry. Allow concrete to cure for 28 days. All surfaces must be clean and dry.

Block Filler (CMU only): 1254 Epoxoblock	125 SF/GL
1st Coat: 66HS-Color Hi-Build Epoxoline	3.0 - 5.0
2nd Coat: 66HS-Color Hi-Build Epoxoline	<u>4.0 - 6.0</u>
Dry Film Thickness	7.0-11.0*
Minimum	9.0 Mils *(Does
not include Block Filler)	

D. IMMERSION - POTABLE & NON-POTABLE WATER

1. System No. 104-2: High Solids Epoxy (Non-Potable Water).

Surface Preparation: Existing Concrete: all existing surfaces (walls, floors, top of walls) shall be pressure washed with 3,000-4,000psi potable water to remove all contaminants. Completely remove existing failing coating system using sweep abrasive blasting. Concrete: Allow concrete to cure for 28 days. Sweep abrasive blast per SSPC-SP13 to remove all laitance, fines, curing compounds, form release oils, and other contaminants, and to establish a surface profile equal to ICRI CSP 5 or greater.

Apply Tnemec Series 218 to all surfaces at a minimum of 1/16" to re-surface concrete, fill voids and bugholes, mitigate concrete outgassing, and to create a monolithic, paintable surface.

1st Coat: 104-1255 H.S. Epoxy Primer	6.0 - 8.0
2nd Coat: 104 Color H.S. Epoxy	<u>6.0 - 8.0</u>
3rd Coat: 104 Color H.S. Epoxy	<u>6.0-8.0</u>
Dry Film Thickness	18.0 - 240.0
Minimum	20.0 Mils

2. System No. 20HS-2 Epoxy-Polyamide (Potable Water)

This system meets American Water Works Association AWWA D 102 Inside System No. 1. Series 20HS meets the requirements of approval for potable water use as established by the National Sanitation Foundation Standard 61.

Surface Preparation: Allow concrete to cure for 28 days. Sweep abrasive blast per SSPC-SP13 to remove all laitance, fines, curing compounds, form release oils, and other contaminants, and to establish a surface profile equal to ICRI CSP 5 or greater.

Apply Tnemec Series 218 to all surfaces at a minimum of 1/16" to re-surface concrete, fill voids and bugholes, and to create a monolithic, paintable surface.

1st Coat: 20HS-15BL Pota-Pox	4.0 - 6.0
2nd Coat: 20HS-1255 Pota-Pox Finish	<u>4.0 - 6.0</u>
3rd Coat: 20HS -15BL	<u>4.0 - 6.0</u>
Dry Film Thickness	12.0 - 17.0
Minimum	13.0 Mils

E. INTERIOR EXPOSURE (NON-IMMERSION)

1. System No. 66HS-5: High Solids Epoxy

Surface Preparation: Allow concrete to cure for at least 28 days. Surface to be clean and dry.

1st Coat: 66HS-Color H.S. Epoxy	6.0 - 8.0
2nd Coat: 66HS-Color H.S. Epoxy	<u>6.0 - 8.0</u>
Dry Film Thickness	12.0 - 16.0
Minimum	4.0 Mils

2. System No. 113-1: Acrylic-Epoxy Semi-Gloss

Can be used when low odor is required during application. Specify Series 114 Tneme-Tufcoat for Gloss Finish.

Surface Preparation: Allow concrete to cure for at least 28 days. Surface must be clean and dry.

One or Two Coats: 113-Color Tneme-Tufcoat
Dry Film Thickness 4.0 - 6.0

3.17 PVC PIPE

A. EXTERIOR OR INTERIOR

System No. 1095-4: Acrylic Polyurethane

Surface Preparation: SSPC-SP1 followed by hand or power sanding to scarify / degloss surface.

Two Coats: 1095 Endurashield Dry Film Thickness 2.0-3.0 mils per coat.

3.18 SURFACES EXPOSED TO H2S/H2SO4 (SEVERE EXPOSURE/IMMERSION)

A. CEMENTITIOUS SURFACES

System No. 435-1: Modified Polyamine Epoxy system

For interior/wet service, see Specification 09970.

Surface Preparation: Allow concrete to cure for 28 days. Sweep abrasive blast per SSPC-SP13 to remove all laitance, fines, curing compounds, form release oils, and other contaminants, and to establish a surface profile equal to ICRI CSP 5 or greater.

Apply Tnemec Series 218 to all surfaces at a minimum of 1/16" to re-surface concrete, fill voids and bugholes, mitigate concrete outgassing, and to create a monolithic, paintable surface.

1st Coat: Series 61-0052 Beige Primer	5.0-10.0 mils
2nd Coat: Series 435 Perma-Glaze	<u>Minimum 20.0 mils</u>
Dry Film Thickness	25.0+ mils
Minimum	25.0 mils

B. FERROUS METAL SURFACES

System No. 435-2: Modified Polyamine Epoxy system

Surface Preparation: SSPC-SP-10 Near White Metal Blast Cleaning (2.0 Mil Profile)

1st Coat: Series 61-0052 Beige Primer	5.0-10.0 mils
2nd Coat: Series 435 Perma-Glaze	<u>Minimum 20.0 mils</u>
Dry Film Thickness	25.0+ mils
Minimum	25.0 mils

3.19 CLEAR WATER REPELLENT FOR CONCRETE, MASONRY AND BRICK

A. Silane /Siloxane Sealer (Min. 42% Solids)

Surface Preparation: Allow concrete to cure 28 days. All surfaces must be clean, dry, and free of oils, curing compounds, form release oils, and other contaminants that might interfere with the penetration of the sealer.

COATING: BRICK, CONCRETE

Tnemec Series 662 Two Coats @ 75-200 SF/GAL

SPLIT FACED OR POROUS MASONRY

Tnemec Series 662..... Two Coats @ 35-100 SF/GAL

3.20 COATING SCHEDULE

A. LIFT STATION 4P IMPROVEMENTS – LIFT STATION STRUCTURE

1. Interior concrete of Lift Station (existing walls) – re-attach seam patches on T-lok liner with glue or meltdown.
2. Interior concrete of Lift Station (new walls, ceiling) – Spectra-Shield, Sewpercoat or Green Monster
3. Ductile iron pipe submerged or interior exposed to elevated H₂S environment – System 435-2
4. Ductile iron pipe non-submerged, exposed to exterior – System 1095-1
5. Exterior concrete slab and walls, above grade - System 156-1
6. Exterior concrete walls, below grade – System 46-31
7. PVC piping non-submerged interior-System 1095-4

B. GENERAL UNLESS NOTED ABOVE

1. Non-immersion concrete (equipment pads, pipe supports, curbs, stair pads) – System 156-1
2. Slab-on-grades – System 156-1.
3. Carbon steel, black iron pipe and mechanical equipment non-immersion exposed to corrosive environment – System 1095-1.
4. Galvanized metals non-immersion exposed to corrosive environment-System 1095-3.
5. Non-ferrous metals (aluminum) exterior in contact with concrete-system 66HS-3..

Contractor shall submit color chart to Owner for color selection.

Contractor shall schedule the painting work to occur near the end of the project.

END OF SECTION

SECTION 09901 – PAINTING SCHEDULE

PART 1 – GENERAL

1.01 DESCRIPTION OF WORK

- A. Exposed surfaces, both interior and exterior of areas shown, shall be painted according to the schedule listed in the following paragraph.

PART 2 – PRODUCTS

2.01 SCHEDULE

- A. Refer to Section 09900 Page 16, paragraph 3.20, COATING SCHEDULE.

PART 3 – EXECUTION

3.01 GENERAL

- A. Paint materials and equipment according to the manufacturer's recommendations.

END OF SECTION

SECTION 09970 – SURFACE PROTECTION SPRAY SYSTEM

PART 1 – GENERAL

1.01 SCOPE OF WORK

- A. The CONTRACTOR shall furnish all labor, materials, equipment and incidentals required to install and test the coating system complete and ready for operation for the structures listed in the specifications and as shown on the Drawings.
- B. The work includes coating of all surfaces as shown and specified on the Drawings and in the Coating Schedule in Section 09900. This includes, but is not limited to walls, ceiling and all other work obviously required to be coated unless otherwise specified herein or on the Drawings. The omission of minor items of Work shall not relieve the CONTRACTOR of their obligation to include such items where they come within the general intent of the Specification as stated herein.

1.02 RELATED WORK

- A. Concrete surface cleaning and preparation is the responsibility of the General CONTRACTOR.
- B. Removal and offsite disposal of rubble is the responsibility of the General CONTRACTOR.

1.03 SUBMITTALS

- A. Submit to the OWNER shop drawings and schedules of all surfacing systems and appurtenances required. Submit design data and specification data sheets listing all parameters used in the surfacing system design and thickness calculations based on applicable provisions of ASTM.
- B. Submit to the OWNER the name of the surfacing supplier, a list of materials to be furnished, and the qualification (per 1.05 A) of the application CONTRACTOR.

1.04 REFERENCE STANDARDS

- A. American Society for Testing and Materials (ASTM)

ASTM D-638
ASTM D-790
- B. Where reference is made to one of the above standards, the revision in effect at the time of bid opening shall apply.

1.05 QUALIFICATIONS

- A. The CONTRACTOR performing the surfacing work shall be fully qualified, experienced a minimum of seven years and equipped to complete this work expeditiously and in a satisfactory manner. The CONTRACTOR shall submit the following information to the ENGINEER for review and approval before any surfacing work is performed.
 - 1. The number of years of experience in performing this type of specialized work must be seven years minimum.
 - 2. Name of the surfacing manufacturer and supplier for this work and previous work listed below. The CONTRACTOR shall be an approved installer as certified and

- licensed by the surfacing manufacturer and equipment supplier.
3. A list of clients that the CONTRACTOR has performed this type of work.
- a. The list shall contain names and telephone numbers of persons who can be called to verify previous satisfactory performance.
 - b. Installation dates and a description of the actual work performed.
 - c. The surfacing manufacturer shall provide an installation list of their product used for similar projects. The list shall provide the same information as required in paragraphs 3.a and 3.b above.
- B. The OWNER reserves the right to approve or disapprove the CONTRACTOR, based on the submitted qualifications.

1.06 GUARANTEE

- A. All surfacing shall be guaranteed by the CONTRACTOR for a period of five years from the date of acceptance. During this period, all defects discovered in the surfacing, as determined by the OWNER, shall be repaired or replaced in a satisfactory manner at no cost to the OWNER, this shall include, but is not limited to, all work and costs associated with the shutdown of any pump stations and all bypass operations needed for the proper repairs to be made.

1.07 QUALITY ASSURANCE

- A. All surfacing products shall be from a single manufacturer. The supplier shall be responsible for the provisions of all test requirements specified in ASTM Standards D-638 and D-790 as applicable.
- B. The CONTRACTOR shall employ specialty workers who have proven ability to perform the Work included herein. This will consist of a minimum of two years or two project experiences installing this product. This is a requirement for each and every employee.

1.08 DELIVERY, STORAGE AND HANDLING

- A. Care shall be taken in shipping, handling and placing to avoid damaging. Any material damaged in shipment shall be replaced as directed by the OWNER.
- B. Any material showing deterioration, or which has been exposed to any other adverse storage condition that may have caused damage, even though no such damage can be seen, shall be marked as rejected and removed at once from the work

PART 2 - PRODUCTS

2.01 GENERAL

- A. The material sprayed onto the surface shall be a urethane or epoxy resin system formulated for the application within a sanitary sewer environment. The urethane or epoxy will exhibit suitable corrosion resistance to corrosive gases and fluids found within domestic sanitary sewage. Unless dictated by varying effluent, the spray system shall be a urethane or epoxy and exhibit the cured physical strengths specified herein.
- B. When cured, the surface coating shall form a continuous, tight-fitting, hard, impermeable surfacing data which is chemically resistant to any chemicals or vapors normally found in

domestic sewage.

- C. The surface shall be an integral part of the structure being protected after being placed and cured. The surface shall cover the complete interior of the structure. The surface shall provide a continuous watertight seal or barrier.
1. The surface shall effectively seal the interior surfaces of the structure and prevent any leakage.
 2. Provide water resistance data on surface based on ASTM Standards.
 3. The surface shall be compatible with the thermal conditions of the pump station wet well. Surface temperature will range from 30 to 80 degrees F. Provide test data on thermal compatibility based on ASTM Standards.

2.02 MATERIALS

- A. Approved lining systems shall be one of the following
1. Raven 405, as manufactured by Raven Lining Systems
 2. SprayRoq, as manufactured by SprayRoq Protective Lining Systems
 3. Green Monster Liner Structural, as manufactured by GML Coatings
 4. PermaShield, as manufactured by Tnemec
- B. Raven 405 epoxy spray application shall be 100% VOC free / 100% solids.
1. Tensile Strength (ASTM D638) 7,600 psi
 2. Compressive strength (ASTM C-579) 18,000 psi
 3. Flexural strength (ASTM D790) 13,000 psi
 4. Adhesion, Concrete (ASTM D4541 Type IV) 200 psi Failure at Concrete minimum
- C. SprayRoq polyurethane spray application shall comply with the following specifications:
1. The cured urethane system shall conform to the minimum physical standards, as listed below. The long-term data is for a 50-year design life of the process.

<u>Cured Urethane</u>	<u>Standard</u>	<u>Long-Term Data</u>
Tensile Stress	ASTM D-638	2000 psi
Flexural Stress	ASTM D-790	1100 psi
Flexural Modulus	ASTM D-790	80,000 psi
Concrete Adhesion	ASTM D4541 Type IV tester	Min. 200 psi failure at concrete

- D. Green Monster Liner Structural polyurethane hybrid application shall be 100% VOC free / 100% solids.
1. Tensile Strength (ASTM D412) 4,500 psi
 2. Impact strength (ASTM G-14-04) >50in/lb
 3. Flexural modulus (ASTM D729) >80,000 psi
 4. Adhesion, Concrete (ASTM D4541) >480 psi

- E. Tnemec PermaShield epoxy liner shall be 100% VOC free / 100% solids.
 - 1. Severed Wastewater Analysis Test (ASTM G210) No less than 83.7% retention or not more than 1.6 ohms cm² reduction in log-Z electrochemical impedance at 0.01 Hz after 28 days exposure.
 - 2. Tensile Strength (ASTM D2370) 2,940 psi
 - 3. Impact strength (ASTM D2794) >88 in/lb
 - 4. Flexural modulus (ASTM D790) >540,000 psi
 - 5. Adhesion, Concrete (ASTM D4541) Exceeds the cohesive strength of the concrete substrate (>400 psi).

PART 3 - EXECUTION

3.01 SURFACE PREPARATION

- A. The material installer shall clean each structure and shall dispose of any resulting material.
- B. All contaminants including: oils, grease, incompatible existing coatings, waxes, form release, curing compounds, efflorescence, sealers, salts, or other contaminants shall be removed.
- C. All concrete or mortar that is not sound or has been damaged by chemical exposure shall be removed to a sound concrete surface or replaced.
- D. Surface preparation method(s) should be based upon the conditions of the substrate, service environment and the requirements of the protective coating to be applied.
- E. Surfaces to receive protective coating shall be cleaned and abraded to produce a sound surface meeting a minimum ICRI CSP 5 profile and to remove white, tan, or black-colored deteriorated concrete. The grey hard concrete shall provide a strong bond between the protective coating and the substrate. Generally, this can be achieved with a high-pressure water jetting using equipment capable of 40,000 psi or higher. Other methods such as abrasive blasting, shot blasting, may also be used. Detergent water cleaning and hot water blasting may be necessary to remove oils, grease or other hydrocarbon residues from the concrete. Whichever method(s) are used, they shall be performed in a manner that provides a uniform, sound clean neutralized surface.
- F. A concrete structure suitably prepared for coating shall have all loose, soft, discolored or otherwise deteriorated material removed and the surface profile shall be in accordance with ICRI Guidelines 310.2. Expose aggregate and obtain a uniform surface texture resembling a minimum ICRI CSP 5 surface profile. The OWNER may use one or more of the following observations/tests to determine whether the substrate has been properly cleaned and prepared:
 - 1. Visual appearance of the surface – The prepared substrate shall have the appearance of sound concrete, free from discolored, white, tan, black, chalky and cracked areas.
 - 2. Aural observations – When struck with a metal hammer or similar metal tool, the prepared substrate shall exhibit the characteristic sound of solid, competent concrete. Care should be taken not to fracture sound concrete.
 - 3. Mechanical abrasion tests – The substrate should be competent enough such that it cannot be scraped off with the claw of a hammer or similar metal tool.
 - 4. pH testing – The CONTRACTOR may use wetted litmus paper applied to the surface of the substrate to ensure that the pH of the substrate is 9 or higher.

5. Phenolphthalein testing – The CONTRACTOR may apply a few drops of phenolphthalein to the surface of the concrete, which if the concrete is competent should yield a purple color indicating a pH of 9 or higher.
- G. If after cleaning, a surface does not meet these requirements, the OWNER shall have authority to require additional cleaning effort and/or increased blasting pressure as required to adequately prepare the surface. If necessary, the OWNER may also require acid etching of the concrete surface to create the desired texture. The OWNER may also require mechanical removal of damaged concrete or other substrate materials.
- H. A mild chlorine solution may be used to neutralize the surface to diminish microbiological bacteria growth prior to final rinse and coating system if approved by the Manufacturer's Representative.
- I. The time between structure cleaning and preparation activities and application of the first coating layer shall be within the coating manufacturer's recommendation.
- J. All surfaces should be inspected by the Inspector during and after preparation and before any repair material is applied.
- K. No separate payment shall be made for any preparatory work required prior to application of the surface coating.

3.02 INSTALLATION

- A. The material supplier shall notify the CONTRACTOR and Engineer at least 48 hours in advance, giving the date, start time and estimated completion time for the work being conducted.
- B. The installation of the surface coating shall be in complete accordance with the applicable provisions of ASTM and the manufacturer's specifications. A representative of the material supplier/manufacturer shall be present during the actual installation.
 1. Prior to placing the surface coating, the material supplier/manufacturer must approve the surface preparation work and installation conditions including temperatures.
 2. All surfaces shall be sufficiently smooth and even, to ensure good flow handling characteristics when complete.
 3. All surfaces shall have the surface coating applied to the required thickness by spray application.
- C. Application procedures shall conform to the recommendations of the protective coating manufacturer, including material handling, mixing, environmental controls during application, safety, and spray equipment.
- D. The spray equipment shall be specifically designed to accurately ratio and apply the specified protective coating materials and shall be regularly maintained and in proper working order.
- E. The protective coating material must be spray applied by a Certified material installer of the protective coating manufacturer.
- F. Polyurethane spray application shall be applied such that all surfaces shall be coated in

accordance with the manufactures recommended thickness but not be less than 250 mils or greater than 300 mils for total system thickness.

- G. Epoxy spray application shall be applied such that all surfaces shall be coated in accordance with the following:

1. Specified surfaces shall be coated by spray application of a moisture tolerant, solvent-free, 100% solids, epoxy protective coating as further described herein. Spray application shall be to a minimum wet film thickness in accordance with the following table or manufacturer's recommendation, whichever is greater:

Concrete, New/Smooth	Min. 125 to 200 max. mils for immersion and vapor space, 60-80 mils for atmospheric, splash and spill exposure
Concrete, Rough	Min. 125+ mils to 200 mils max. for immersion and vapor space

2. Airless spray application equipment approved by the coating manufacturer shall be used to apply each coat of the protective coating. Air assisted spray application equipment may be acceptable, especially for thinner coats (<10 mils), only if the air source is filtered to completely remove all oil and water.
3. If necessary, subsequent top coating or additional coats of the protective coating should occur as soon as the basecoat becomes tack free, ideally within 12 hours but no later than the recoat window for the specified products. Additional surface preparation procedures will be required if this recoat window is exceeded.

- H. Polyurethane hybrid application shall be applied such that all surfaces shall be coated in accordance with the manufacturers recommended thickness but not be less than 125 mils or greater than 250 mils for total system thickness.

3.03 FIELD TESTING AND ACCEPTANCE

- A. Field acceptance of surface coatings shall be based on the OWNER's evaluation of the proper surfacing of the structure and the appropriate installation and curing test data along with review of the structure inspections.
- B. The CONTRACTOR shall give the OWNER's Coatings Inspector a minimum of 3 days of advance notice of the start of any field surface preparation work for coating application work.
- C. All such work shall be performed only in the presence of the Inspector, unless Inspector has granted prior approval in writing to perform such work in their absence.
- D. Inspection by the Inspector, or the waiver of inspection of any particular portion of the work, shall not relieve the CONTRACTOR of its responsibility to perform the work in accordance with these Specifications.
- E. The CONTRACTOR shall hold all surface preparation and coating application operations until Inspector approves the following inspection points: concrete surface preparation mock up sample area following completion of blasting; completion of concrete resurfacing; primer application; coating application and testing of cured coating.

- F. One adhesion test shall be performed for every 400 square feet of concrete surface to be coated per ASTM D7234 by the CONTRACTOR. The coating adhesion to the concrete substrates shall be tested using a Type II or Type V instrument per ASTM D4541 and shall be witnessed by the OWNER Coatings Inspector. Elcometer 106, Defelsco PosiTector, or equal, shall be used to perform the test. All dollies shall be submitted to the OWNER at the completion of the testing. The procedure is as follows:
1. The new lining material shall be abraded and wiped with solvent per SSPC SP1 prior to applying the adhesive on the dolly.
 2. A minimum of one new 20 mm diameter dolly shall be affixed to the coated surface for every 40 square feet of surface area. Each testing location shall be identified and recorded by the Inspector.
 3. After the dolly is affixed to the new lining but prior to conducting the pull-off test, the Inspector shall score around the dolly without disturbing the dolly or bond within the test area. The scoring shall penetrate through the newly applied coating, and abrade the substrate.
 4. The adhesive used to attach the dollies to the liner shall be rapid setting with a tensile strength in excess of the coating material and permitted to cure in accordance with the manufacturer's recommendations. Failure of the dolly adhesive shall require re-testing.
 5. The Inspector shall record the type of adhesive used, the length of time the adhesive was allowed to cure and the type of failure observed on the dolly.
 6. The minimum concrete adhesion pulls shall be 200 psi with failure at the concrete. Adhesion pulls between 150 psi and 200 psi shall be acceptable if the dolly pull surface contains 50% concrete. An additional pull test will be required for results less than 150 psi for concrete as stated below.
 7. If the first adhesion test at each test area does not meet the minimum adhesion criteria, an additional test shall be performed within a 12-inch diameter area of the lowest result. If the second adhesion test does not meet the adhesion requirements, an additional location shall be tested 10 feet away from the original test. The adhesion values of the retests and passing results shall be recorded and shall average a minimum of 200 psi for concrete, or as otherwise approved by the OWNER. If all three adhesion tests fail to meet the adhesion requirements, the liner shall be removed and replaced at the CONTRACTOR's expense.
 8. The CONTRACTOR shall repair the coating or lining at the locations of the adhesion tests per the manufacturer's recommendations. The testing dollies shall be retained by the OWNER's Coating Inspector at the conclusion of the testing.
- A. Holiday Testing: The CONTRACTOR shall holiday test all newly applied coated surfaces submerged in wastewater and sewer gas service environments in the presence of the INSPECTOR. After the specified coating has set hard to the touch, the CONTRACTOR shall test the coated surfaces for pinholes and holidays using a high voltage spark tester according to ASTM D4787. Areas which contain visual pinholes and sparking holidays shall be marked, repaired or recoated, and retested in accordance with the coating manufacturer's printed instructions. The electrode movement over the coating surface shall be continuous and shall proceed in a systematic manner, which ensures 100% coverage of the coated surfaces.
1. Coatings with Thickness Exceeding 20 Mils: For surfaces having a total dry film coating thickness exceeding 20 mils: pulse-type holiday detector such as Tinker & Rasor Model AP-W, D.E. Stearns Co. Model 14/20, Elcometer 236 15kV, or equal shall be used. Holiday testing shall be conducted with a clean 12-inch or 18-inch wide wire brush electrode attached to the unit. A silicon rubber electrode shall not be allowed. The unit shall be adjusted to operate at the voltage as

required in ASTM D4787.

- B. The surface coatings shall provide a continuous monolithic surfacing with uniform thickness throughout the structure interior. If the thickness of the coating surface is not uniform or is less than specified, it shall be repaired or replaced at no additional cost to the OWNER.
 - 1. The OWNER will measure the surface cured thickness from a specimen retrieved by the CONTRACTOR. The CONTRACTOR shall retrieve the specimen by physically cutting through the surfacing (by drilling or coring). There will be up to three thickness measurement locations in each structure. A suitable non-destructive type of thickness measurement may also be used.
 - 2. All the surface coating thickness measurement locations shall be repaired by the CONTRACTOR in accordance with the manufacturer's recommendations. These repairs shall be included in the five year surface coating guarantee.
- C. All pipe connections shall be open, clear, and watertight.
- D. There shall be no cracks, voids, pinholes, uncured spots, dry spots, lifts, delaminations or other type defects.
- E. If any defective surface coating is discovered after it has been installed, it shall be repaired or replaced in a satisfactory manner within 72 hours and at no additional cost to the OWNER. This requirement shall apply for the entire five year guarantee period.

3.04 COATING SCHEDULE

- A. Refer to Section 09900 - Painting.

END OF SECTION

DIVISION 11

EQUIPMENT

SECTION 11001 – EQUIPMENT – GENERAL PROVISIONS

PART 1 – GENERAL

1.01 DESCRIPTION OF WORK

- A. Provisions: Requirements specified in Conditions of Contract and Division 1, form a part of this Section.
- B. Work Included in this Section: The CONTRACTOR shall provide all the required labor, project equipment and materials, tools, construction equipment, safety equipment, transportation, and test equipment (unless otherwise specified) for furnishing, installation, adjustment, and full test loading of all the mechanical work shown on the Drawings and included in these Specifications.

1.02 QUALITY ASSURANCE

- A. Incorporated Documents: Published specifications, standards, tests, or recommended methods of trade, industry, or governmental organizations apply to work of these Specifications where cited by abbreviations noted in Section 01070 and below. In every situation, the latest specifications, standards, tests, etc., shall apply unless otherwise noted.
- B. Variances: In instances where two codes are at variance, the more restrictive requirements shall apply.
- C. Standard of Quality: Items of equipment are specified herein by the name of a manufacturer for the purpose of establishing a standard of quality and acceptable experience. Alternate equipment will be given consideration, per Section 01640: Product Selection and Substitution Procedures.
- D. Data: Unless otherwise specified, all equipment furnished shall have a data plate fabricated of 316 stainless steel with a minimum thickness of 1/16 inch and embossed or preprinted lettering, and fastened to the frame with corrosion-resisting pins. Nameplates shall have stamped on them the manufacturer, serial number, model number, type, operating and performance data, and other pertinent data. Letters and numerals shall not be smaller than 3/16 inch high.
- E. Taggings: Where the size of the equipment prevents the fastening of data plates, name tags shall be provided and attached to the equipment and device item to identify it. The name tags shall have a rectangular configuration with square corners and shall be approximately 1-1/2 inches by 3 inches in size. They shall be made from brass or stainless steel sheet metal and have a minimum thickness of 0.032 inches. Letters and numerals shall be engraved or etched in the name tags by a professional engraver and shall not be smaller than 3/16 inch high in size. The name and number for each item of equipment, as designated on the Drawings, shall appear on the name tag for the item. Valve tag information shall conform to Section 09905 (if applicable). A 3/16-inch diameter hole shall be provided in the upper left-hand corner of each name tag and shall be used to attach the name tags to the equipment and device items with 1/8-inch stainless steel cable.

1.03 DRAWINGS

- A. Project Drawings: The Drawings are diagrammatic and show the general layout of the complete construction work.
 - 1. Locations of equipment, inserts, anchors, motors, panels, conduits, stub-ups, fittings, fixtures, water, power and process inlets, unless specifically dimensioned on

the Drawings, shall be determined to suit field conditions encountered, and the CONTRACTOR shall be responsible for ensuring clearance between pipes, equipment, and similar appurtenances, without extra cost to the OWNER.

2. The CONTRACTOR shall review the Drawings and Specifications of other trades and shall include the mechanical work shown thereon that will be required for the installations.
3. Should there be a need to deviate from the Drawings and Specifications; the CONTRACTOR shall submit written details and reasons for all changes to the Owner/Engineer for approval before making such changes. All extra costs to make the changes shall be borne by the CONTRACTOR.

B. Shop Drawings

1. Prior to fabrication, the CONTRACTOR shall obtain, from the manufacturer, shop drawings for all equipment. Shop drawings shall include fabrication, assembly, unit support drawings, installation drawings, and wiring diagrams together with detailed specifications and data covering materials used, power drive assembly, parts, devices, and other accessories forming a part of the equipment to be furnished.
2. The CONTRACTOR shall submit Certified performance or Certified test curves, as specified for all pumps furnished under this Contract. The CONTRACTOR shall notify the Owner/Engineer three weeks prior to all testing should the Owner/Engineer elect to witness the tests.
3. Submit shop drawings and material lists for approval as specified in applicable Sections and in conformance with the requirements of Section 01310: Administrative Requirements.

1.04 ADAPTATION OF EQUIPMENT

- A. Should any alternate equipment selected require any revision to the structure, piping, electrical, or other work shown on the Drawings, the CONTRACTOR shall include the cost of such revisions in his bid for the equipment and no extra payment shall be made for such revision. All such revisions shall be subject to the approval of the Owner/Engineer.

1.05 UTILITY SERVICE AND PROCESS INTERRUPTION

- A. All utility service and/or process interruptions initiated by the CONTRACTOR in the prosecution of his work shall be scheduled in advance and approved by the appropriate Utility Company and the OWNER.

1.06 OPERATION AND MAINTENANCE MANUALS

- A. The CONTRACTOR shall submit to the Owner/Engineer operation and maintenance manuals on all mechanical equipment in accordance with the requirements of the General Conditions.

PART 2 – PRODUCTS

2.01 MATERIALS AND WORKMANSHIP

- A. All equipment furnished under this Division shall be new and guaranteed free from defects in materials, design, and workmanship. These Specifications, to the extent possible, identify service conditions and requirements for all equipment; however, it shall be the manufacturer's responsibility to ascertain, to his satisfaction, the conditions and service under which the equipment will operate and to warrant that operation under those conditions will be successful. All parts of the equipment shall be amply proportioned for all stresses that may occur during fabrications, erection, and intermittent or continuous operation.

- B. All equipment shall be designed, fabricated, and assembled in accordance with the best modern engineering and shop practices. Individual parts shall be manufactured to standard sizes and gauges so that repair parts, furnished at any time, can be installed in the field. Like parts of duplicate units shall be interchangeable. Equipment shall not have been in service at any time prior to delivery, except as required for tests. Materials shall be suitable for service conditions.
- C. Except where otherwise specified, structural and miscellaneous fabricated steel used in items of equipment shall conform to the Standards of the American Institute of Steel Construction. All structural members shall be considered as subject to shock or vibratory loads. Unless otherwise specified, all steel which will be submerged, all or in part, during normal operation of the equipment, shall have a minimum nominal thickness of 1/4 inch. The location of the fabricator and his shop schedule shall be furnished to the Owner/Engineer prior to the beginning of fabrication so that the Owner/Engineer can schedule shop inspection if so desired.

2.02 SAFETY GUARDS

- A. All belt or chain drives, fan blades, couplings, exposed shafts and other moving or rotating parts shall be covered on all sides by safety guards which shall be free of all sharp edges and corners. Safety guards shall conform to the requirements of appropriate safety agencies, such as OSHA.
- B. Safety Guards shall be fabricated from 16 US Standard gauge, or heavier, galvanized or aluminum-clad sheet steel or 1/2-inch mesh, galvanized expanded metal. Each guard shall be designed for easy installation and removal. All necessary supports and accessories shall be provided for each guard. Supports and accessories, including bolts, shall be hot-dip galvanized. All safety guards in outdoor locations shall be designed to prevent the entrance of rain and dripping water.

2.03 EQUIPMENT BASES AND BEDPLATES

- A. A heavy cast-iron or welded steel base shall be provided for each item of equipment which is to be installed on a concrete foundation. Equipment assemblies, unless otherwise specified, or shown on the Drawings, shall be mounted on a single, heavy, cast-iron or welded steel bedplate. Bases and bedplates shall be provided with machined support pads, tapered dowels for alignment of mating, or adjacent items, adequate openings to facilitate grouting, and openings for electrical conduits. All seams and contact edges between steel plates and shapes shall be continuously welded and ground smooth. The plates shall have a minimum thickness of 1/4 inch. All pump bedplates must include a drip lip and provision for directing accumulated gland leakage to a single disposal drain point. Pipe all accumulated gland and seal water leakage and spent cooling water to a floor drain provided adjacent to each piece of equipment. Floor drain may be provided for more than one piece of equipment provided the equipment drain line does not create a safety or tripping hazard.

2.04 JACKING SCREWS AND ANCHOR BOLTS

- A. Jacking screws shall be provided in the equipment bases and bedplates to aid in leveling prior to grouting.
- B. Equipment suppliers shall furnish anchor bolts, nuts, washer, and sleeves of adequate design as required for proper anchorage of the bases and bed plates to the concrete bases. Sleeves shall be a minimum of 1-1/2 times the diameter of the anchor bolts. Unless otherwise shown or specified, anchor bolts for items of equipment mounted on baseplates shall be long enough to permit 1 inch of grout beneath the baseplate and to provide

adequate anchorage into structural concrete. Anchor bolts, together with templates or setting drawings, shall be delivered sufficiently early to permit setting the anchor bolts when the structural concrete is placed. Anchor bolts shall be 316 stainless steel which conforms to ASTM A-167 and ASTM A-267.

2.05 DRIVES

- A. General: All drive units shall have an AGMA rating and service factor suitable for 24 hours per day operation under the specified maximum, or "worse case" operating load. Drive unit housing shall be constructed of high-grade cast iron, welded steel, or other suitable material. Thermal rating of each unit shall exceed the design load or proper cooling devices shall be provided. All drives shall be designed especially for the service for which they are to operate.
- B. Electric Motors: All electric motors supplied under this Contract shall conform to all requirements specified in Division 16. Additional or superseding requisites for certain motors may be found in Division 11, and to a lesser extent, in other Divisions wherein electric motor driven equipment is specified. The CONTRACTOR must coordinate the work of all trades, and the functional, safety and Code requirements for each installation, in order to comply with these Specifications.
- C. V-Belt Drives: Where motors are mounted above the driven machine on a pedestal, the belt tensioning shall be accomplished by four studs which are double nutted to the motor plate to raise and lower the motor plate. Hinges with a jacking screw to tension the belts shall not be used. Where motors are mounted horizontally adjacent to the driven equipment, belt tensioning shall be accomplished by utilization of sliding rail type motor mount, with manual adjustment of motor location, and thereby, belt tension, through a manual, permanently mounted hand crank mechanism. All V-belt tensioning devices shall be such that under no circumstances will it be possible for any device, once set to the desired adjustment, to go out of the adjustment due to the load being imposed upon the drive at that setting. This requirement shall be construed to mean that a set belt tension may not go out of adjustment due to gradual stretching of belts, but shall mean that no portion of any device or devices used to accomplish belt tensioning may slip, become loose, or otherwise move from the desired setpoint, once selected, except when manually reset by operating personnel by use of the adjustment device or devices.

2.06 LUBRICATION

- A. Lubrication of equipment shall ensure constant presence on all wearing surfaces. Lubricant fill and drain openings shall be readily accessible. Easy means for checking the lubricant level shall be provided. Prior to testing and/or operation, the equipment shall receive the prescribed amount and type of lubricant as required by the equipment manufacturer. The CONTRACTOR shall provide to the OWNER a 1-year supply of lubricants for each piece of equipment installed. All lubricants shall be properly packaged, labeled, and delivered to the OWNER concurrent with equipment installation. An inventory listing of lubricant types by equipment and quantities shall be provided.

2.07 GEARS

- A. Provide oil-lubricated totally-enclosed gear reducers and increasers.
- B. Service Ratings: Each gear shall have a nameplate service horsepower rating at least equal to the nameplate rating of the driving motor. Each gear shall have mechanical and thermal capacity equal to or greater than an equivalent horsepower determined by multiplying the service horsepower rating by the specified service factor recommended by AGMA for heavy duty service, except each set of worm gears shall have a minimum service factor of 1.20 and all other gears shall have a minimum service factor of 1.50.

- C. Bearings: Provide antifriction bearings throughout, designed to give a minimum 20,000 hours B10 life for the specified horsepower in continuous operation, of proportions, mountings, and adjustment consistent with acceptable modern practices for applied radial and thrust loads at speeds involved. Provide thrust bearing rates of 1-1/2 times the maximum thrust loading involved.
- D. Gear Nameplates: Equip each gear with an AGMA nameplate which shows service horsepower, actual service factor for actual mechanical or thermal rating as applicable, and AGMA gear Class I rating.

PART 3 – EXECUTION

3.01 COORDINATION

- A. The Drawings show, in a diagrammatic form, the arrangements desired for the principal apparatus, piping, and similar appurtenances, and shall be followed as closely as possible. Proper judgment must be exercised in carrying out the work to secure the best possible headroom and space conditions throughout, to secure neat arrangement of piping, valves, fixtures, hangers, and similar appurtenances, and to overcome local difficulties and interferences of structural conditions wherever encountered.
- B. The CONTRACTOR shall take all measurement for his work at the installation sites, verify all subcontractor Drawings prior to required submittal and be responsible for the proper installation, within the available space, of the apparatus specified and shown on the Drawings. The CONTRACTOR must secure the approval of the Owner/Engineer for all variations and/or substitutions before making any changes.

3.02 PROTECTION

- A. All equipment shall be boxed, crated, or otherwise completely enclosed and protected during shipment, handling and storage. All equipment shall be protected from exposure to the elements and shall be kept thoroughly dry and clean at all times. Pumps, motors, electrical equipment, and other equipment having anti-friction or sleeve bearings shall be stored in weathertight storage facilities such as warehouses. All materials and equipment showing evidence of rust, dirt contamination, or other surface or subsurface deterioration shall be cleaned and restored to the Owner/Engineer's satisfaction prior to installation.
- B. Painted surfaces shall be protected against impact, abrasion, discoloration, and other damage. All painted surfaces which are damaged prior to acceptance of equipment shall be repainted in accordance with the requirements of Section 09900 to the satisfaction of the Owner/Engineer.
- C. Electrical equipment, controls, and insulation shall be protected against moisture or water damage.
- D. The CONTRACTOR shall maintain equipment storage facilities in accordance with the provision of Division 1.
- E. All equipment shall be stored in the designated storage facilities from delivery until installation.
- F. All mechanical equipment, whether in the CONTRACTOR'S designated storage facility prior to final installation, or whether installed, but not yet placed into service or accepted by the OWNER, shall be periodically exercised at intervals, and in accordance with procedures

prescribed by each manufacturer, if such a recommendation is included in the manufacturer's installation, operation and maintenance instructions.

3.03 INSTALLATION CHECK

- A. The CONTRACTOR shall have an experienced, competent, and authorized representative of the manufacturer or supplier of each major item of equipment visit the site of the work and inspect, check, adjust if necessary, and approve the equipment installation. In each case, the equipment supplier's representative shall be present when the equipment is placed in operation. The CONTRACTOR shall have the equipment supplier's representative revisit the job site as often as necessary until all problems are corrected and the equipment installation and operation is satisfactory to the Owner/Engineer.
- B. Each equipment supplier's representative shall furnish to the OWNER, through the CONTRACTOR, a written report certifying that the equipment: (1) has been properly installed and lubricated; (2) is in accurate alignment; (3) is free from all stress imposed by connecting piping or anchor bolts; and (4) has been operated successfully under full load conditions.
- C. Equipment manufacturers shall furnish the services of competent, factory-trained personnel during the warranty period specified to inspect, service, and repair the equipment where required. Service requests shall be answered and acted upon promptly. This requirement shall not include normal maintenance and service of equipment, which will be the responsibility of the OWNER.
- D. All costs for this work shall be included in the price bid by the CONTRACTOR.

3.04 EQUIPMENT INSTALLATION

- A. All equipment shall be installed in full accordance with the equipment manufacturer's recommendations and good practice. Where specified in other parts of this Division, factory-trained service personnel shall be on-site to supervise the installation. Sufficient notice shall be given to the Owner/Engineer prior to equipment installation in order that the Owner/Engineer or his representative may be present during installation. In general, the following installation practices shall be followed:
 - 1. Examine equipment for damage in shipping and handling. The examination shall include checking for corrosion, poor workmanship, dirt or deleterious substances, and poor fits.
 - 2. Level the base plate or bedplate.
- B. Install equipment.
- C. Check alignment of couplings.
- D. If grout has been used, check alignment and levelness after the grout has set.
- E. Check direction of rotation and correct, if necessary, to insure proper operation.
- F. Provide drain lines from all equipment gland leakage housings, seal water openings, and strainers to nearest floor drain or point of disposal. Blow-down valves shall be provided on all strainers whether or not shown on the Drawings.

3.05 PLACING IN OPERATION

- A. Prior to being placed in operation, equipment shall be inspected by the manufacturer's factory-trained personnel. All defects discovered during this inspection shall be corrected prior to initial equipment start-up. Internal coatings applied at the factory shall be removed if required. Lubricant shall be applied in the proper places and levels shall conform to the manufacturer's recommendations. In the presence of the Owner/Engineer, full-load operational testing shall be performed and the results of such tests shall be recorded. Unsatisfactory performance shall be corrected and tests shall be repeated until the equipment performance meets the Specifications. The CONTRACTOR shall furnish all power, materials, services, test equipment and labor required to successfully complete all full load equipment testing specified. The CONTRACTOR shall certify in writing to the Owner/Engineer, in triplicate, that all tests were conducted in accordance with these Specifications and that all components within each system successfully function as required. The CONTRACTOR shall notify the Owner/Engineer ten (10) calendar days in advance of the time when the equipment will be placed into operation. During the course of initial operation, the CONTRACTOR shall instruct OWNER'S personnel in the proper operation and maintenance of the equipment, as specified herein.

3.06 INSTRUCTION

- A. After the equipment specified in Divisions 11 and 16 has been installed, tested, adjusted, and placed in satisfactory operating condition, services of representatives of each equipment manufacturer shall be provided to instruct the operating personnel in the use and maintenance of the equipment. The instruction period shall be scheduled at a time mutually agreed upon with the OWNER. The manufacturer's representatives shall fully instruct the OWNER'S personnel regarding use and maintenance of the equipment. During this instruction period, it shall be the responsibility of the manufacturer to answer all questions for the OWNER'S operating personnel. Manufacturer shall also demonstrate lubrication, disassembly, adjusting, routine parts replacement, and other "hands-on" activities related to maintenance of the equipment. Provide a minimum of not less than three (3) hours for this instruction for each piece of equipment or set of identical pieces of equipment provided unless otherwise specified. More days shall be provided if called for in the individual equipment specification. Each manufacturer shall include the service in the price of his equipment. Training session schedules shall be coordinated with the Owner/Engineer and under no circumstances shall more than two training sessions be scheduled for the same day. The CONTRACTOR shall designate an individual through whom manufacturer's training will be coordinated. This individual will coordinate all training sessions through OWNER'S designated training coordinator.

3.07 SPECIAL TOOLS AND ACCESSORIES

- A. All special tools, special tool lists, equipment, or accessories required for the installation and maintenance of equipment specified in Division 11, shall be provided by the equipment manufacturer. Special tools shall be defined as those items manufactured by the equipment supplier specifically for performing maintenance and installation of their respective equipment.

3.08 SHOP PAINTING

- A. Except as specifically supplemented or superseded by requirements herein, shop painting shall conform to requirements in Section 09900. Electric motors, gears, starters, and other similar self-contained or enclosed components shall be shop primed and finished with high-grade oil-resistant acrylic enamel. Surfaces which will be inaccessible after assembly shall be painted or otherwise protected before assembly by a method which provides protection for the life of the equipment.

- B. Surfaces to be painted at the project site shall be shop painted with one or more coats of a primer which will adequately protect the equipment until finishes are applied at the project site. Primers shall be as specified in Section 09900. All equipment shall be primed with primer compatible with the coating system selected by the CONTRACTOR, and if not, the CONTRACTOR shall reprime the equipment such that it is compatible and in conformance with Section 09900.
- C. Machined and polished metallic surfaces which are not to be painted shall be coated with a rust preventative compound as specified in Section 09900.

3.09 DAMAGED PRODUCTS

- A. The CONTRACTOR shall notify the Owner/Engineer in the event that any equipment or material is damaged subsequent to receipt at the job site, and prior to acceptance of the installation by the OWNER.
- B. Repairs to damaged products in lieu of replacement shall not be made without prior approval by the Owner/Engineer.

END OF SECTION

SECTION 11310 - SUBMERSIBLE, NON-CLOG WASTEWATER PUMP

PART 1 – GENERAL

1.01 DESCRIPTION

A. Scope:

1. Install, and test submersible sewage pumps and motors. Furnish and install related equipment necessary to complete work shown or specified.
2. Installed equipment shall include pumps and motors. Furnish and install equipment shall include pump control panel, guide rail brackets, lifting chain/cable, pump discharge elbows, three (3) base plates with anchors, guide rail system, float, transducer access frames & covers, electrical power and appurtenances. Provide all components of the pumping units by one manufacturer.

1.02 REFERENCES

- A. Codes, Specifications, and Standards:** Codes, specifications, and standards referred to by number of title shall form a part of this specification to the extent required by the references thereto.

1.03 SUBMITTALS

- A. Submittals** shall be as specified in the General Conditions and Section 01310 – Administrative Requirements.

B. Submit the following:

1. Manufacturer's Certificate of Compliance certifying compliance with the referenced specifications and standards.
2. Shop drawings with performance data and physical characteristics .
3. Manufacturer's installation instructions.
4. Manufacturer's operation and maintenance material and manuals.
5. Certified copies of test reports.

1.04 QUALITY ASSURANCE

- A. Perform field tests** specified in this Section.

1.05 DELIVERY, STORAGE, AND HANDLING

- A. Be responsible for the delivery, storage, and handling of products.**

- B. Load and unload all pumps, motors, and appurtenances by hoists or skidding. Do not drop products. Do not skid products on or against other products. Pad slings and hooks in such a manner as to prevent damage to products. Package the pumping units furnished in such a manner as to provide ample protection from damage during handling, shipment, and outdoor storage at the lift station site. Cap all openings with dustproof closures and seal or tape all edges to provide a dust-tight closure.**

- C. Promptly remove damaged products from the job site. Replace damaged products with undamaged products.

1.06 WARRANTY

- A. Provide warranty from the pump manufacturer warranting the complete units being supplied to the OWNER against defects in workmanship and material for a period of five (5) years or 10,000 hours under normal use, operation and service. Provide the warranty in printed form and submit with the normal drawings.

PART 2 – PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

- A. XYLEM/Flygt Corporation

2.02 NON-CLOG SUBMERSIBLE CENTRIFUGAL PUMPS, GUIDE RAIL BASE AND GUIDE RAIL DESIGN

- A. The pumps shall be capable of handling raw unscreened sewage , storm water , and other similar solids-laden fluids without clogging. The discharge base and elbow shall be permanently installed in the wet well and connected to the discharge piping. In order to prevent binding or separation of the pump from the guide rail system. The pumps shall connect to the guide rails base automatically and firmly, guided by the 316 stainless steel guide rails extending from the top of the station to the discharge connection . Cable guide systems shall not be considered acceptable. Each pump shall be fitted with a 316 stainless steel grab link or grip-eye assembly of adequate strength to permit raising the pumps for inspection. There shall be no need for personnel to enter the wet well to remove or reinstall the pump(s). Positive sealing of the pump to the discharge elbow shall be accomplished by metal to metal contact between the pump and discharge elbow. No portion of the pump shall bear directly on the floor of the sump. The pump with its appurtenances and cable shall be capable of continuous submergence to a depth of 65 feet.

2.03 PUMP STATION POWER SYSTEM AND COMPONENTS

- A. General: This section specifies the electrical power system requirements for wastewater pump stations. These requirements apply to duplex pump panels. Similar requirements shall apply when more than two pumps are involved except for the quantity of control equipment and panel size shall be increased accordingly. The manufacturer of the control panel shall provide data to indicate that the manufacturer has a minimum of 3 years of experience in the fabrication of pump control panels. The control panel shall consist of main circuit breakers and generator breaker with mechanical interlock, an emergency power receptacle, a circuit breaker and starter for each pump motor, and 15 ampere, 120 volt circuit breakers as required.
- B. Panel Construction: The duplex pump panel shall be housed in a NEMA 4X, Type 316, 14 gauge stainless steel enclosure. Enclosure shall incorporate a three-point latch with two other fasteners and shall have provisions for padlocking the door and a dead front inner door unit for mounting controls. All exterior hardware and hinges shall be stainless steel.

There shall be permanently affixed to the interior side of the exterior enclosure door both a nameplate and a 10" x 12" pocket for log sheet storage. The nameplate shall contain the following information: voltage, phase, rated horsepower, speed, date manufactured, pump and control panel manufacturer's name, address and telephone number, pump data, including impeller data, discharge capacity (gpm) and head (ft.), kW input, and amps at the operating point and at least two other points on the pump curve.

The control panel enclosure shall be Underwriters Laboratories (U.L.) 50 type 4X listed. Size of the panel shall be as shown on the Drawings.

- C. Power Supply and Main Disconnect: Power supply to the control panel shall be 480 volt, 3 phase, 3 wire. Minimum service shall be 200 AMP. Single-phase power shall not be accepted.

Non-fusible safety service main disconnects shall be installed at all stations. In all 240 volt systems, disconnects shall be installed between the meter and the panel and on all 480 volt systems, disconnects shall be installed ahead of the meter. LED power available indicators shall be supplied on all legs.

The disconnect box shall be 316 stainless steel.

- D. Main Breakers: The panel shall have an inter-lock system between the normal power main breaker and the emergency breaker to ensure only one breaker is in the "on" position at a time. Both breakers shall be equal in size.

- E. Circuit Breaker: All circuit breakers shall be heavy duty molded case breakers. The handle on the circuit breakers shall be operational through the inner door. All circuit breakers shall have an appropriate locking device to meet OSHA lock-out and tag-out rules.

- F. Motor Circuit Protectors:

1. Each pump motor shall be protected by a 3-pole motor circuit protector. The motor circuit protector shall be operated by a toggle-type handle and shall have a quick-make, quick-break overcenter switching mechanism that is mechanically trip-free from the handle so that the contacts cannot be held closed against a short circuit and abnormal currents which cause the motor circuit protector to trip. Tripping shall be clearly indicated by the handle automatically assuming a position midway between the normal ON and OFF positions. All latch surfaces shall be ground and polished. All poles shall be so constructed to open, close, and trip simultaneously. Motor circuit protector must be completely enclosed in a high-strength glass polyester molded case. Ampere ratings shall be clearly visible. Contacts shall be non-welding silver alloy. Arc extinction must be accomplished by means of arc chutes. A manual push-to-trip button shall be provided for manual exercising of the trip mechanism. Each pole of these motor circuit protectors shall provide instantaneous short circuit protection by means of an adjustable magnetic- only element.
2. Each motor and cable system shall be monitored by a ground-fault detection device which shall measure excessive leakage current in the motor or the cable system. Detection device shall disconnect power from the motor and provide a visual indication if excessive ground current is detected.

- G. Motor Starter and Selector Switches: The panel shall contain two motor starters for duplex pump stations and three motor starters for triplex pump stations. The motor starter for motors 30Hp or less shall be across the line magnetic starters with individual overload protection on each power leg with reset installed through the inner door unit. The motor starters for motors greater than 30Hp shall be reduced voltage soft starters with overload protection on each power leg with reset installed through the inner door unit. Local Power Company Regulations shall govern.

Selector switches shall be installed on the face of the inner door unit. Selector switch shall be a heavy duty oil tight "Hand-Off-Auto" three position switch to control the operation mode of each pump motor starter.

- H. Pump Alternator: An eight pin plug-in solid state alternator shall be provided to change the pump starting sequence on each pumping cycle. For Duplex pump stations, a three-position alternator test switch shall be provided to control the alternation operation. Switch positions shall include the "Auto" position to provide normal automatic sequence, "Off" position to disable alternator, and "Test" position with a spring return to allow the alternation of the pump sequence to check alternator operation. For Triplex pump stations, an eight-position rotary switch shall be provided which allows switching between either duplex or triplex operation, and primary load locking. Alternating relays shall include LEDs for indication of load status and phase failure.
- I. Indicator Lights: There shall be installed on the face of the inner door unit, heavy duty NEMA 4X oil tight indicator lights. The lights shall indicate the control status of the float control switches and the run condition of each pump. The indicator lights shall be 24 volt.
- J. High Level Alarm: Vapor proof red strobe light shall be mounted on an exterior wall of the pump station. The horn shall be mounted on the side of the panel to indicate a high level alarm. Also, there shall be an alarm silence pushbutton located below the alarm light and a silence relay which will silence the horn and automatically reset when these signals are restored to normal. The pushbutton shall be heavy duty oil tight.
- K. Emergency Power Receptacle: The panel shall incorporate an externally mounted generator receptacle of the required size. The receptacle model no. shall be as shown on the Drawings.
- L. Wiring : All power wires shall be THW or THWN 75 Degree C insulated stranded copper conductors and shall be appropriately sized for the given load application . All control circuit wire shall be type THW, Size 16, stranded type copper. All wiring within the enclosure shall be neatly routed by the use of slotted type wiring duct with snap on type covers. Wiring on the rear of the inner door shall be neatly bundled with nylon ties and include sufficient loop across the hinges to prevent wire damage. Both ends of each conductor shall be permanently identified. Color coding of all wiring is required: RED, 24 VAC+; WHITE, Neutral; BLACK, 120 VAC+ ; PURPLE, 24 VDC-; YELLOW, 24 VDC+; GREEN, equipment ground.
- M. Terminal Points: Terminal points of all terminal strips, relays and components shall be permanently identified. All terminal numbers, wire numbers and identifying nomenclature shall correspond to and be shown on electrical schematic diagrams.

- N. Engraved Nameplates: All circuit breakers, control switches, indicator pilot lights and other control devices shall be identified with permanently affixed legend plates and lamicoid-type engraved nameplates where applicable. A black and red on white label stating "DANGER, HIGH VOLTAGE, 240 VOLTS" shall be affixed to the face of the inner door unit.
- O. Surge Protector: A surge protector shall be included and wired to protect motors and control equipment from lightning induced line surges . All surge protectors shall be U.L. approved and installed per respective power company requirements and manufacturers' specifications. Surge protectors shall be installed on the disconnect switch as shown on the Drawings and within the pump control panel. Surge protection shall be manufactured by EDCO, or equivalent.
- P. Elapsed Time Meters: Elapsed time meters shall be mounted on the face of the inner door, one meter for each pump. Elapsed time meters shall be 115 volt non-resettable type and shall totalize pump running time in hours and tenths of hours to 99999.9 hours.
- Q. Convenience Receptacle: On the face of the inner door unit, there shall be installed a 20 AMP, 120 volt, duplex convenience receptacle. It shall be provided with its own single pole, 20 AMP circuit breaker for protection. Ground fault interrupt type shall be required.
- R. Control Terminal Blocks: Control terminal blocks shall be of the clamp screw type, rated for 600 volts. Amperage rating shall accommodate the control circuit amperage to which it is connected but have a minimum rating of 20 amps.
- S. Control Power Transformer: For 480V panels, there shall be a control power transformer with a minimum size of SOOVA to provide 120VAC power for: coils for starters, 20A duplex receptacle, alarm horn, alarm light, elapsed time meters, etc. The power transformer shall be dry and properly fused on both the primary and secondary side of the transformer. The signal required by the float switches and relays shall be 24VAC. This shall be provided by a 24VAC control power transformer properly sized with a fused secondary.
- T. Control Relay: The level control relays shall operate from 24VAC. They shall be enclosed, plug-in 8 pin type with octal-style screw terminal sockets and shall include a test button.
- U. Electric Schematic: There shall be permanently affixed to the interior side of the exterior enclosure door an electrical schematic diagram and a copy supplied to the City of Palm Coast personnel at start-up. The schematic diagram shall include the rated amperage and voltage for all components.
- V. Phase Monitor: For all 240 volt and 480 volt, 3 phase stations, an eight pin plug-in type phase monitor shall be provided for protection of electrical components due to phase loss, phase reversal, over and under voltage. Adequate dummy pin protection shall be provided to prevent accidental interchanging of the eight-pin phase monitor with the eight-pin alternator. Failure of the phase monitor shall activate the alarm system.
- W. Testing: After fabrication in the control panel manufacturer's plant, an operational test shall be performed to check out the entire panel before delivery. Three phase source voltage to which the panel is intended shall be used for the testing.

- X. Service: The control panel manufacturer shall maintain a service organization in the applicable county that is available for service.
- Y. Warranty: The manufacturer shall furnish a one (1) year warranty against defects in materials and workmanship covering parts and labor on all items supplied under this Section Spare Parts: The manufacturer shall furnish the following spare parts for each panel supplied:
 - 1. A wear ring for each pump supplied.
 - 2. Phase monitor.

2.04 PUMP STATION CONTROL SYSTEM

- A. Refer to Section 13420 – Instrumentation and Controls - Field Instruments and Panels

2.05 LEVEL TRANSMITTER (SUBMERSIBLE PRESSURE)

- A Refer to Section 13420 – Instrumentation and Controls - Field Instruments and Panels

2.06 ACCESS FRAMES AND COVERS

- A The wet well shall be furnished with an access frame and cover. Equipment furnished shall include the necessary aluminum access frames, complete with hinged and slide bar equipped covers, 316 stainless steel upper guide rail brackets and 316 stainless steel level sensor cable holder. The frames shall be securely mounted above the pumps. Doors shall be of aluminum checkered plate. The access cover and frame with stainless steel hardware shall be sized in accordance with the pump manufacturer's requirements for proper pump spacing. Safety grating shall be supplied with all new access hatches.

PART3-EXECUTION

3.01 INSTALLATION

- A Install each submersible pump in accordance with the Drawings and manufacturer's written instructions.
- B. Make sure that each pump is securely anchored. Also, make certain that all connections are tight.
- C. Install each pumping unit level and plumb to insure unit is uniformly supported and guide rails are plumb.

3.02 TESTING

- A After installation, test each pump in accordance with manufacturer's instructions. Record test voltage and amperage measurements.

3.03 MANUFACTURER'S REPRESENTATIVE

- A. Provide services of a qualified manufacturer's service representative to inspect equipment installation and to perform the required field tests.

3.04 CLEANING

- A. Clean grease, oil or any other debris from the exterior surfaces of the pump and motor; make sure all passages are clear of obstruction and that impellers rotate freely.

TABLE 11310-A PERFORMANCE REQUIREMENTS	
	PS 4P SEWAGE PUMP
Design Flow, GPM	1034
Design TDH, feet	77
Motor Horsepower, HP	34
Motor Design Speed, RPM	1760
Minimum Pump Efficiency Design Point	75%
Motor Voltage	460
Type of Duty	S1
Impeller Diameter mm	270
Discharge Diameter – Inches	4
Basis of Design Manufacturer	Xylem Flygt NP 3171, HT, 3pH 454

END OF SECTION

DIVISION 13

SPECIAL CONSTRUCTION

SECTION 13400 – INSTRUMENTATION AND CONTROLS - GENERAL REQUIREMENTS

PART 1 - GENERAL

1.01 WORK INCLUDED

- A. Furnish and Install all instrumentation and controls hereinafter specified to perform the intended function. Work shall include all labor, materials, facilities and equipment, performance of all work necessary to provide programming, calibration, installation supervision, system start-up, services and incidentals required to completely furnish and install the control systems specified herein and shown on the Contract Drawings.
- B. The Contractor shall coordinate and have responsibility for interconnecting with equipment now existing and/or being installed under this or other contracts as shown on the drawings.
- C. Auxiliary and accessory devices necessary for system operation or performance such as transducers or relays to interface with existing equipment or equipment provided under other sections of this Specification shall be included whether specified or not.
- D. Equipment shall be fabricated, assembled, installed and placed in proper operating condition in full conformity with detail drawings, specifications, engineering data, instructions and recommendations of the equipment manufacturer as approved by the Engineer.
- E. Equipment removed in the course of this work shall become the property of the Owner.
- F. All equipment and installations shall satisfy applicable federal, state and local mechanical and electrical codes.

1.02 SUBMITTALS

- A. Following award of Contract, shop drawings shall be submitted as outlined under the General Conditions and as described herein. Submittals shall be complete giving at least equipment specifications, details of connections, wiring, range and dimensions. Submittals consisting of only general sales literature shall not be acceptable.
- B. Submit detailed information for each instrument or control device including manufacturer's descriptive literature and a specific data sheet for each device and its configuration which shall include as a minimum.
 - 1. Tag number per the loop diagrams.
 - 2. Product (item) name used herein and on the contract drawings.
 - 3. Manufacturer's complete model number.
 - 4. Location of the device.
 - 5. Input/Output characteristics.
 - 6. Range, size and graduations.
 - 7. Physical size with dimensions, enclosure NEMA classification and mounting details.
 - 8. Materials of construction of all components.
 - 9. Instrument or control device sizing calculations, where applicable.
 - 10. Accuracy, resolution, hysteresis and frequency response.
- C. Submit a detailed loop diagram on a single 8-1/2 inch x 11-inch sheet for each monitoring or control loop. The format shall be the Instrument Society of America Standard for

Instrument Loop Diagrams, ISA-S5.4. Each wire shall be shown with all terminations as part of the loop diagram. Terminations furnished under other sections of this Specification shall be shown and completely identified on the "As-Built" drawings in the submittal. The loop diagrams shall use the same numbers as used herein.

- D. Submit detailed ladder diagrams of the relay and switch. The ladder diagram format shall be the same for all processes, systems, sub-systems, and equipment. Diagram formats differing based on different manufacturers will not be accepted. Rungs of the ladders shall be cross-referenced. All functions shall be annotated and cross-referenced to loop drawings.
- E. The data sheets shall be provided with an index and proper identification and cross-referencing. There shall be separate volumes for field/panel and in-line equipment. The in-line equipment shall be coordinated with the piping work. The detailed loop diagrams shall accompany the field/panel instrument submittal. Each volume shall be submitted in its entirety. Partial submittals will be rejected.
- F. Submit detailed drawings concerning control panels and/or enclosures including:
 - 1. Cabinet assembly and layout drawings to scale.
 - 2. Fabrication and painting specifications.
 - 3. Color selection samples for selection by the Engineer.
 - 4. Point to point wiring diagrams depicting wiring within the panel as well as connections to external devices.
- G. Exceptions to the Specifications or drawings shall be clearly defined by the system supplier. Data shall contain sufficient details so a proper evaluation may be made by the Engineer.

1.03 FINAL DOCUMENTATION

- A. Prior to final acceptance of the system, three (3) sets of Operating and Maintenance manuals covering instructions and maintenance on each type of equipment shall be furnished as noted herein.
- B. The instructions shall be bound in three-ring binders with drawings reduced or folded for inclusion and shall provide at least the following as a minimum.
 - 1. A comprehensive index.
 - 2. A complete "As Constructed" set of approved shop drawings.
 - 3. A complete list of the equipment supplied including serial number, ranges and pertinent data.
 - 4. Full specifications on each item.
 - 5. System schematic drawings "As Constructed" illustrating all components, piping and electrical connections of the systems supplied under this section.
 - 6. Detailed service, maintenance and operation instructions for each item supplied.
 - 7. Special maintenance requirements particular to this system shall be clearly defined, along with special calibration and test procedures.
 - 8. The operation instruction shall also incorporate a functional description of the entire system with references to the system's schematic drawings and instructions.
 - 9. Complete parts lists with stock numbers and name, address and telephone number of the local supplier.
 - 10. RTU Program: Hard copy documentation and RTU source code.
 - 11. Radio Configuration: Hard copy configuration and radio software configuration

1.04 PRODUCT HANDLING

A. Shipping Precautions

1. Special instructions for proper field handling, storage and installation required by the manufacturer for proper protection shall be securely attached to each piece of equipment prior to packaging and shipment.

B. Identification

1. Each component shall be tagged to identify its location, tag number and function in the system. Identification shall be prominently displayed on the outside of the package.
2. A permanent stainless steel or other non-corrosive material tag firmly attached and permanently and indelibly marked with the instrument tag number as given in the tabulation, shall be provided on each piece of equipment supplied under this section.

C. Storage

1. Equipment shall not be stored outdoors. Equipment shall be stored in dry permanent shelters and shall be adequately protected against mechanical and corrosive damage. If any apparatus has been damaged, such damage shall be repaired by the Contractor at his own cost and expense. If any apparatus has been subject to possible injury by water, it shall be thoroughly dried out and put through such tests as directed by the Engineer. This shall be at the cost and expense of the Contractor or the apparatus shall be replaced by the Contractor at his own expense.

PART 2 - PRODUCTS

2.01 INSTRUMENTATION

- A. All instrumentation supplied shall be of the manufacturer's latest design and shall produce or be activated by signals which are established standards for the water and wastewater industries.
- B. All electronic instrumentation shall be of the solid state type and shall utilize transmission signals which conform to all FCC and local requirements.
- C. Outputs of equipment that are not of the standard signals as outlines shall be the output immediately converted to compatible standard signal as for remote transmission.
- D. All instruments shall be provided with mounting hardware and floor stands, wall brackets or instrument racks as shown on the drawings, or as required.
- E. All indicators and readouts shall be linear in process units.
- F. Electronic equipment shall be of the manufacturer's latest design utilizing printed circuitry and suitably coated to prevent contamination by dust, moisture and fungus. Solid state components shall be conservatively rated for their purpose to assure optimum long-term performance and dependability over ambient atmospheric fluctuations and 0 and 100 percent relative humidity. The field mounted equipment and system components shall be designed for installation in dusty, humid and slightly corrosive service conditions.

- G. All equipment, cabinets and devices furnished hereunder shall be heavy-duty type designed for continuous industrial service. The system shall consist of equipment models which are currently in production. All equipment provided shall be of modular construction and shall be capable of field expansion.
- H. All electronic equipment shall be provided with radio frequency interference protection.

2.02 ELECTRICAL

- A. All equipment shall be designed to operate on a 60 hertz alternating current power source at a nominal 110 volts plus or minus 10 percent, except where specifically noted. All regulators and power supplies required for compliance with the above shall be provided between power supply and interconnected instrument loop. Where equipment requires voltage regulation, constant voltage transformers shall be supplied.
- B. All analog transmitter and controller outputs shall be 4-20 milliamps into a minimum load range of 0-750 ohms, unless specifically noted otherwise. All switches shall have double-pole, double-throw contacts rated at a minimum of 600 VA, unless specifically noted otherwise. Material and equipment used shall be UL approved wherever such approved equipment and materials are available. All equipment shall be designed and constructed so that in the event of a power interruption, the equipment specified hereunder shall resume normal operation without manual resetting when power is restored.
- C. Fusible terminal blocks to have blown fuse indication, Entrelec M 4/8.SF series, or equal

PART 3 - EXECUTION

3.01 GENERAL INSTALLATION

- A. Instrumentation and accessory equipment shall be installed in accordance with the manufacturer's instructions. The locations of equipment, transmitters, alarms and similar devices shown on the drawing are approximate only. Exact locations shall be as approved by the Engineer during construction.
- B. Obtain in the field all information relevant to the placing of process control work and in case of any interference with other work, proceed as directed by the Engineer and furnish all labor and materials necessary to complete the work in an approved manner.
- C. The installation details on the drawings indicate the designed installation for the equipment specified. Where specific installation details are not specified or shown on the drawings, the American Petroleum Institute (API) Recommended Practice 550 shall be followed as applicable.
- D. All work shall be executed in full accordance with codes and local rulings. Should any work be performed contrary to said rulings, ordinances and regulations, the Contractor shall bear full responsibility for such violations and assume all costs arising therefrom.
- E. All equipment used in areas designated as hazardous shall be designed for the Class, Group and Division as required on the electrical drawings for the locations. All installation shall be in strict accordance with codes.
- F. Unless specifically shown in the contract documents, direct reading or electrical transmitting instrumentation shall not be mounted on process piping. Instrumentation shall be mounted on instrument racks or stands as detailed on the installation detail

drawings. All instrumentation connections shall be provided with shut off and drain valves. For the differential pressure transmitters, three way stainless steel valve manifolds shall also be provided. For slurries, chemical or corrosive fluids diaphragm seals with flushing connections shall be provided.

- G. All piping to and from field instrumentation shall be provided with necessary unions, test tees, couplings, adapters and shut off valves.
- H. Field instruments requiring power supplies shall be provided with local electrical shut offs and fuses as required. Two (2) fuses of each type to be provided as loose spares.
- I. Brackets and hangers required for equipment mounting shall be provided. They shall be installed in a workmanlike manner and not interfere with any other equipment.
- J. The shield on each process instrumentation cable shall be continuous from source to destination and be grounded as directed by the manufacturer of the instrumentation equipment, but in no case shall more than one ground point be employed for each shield.
- K. Lifting rings from cabinets/assemblies shall be removed. Hole plugs shall be provided for the holes of the same color as the cabinet.

3.02 INSTALLATION

- A. The system supplier shall coordinate the installation, placing and location of system components, their connections to the process equipment panels, cabinets and devices subject to the Engineer's approval. He shall be responsible to insure that all field wiring for power and signal circuits are correctly done in accordance with best industry practice and provide for all necessary system grounding to insure a satisfactory functioning installation. The Contractor hereunder shall schedule and coordinate his work under with that of the electrical work specified under applicable sections Division 16.
- B. Remote Terminal Unit (RTU System) Connection/Programming: The RTU system supplier shall furnish all materials, labor and services necessary to connect new input and output signals to the existing CTU. He shall provide all wiring, conduit and other materials necessary to interface field instruments and devices with the various control panels and existing SCADA system. The RTU system supplier shall have full responsibility for programming the existing RTU at the plant and configuring the SCADA HMI at the City water and wastewater plants to monitor/control the new pump station as described herein and on the project plans.
- C. Radio Configuration: The SI shall configure the radio to be compatible with the existing radio frequencies and modes. Communications between the RTU and CTU must be configured and validated by the SI.

3.03 TESTING

- A. Following connections check out and final adjustment of all panels, instruments, meters, monitoring and control devices, a performance check shall be made on each. Analog instruments and system inputs shall be tested at 0, 25, 50, 75, and 100 percent of scale. All status and alarm switches as well as all monitoring and control functions shall also be checked. Each device on the loop/logic diagrams must be signed off by the Engineer as being acceptable. Testing shall be done from the signal source (transmitter) to the Data Acquisition and Process Control System including all field wiring.

- B. If, during running of the tests one or more points appear to be out by more than the specified amount, the system supplier's servicemen shall make such adjustments or alterations as are necessary to bring equipment up to Specification performance. Following such adjustment, the tests shall be repeated for all specified points to insure compliance.

3.04 TRAINING

- A. The Contractor shall furnish a system supplier's representative for a field training program to be run at the Owner's site and consist of up to one (1) day instruction for the Owner's personnel. The program shall cover instrumentation debugging, troubleshooting, calibration and maintenance procedures and system operation. This training program will be held at a time chosen by the Owner and will be exclusive of any instruction given at the time of system start up.

END OF SECTION

SECTION 13420 - INSTRUMENTATION AND CONTROLS - FIELD INSTRUMENTS AND PANELS

PART 1 - GENERAL

1.01 SCOPE OF WORK

- A. This Section covers work related to the furnishing, installation, and testing of the various field elements and panels to be supplied.
- B. All equipment, materials, programming and services hereinafter termed "the system", shall be integrated by the control system integrator who, with the Contractor, shall coordinate and have responsibility for interconnecting with equipment now existing and/or being installed under this or other contracts as shown on the Contract Drawings.
- C. Auxiliary devices necessary for system operation or performance such as transducers or relays to interface with existing equipment or equipment provided under other sections of this Specification shall be included whether specified or not.
- D. The Instrumentation and Control System shall be furnished by a single prequalified System Integrator (SI) who shall provide all of the services, equipment and appurtenances required to achieve a fully integrated and operational system. To facilitate the Owner's future operation and maintenance, products shall be of the same major instrumentation manufacturer with panel mounted devices of the same type and model as far as possible.

PART 2 - PRODUCTS

2.01 SCOPE OF WORK

- A. RTU PANEL:

Provide RTU Panel with Input/Output (I/O) connections to lift station Pump Control Panel for lift station control and monitoring telemetry, as follows:

- 1. Enclosure type:
 - a. Hoffman, Rittal, or approved equal
 - b. NEMA 4X, 316 SS
 - c. 20% spare space to be provided in panel
 - d. All discrete and analog outputs to be individually fused
 - e. All wire terminations to use wire ferrules
 - f. Door to have handle with latch installed
- 2. PLC:
 - a. Emerson ControlWave Micro Model # CWM-2-0-07-00-2-0-2-00-21-24, no equal
 - b. 4-Slot Rack
 - c. Slot # 1 - PSSM: 24V Syst. Cont. w/o key lock, with display interface
 - d. Slot # 2 - CPU: Micro 150 without gas calcs, 2Mb SR, 64Mb SDR, 16Mb Flash, (1) ENET, (2) RS-232, (1) RS-485
 - e. Slot # 3 - I/O Module: (6) Discrete Configurable I/O, (4) Analog Inputs, (2) HSC
 - f. Slot #4 - I/O Module: (16) Discrete Inputs

- g. Power for each module to be individually fused
- 3. UPS DC-DC Power Supply:
 - a. Puls Model # UB10.241, or approved equal
 - b. 24VDC, 12 Volt Battery Supply
 - c. Single external 12VDC backup battery requirement
- 4. Battery
 - a. Powersonic Model # PSH-1255FR, or approved equal
 - b. 12V, 6AH, Sealed Lead Acid, Quick Disc. Tabs
 - c. 30-Minute minimum emergency backup run-time
- 5. Power Supply:
 - a. Phoenix Contact Model # 2902993
 - b. 100W, 24VDC Output, 240/120 VAC Input, or approved equal
- 6. Panel Surge Arrestors
 - a. 120VAC: Phoenix Contact Plugtrab Model # 2856812 w/base, or approved equal
 - b. 240VAC: Phoenix Contact Plugtrab Model # 2858357 w/base, or approved equal
 - c. 24VDC: Phoenix Contact Plugtrab Model # 2856032 w/base, or approved equal
- 7. Antenna Surge Arrestor
 - a. Polyphaser IS-50NX series, or approved equal
 - b. Bulkhead mounting inside panel
- 8. Intrinsically Safe Barrier
 - a. MTL 7187+ Intrinsically Safe barrier, or approved equal
- B. RTU shall be the sole microprocessor controller for the lift station. Control scheme based on PRIMARY level control signal from submersible transducer. SECONDARY level control shall be from level floats. RTU panel to interface with the equipment in the Pump Control panel.
- C. RTU physical I/O to include utilizing interposing relays, as needed, at a minimum:
 - 1. DISCRETE INPUTS:
 - a. Pump P1 RUNNING
 - b. Pump P2 RUNNING
 - c. Pump P1 in AUTO
 - d. Pump P2 in AUTO
 - e. Pump P1 MTR FAULT
 - f. Pump P2 MTR FAULT
 - g. Phase Monitor Alarm
 - h. Wetwell Pump OFF Float
 - i. Wetwell Pump LEAD Pump Float
 - j. Wetwell Pump LAG Pump Float

- k. Wetwell High Level Alarm Float
 - l. AC Surge Suppressor FAULT
 - m. UPS - Buffering (AC FAIL – Operating on Battery)
 - n. UPS - Ready
 - o. UPS - Replace Battery
 - p. Master Control Relay status
- 2. DISCRETE OUTPUTS:
 - a. Pump P1 START
 - b. Pump P2 START
 - c. ALARM
- 3. ANALOG INPUTS:
 - a. Wetwell Level
 - b. Local Water Pressure (0-100 PSI)
 - c. Lift Station Total Current (0 – xxx Amps), if available
- D. The Duplex Pump Control Panel shall be provided by the pump supplier. Pump Control panel to include all necessary motor controls for the pumps, including Phase Monitor, Current Transducer for Main Power, Master Control relay, and 10A/120VAC circuit breaker for RTU panel power.
- E. SI is responsible for integration of lift station controls with other vendor's equipment to deliver a complete and operable system.
- F. SI is responsible for all programming of both the existing IFIX Ver. 4.0 HMI SCADA and Central Telemetry Unit (CTU) at the Water Plant and IFIX Ver. X at the Wastewater Plant related to monitoring, manual control, and alarms from the CTU to support the addition of the new lift station controller. HMI shall have ability to issue pump start/stop commands and adjust lead/lag level setpoints. HMI shall provide separate alarms for communications loss, wetwell high level, AC power loss, phase loss, and other relevant alarms from RTU.
- G. Antenna Cable:
 - 1. 1/2", foam dielectric, 50 ohm, type N connectors.
 - 2. Attenuation: 0.815 dB / 100 ft at 150 MHz.
 - 3. Shall be Andrew, Helix, LDF4-50A.
- H. Antenna Cable Connectors:
 - 1. Captivated connectors suitable for antenna cable.
 - 2. Shall be Andrew 1/2-inch connectors, L4PNM-RC/L4PNF-RC
- I. Antenna Cable Surge Protector:
 - 1. Selected for application and cable size, bulkhead mount.
 - 2. Shall be combined with connector selections to allow operation with surge arrestor bypassed.
 - 3. Shall be Polyphaser, IS-50NX series or approved equal.

- J. Antenna cable transmission accessories (hangers, cable ground kits, weather-proofing kits, etc.) shall be provided by Andrew or approved equal. Accessories shall be furnished and installed as recommended by the manufacturer for the design conditions specified.
- K. Existing antenna and tower to be reused.
- L. Backup Level Float Switch (Suspended Float Type):
 - 1. Float switches shall be of the non-mercury displacement type, encapsulated in polypropylene or vinyl floats; float switches shall be certified for use for potable water systems.
 - 2. Units shall be waterproof rated IP 68, shockproof, explosion-proof and equipped with sufficient submersible cable to extend to the control panel or junction box without splicing.
 - 3. Any required weights shall be provided. Switches shall be suspended on a suitable rack or rail of stainless steel construction.
 - 4. Safety barrier shall be used.
 - 5. Suspended type float switches shall be Flygt ENM-10, Anchor Scientific Roto-Float, or approved equal.
- M. Level Transmitter:
 - 1. Manufacturers:
 - a. MJK Model 3400 Hydrostatic Level Transmitter
 - 2. System Description:
 - a. The level transmitter shall measure level from 0 to 12 inch through 0 to 1000 feet as specified at the time of ordering.
 - b. The level transmitter shall have equal to or better than $\pm 0.1\%$ full scale accuracy, less than $0.015\%/^{\circ}\text{F}$ drift, direct air pressure compensation, temperature compensation, and less than 0.1% drift during the first year of operation.
 - c. The level transmitter shall produce a linear 4-20mA signal proportional to the measured level, and capable of transmission over a maximum 600-ohm loop resistance. The signal shall be transmitted as indicated on the drawings.
 - d. The level transmitter shall have a ceramic diaphragm in an iron rod reinforced NEMA 6P PSS (Ryton) housing.
 - e. The level transmitter shall have an oil resistant Polyurathane jacketed, 2X AWG-20 wire and 5 x30AWG shielded cable, with a 2000 lb. pull strength, and with internal and external dust and water barriers on the breather tube.
 - f. The level transmitter shall have CE approvals EN50081-1 and EN50082-1.
 - g. The level transmitter shall be UL certified and approved for use in Class 1 Division 1 Groups A-D hazardous atmospheres.

- h. The level transmitter shall have an operating temperature range from 14 to 158°F.
- i. The level transmitter shall be 10-29VDC loop powered from the flow converter via an intrinsically safe barrier.

3. Materials:

- a. All materials shall be supplied by one manufacturer to ensure consistent fit and system-wide functioning.
- b. Provide:
 - i. Hydrostatic level transmitter with required measurement range.
 - ii. Hydrostatic level transmitter manufacturer's recommended cable mounting.
 - iii. All necessary wires and hardware necessary for installation and operation.

2.02 LIGHTNING/SURGE PROTECTION

A. General

- 1. Lightning/surge protection shall be provided to protect the electronic instrumentation system from induced surges propagating along the analog and discrete signal and power supply lines. The protection systems shall be such that the protection level shall not interfere with normal operation, but shall be lower than the instrument surge withstand level and be maintenance free and self-restoring. Field-mounted instruments shall be housed in a suitable metallic case, properly grounded. Ground wires for all surge protectors shall be connected to a reliable earth ground with dedicated ground wires. Surge protectors shall be mounted within the instrument enclosure or a separate NEMA 4X junction box coupled to the enclosure. The units shall be Eaton, or equal.

B. Power Supply

- 1. Protection of all alternating current (AC) instrument power supply lines shall be provided. Panels and outdoor field instruments shall be protected by surge suppressors.

C. Signal Line

- 1. Protection of all outdoor field I/O shall be provided. Protection devices shall be installed at both ends and as close to the instrument being protected as possible. Where signal lines enter control rooms through an interface cabinet, the protection devices shall be mounted inside the interface cabinet.

D. Warranty

1. A five year warranty shall be provided by the surge/lightning suppression equipment manufacturer.

PART 3- EXECUTION - NOT APPLICABLE

END OF SECTION

DIVISION 15

MECHANICAL

SECTION 15000 – MECHANICAL – GENERAL REQUIREMENTS

PART 1 – GENERAL

1.01 DESCRIPTION

A. Scope of Work:

1. All equipment furnished and installed under this Contract shall conform to the general stipulations set forth in this Section except as otherwise specified in other Sections.
2. CONTRACTOR shall coordinate all details of equipment with other related parts of the Work, including verification that all structures, piping, wiring, and equipment components are compatible. CONTRACTOR shall be responsible for all structural and other alterations in the Work required to accommodate equipment differing in dimensions or other characteristics from that contemplated in the Contract Drawings or Specifications.

B. Related Work Described Elsewhere: Other sections directly referenced in this section include the following:

1. General Requirements: Division 1.
2. Concrete: Division 3 (if applicable).
3. Painting: Division 9 (if applicable).

C. Contract Drawings and Specifications: The Contract Drawings and Specifications shall be considered as complementary, one to the other, so that materials and work indicated, called for, or implied by the one and not by the other shall be supplied and installed as though specifically called for by both. The Contract Drawings are to be considered diagrammatic, not necessarily showing in detail or to scale all of the equipment or minor items. In the event of discrepancies between the Contract Drawings and Specifications, or between either of these and any regulations or ordinances governing work of these specifications, the bidder shall notify the Owner/Engineer in ample time to permit revisions.

1.02 QUALITY ASSURANCE

A. Materials and Equipment: Unless otherwise specified, all materials and equipment furnished for permanent installation in the work shall conform to applicable standards and specifications and shall be new, unused, and undamaged when installed or otherwise incorporated in the work. No such material or equipment shall be used by the CONTRACTOR for any purpose other than that intended or specified, unless such use is specifically authorized in writing by the OWNER. No material shall be delivered to the work site without prior acceptance of drawings and data by the Owner/Engineer.

B. Equivalent Materials and Equipment:

1. Whenever a material or article is specified or described by using the name of a proprietary product or the name of a particular manufacturer or vendor, the specific item mentioned shall be understood as establishing the type, function, and quality desired. Other manufacturers' products will be accepted provided sufficient information is submitted to allow the Owner/Engineer to determine that the products proposed are equivalent to those named. Such items shall be submitted for review in accordance with the General Conditions.

2. Requests for review of equivalency will not be accepted from anyone except the CONTRACTOR and such requests will not be considered until after the Contract has been awarded.
- C. Governing Standards: Equipment and appurtenances shall be designed in conformity with ANSI, ASME, ASTM, IEEE, NEMA, OSHA, AGMA, and other generally accepted applicable standards. They shall be of rugged construction and of sufficient strength to withstand all stresses which may occur during fabrication, testing, transportation, installation, and all conditions or operations. All bearings and moving parts shall be adequately protected against wear by bushings or other acceptable means. Provisions shall be made for adequate lubrication with readily accessible means.
- D. Tolerances: Machinery parts shall conform to the dimensions indicated on the drawings within allowable tolerances. Protruding members such as joints, corners, and gear covers shall be finished in appearance. All exposed welds shall be ground smooth and the corners of structural shapes shall be rounded or chamfered.
- E. Clearances: Ample clearances shall be provided for inspection and adjustment. All equipment shall fit the allotted space and shall leave reasonable access room for servicing and repairs. Greater space and room required by substituted equipment shall be provided by the CONTRACTOR and at his expense.
- F. Testing:
 1. When the equipment is specified to be factory tested, the results of the tests shall be submitted to the Owner/Engineer and approval of the test results shall be obtained before shipment of the equipment.
 2. When an item of equipment, including controls and instrumentation, has been completely erected, the CONTRACTOR shall notify the Owner/Engineer, who will designate a time to make such tests as required, and operate the item to the satisfaction of the Construction Inspector. All testing shall be done in the presence of the Construction Inspector. "Completely erected" shall mean that the installation is erected, all necessary adjustments have been made, all required utility connections have been made, required lubricants and hydraulic fluid have been added and the unit has been cleaned and painted.
- G. Pressure Test:
 1. After installation, all piping shall be pressure tested. Piping shall be tested in accordance with Section 02661: Pressure Testing of Piping.
 2. All tests shall be made in the presence of and to the satisfaction of the Construction Inspector and also, to the satisfaction of any local or state inspector having jurisdiction.
 - a. Provide not less than three days notice to the Construction Inspector and the authority having jurisdiction when it is proposed to make the tests.
 - b. Any piping or equipment that has been left unprotected and subject to mechanical or other injury in the opinion of the Construction Inspector shall be retested in part or in whole as directed by the Construction Inspector.
 - c. The piping systems may be tested in sections as the work progresses but no joint or portion of the system shall be left untested.

3. All elements within the system that may be damaged by the testing operation shall be removed or otherwise protected during the operation.
4. All defects and leaks observed during the tests shall be corrected and made tight in an approved manner and the tests repeated until the system is proven tight.
5. Repair all damage done to existing or adjacent work or materials due to or on account of the tests.
6. Provide test pumps, gauges, or other instruments and equipment required for the performance of all tests. Provide all temporary bracing, test plugs, additional restraint, and thrust blocking which may be required for test pressures above normal working pressures.
7. All tests shall be maintained for as long a time as required to detect all defects and leaks but not less than the duration specified for each type of pipe or piping system in this Division.

H. Failure of Test:

1. Defects: Any defects in the equipment, or deviations from the guarantees or requirements of the Specifications, shall be promptly corrected by the CONTRACTOR by replacements or otherwise. The decision of the Owner/Engineer as to whether or not the CONTRACTOR has fulfilled his obligations under the Contract shall be final and conclusive. If the CONTRACTOR fails to correct any defects or deviations, or if the replaced equipment when tested shall fail again to meet the guarantees or specified requirements, the OWNER, notwithstanding his having made partial payment for work and materials which have entered into the manufacturer for such equipment, may reject that equipment and order the CONTRACTOR to remove it from the premises at the CONTRACTOR'S expense.
2. Rejection of Equipment: In case the OWNER rejects a particular item of equipment, then the CONTRACTOR hereby agrees to repay to the OWNER all sums of money paid to him to deliver to the CONTRACTOR a bill of sale of all his rights, title, and interest in and to the rejected equipment provided, however that the equipment shall not be removed from the premises until the OWNER obtains from other sources other equipment to take the place of that rejected. The bill of sale shall not abrogate the OWNER'S right to recover damages for delays, losses or other conditions arising out of the basic Contract. The OWNER hereby agrees to obtain the alternate equipment within a reasonable time and the CONTRACTOR agrees that the OWNER may use the original equipment furnished by him without rental or other charge until the other equipment is obtained.

- I. Responsibility During Tests: The CONTRACTOR shall be fully responsible for the proper operation of equipment during tests and instruction periods and shall neither have nor make any claim for damage which may occur to equipment prior to the time when the OWNER formally takes over the operation thereof.

J. Acceptance of Materials:

1. Only new materials and equipment shall be incorporated in the work. All materials and equipment furnished by the CONTRACTOR shall be subject to the inspection and acceptance of the OWNER. No material shall be delivered to the work without prior submittal approval of the Owner/Engineer.
2. The CONTRACTOR shall submit to the Owner/Engineer data relating to materials and equipment he proposes to furnish for the work. Such data shall be in sufficient detail to enable the Owner/Engineer to identify the particular product and to form an opinion as to its conformity to the Specifications.
3. Facilities and labor for handling and inspection of all materials and equipment shall be furnished by the CONTRACTOR. If the Owner/Engineer requires, either prior to

beginning or during the progress of the work, the CONTRACTOR shall submit samples of materials for such special test as may be necessary to demonstrate that they conform to the Specification. Such sample shall be furnished, stored, packed, and shipped as directed at the CONTRACTOR'S expense. Except as otherwise noted, the OWNER will make arrangements for and pay for tests.

4. The CONTRACTOR shall submit data and samples sufficiently early to permit consideration and acceptance before materials are necessary for incorporation in the work.

K. Safety Requirements:

1. In addition to the components shown and specified, all machinery and equipment shall be safeguarded in accordance with the safety features required by the current codes and regulations of ANSI, OSHA, and local industrial codes.
2. The CONTRACTOR shall provide for each V-belt drive or rotating shaft a protective guard which shall be securely bolted to the floor or apparatus. The guard shall completely enclose drives and pulleys and be constructed to comply with all safety requirements.
3. For double inlet fans, the belt guard shall be arranged so as not to restrict the air flow into the fan inlet. Guards shall not interfere with lubrication of equipment.

1.03 SUBMITTALS (See Section 01310: Administrative Requirements)

1.04 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Packaging: All equipment shall be suitably packaged to facilitate handling and protect against damage during transit and storage. All equipment shall be boxed, crated, or otherwise completely enclosed and protected during shipment, handling, and storage. All equipment shall be protected from exposure to the elements and shall be kept thoroughly dry at all times.
- B. Protection: All machined surfaces and shafting shall be cleaned and protected from corrosion by the proper type and amount of coating necessary to assure protection during shipment and prior to installation. Painted surfaces shall be protected against impact, abrasion, discoloration, and other damage as specified in Sections 09900: Painting and Special Coatings and 09905: Piping and Equipment Identification System (if applicable). All painted surfaces which are damaged prior to acceptance of equipment shall be repainted to the satisfaction of Owner/Engineer.
- C. Lubrication: Grease and lubricating oil shall be applied to all bearings and similar items as necessary to prevent damage during shipment and storage.
- D. Marking: Each item of equipment shall be tagged or marked as identified in the delivery schedule or on the Shop Drawings. Complete packing lists and bills of material shall be included with each shipment.
- E. Fabricated sub-assemblies, if any, shall be shipped in convenient sections as permitted by carrier regulations and shall be properly match-marked for ease of field erection.
- F. Responsibility:
 1. The CONTRACTOR shall be responsible for all material, equipment, and supplies sold and delivered to the site under this Contract until final inspection of the work and acceptance thereof by the OWNER. In the event any such material, equipment, and supplies are lost, stolen, damaged, or destroyed prior to final inspection and

- acceptance, the CONTRACTOR shall replace same without additional cost to the OWNER.
2. Should the CONTRACTOR fail to take proper action on storage and handling of equipment supplied under this Contract within seven days after written notice to do so has been given, the OWNER retains the right to correct all deficiencies noted in previously transmitted written notice and deduct the cost associated with these corrections from the CONTRACTOR'S Contract. These costs may be comprised of expenditures for labor, equipment usage, administrative, clerical, engineering, and any other costs associated with making the necessary corrections.
- G. Delivery: The CONTRACTOR shall arrange deliveries of products in accordance with construction schedules and coordinate to avoid conflict with work and condition at the site.
1. The CONTRACTOR shall deliver products in undamaged condition, in manufacturer's original containers or packaging, with identifying labels intact and legible.
 2. Immediately on delivery, the CONTRACTOR shall inspect shipments to assure compliance with requirements of Contract Documents and accepted submittals, and that products are properly protected and undamaged.
 3. Under no circumstances shall the CONTRACTOR deliver equipment to the site more than one month prior to installation without written authorization from the Construction Inspector. Operation and maintenance data shall be submitted to the Owner/Engineer for review prior to shipment of equipment.
- H. Storage and Protection of Products:
1. The CONTRACTOR shall furnish a covered, weather-protected storage structure providing a clean, dry noncorrosive environment for all mechanical equipment, valves, architectural items, electrical and instrumentation equipment, and special equipment to be incorporated into this project. Storage of equipment shall be in strict accordance with the "Instructions for Storage" of each equipment supplier and manufacturer including connection of space heaters, and placing of storage lubricants in equipment. Corroded, damaged, or deteriorated equipment and parts shall be replaced before acceptance of the project. Equipment and materials not properly stored will not be included in a payment estimate.
 - a. The CONTRACTOR shall store products subject to damage by the elements in weathertight enclosures.
 - b. The CONTRACTOR shall maintain temperature and humidity within the ranges required by manufacturer's instructions.
 - c. The CONTRACTOR shall store fabricated products above the ground, on blocking or skids, to prevent soiling or staining. The CONTRACTOR shall cover products which are subject to deterioration with impervious sheet coverings and provide adequate ventilation to avoid condensation.
 - d. The CONTRACTOR shall store loose granular materials in a well-drained area on solid surfaces to prevent mixing with foreign matter.
 2. All materials and equipment to be incorporated in the work shall be handled and stored by the CONTRACTOR before, during, and after shipment in a manner to prevent warping, twisting, bending, breaking, chipping, rusting, and any injury, theft, or damage of any kind whatsoever to the material or equipment.

3. Cement, sand, lime shall be stored under a roof and off the ground, and shall be kept completely dry at all times. All structural and miscellaneous steel and reinforcing steel shall be stored off the ground or otherwise to prevent accumulations of dirt, or grease, and in a position to prevent accumulations of standing water, staining, chipping, or cracking. Brick, block, and similar masonry products shall be handled and stored in a manner to reduce breakage, chipping, cracking, and spalling to a minimum.
4. All materials which, in the opinion of the Construction Inspector, have become damaged and are unfit for the use intended or specified, shall be promptly removed from the site of the work, and the CONTRACTOR shall receive no compensation for the damaged material or its removal.
5. The CONTRACTOR shall arrange storage in a manner to provide easy access for inspection. The CONTRACTOR shall make periodic inspections of stored products to assure products are maintained under specified conditions, and free from damage or deterioration.
6. Protection After Installation: The CONTRACTOR shall provide substantial coverings as necessary to protect installed products from damage from traffic and subsequent construction operations. The CONTRACTOR shall remove covering when no longer needed.

1.05 WARRANTY AND GUARANTEES

- A. The manufacturer's written warranty shall be submitted for all major pieces of equipment, as specified in Section 01740: Warranties. The manufacturer's warranty period shall be concurrent with the CONTRACTOR'S correction period for one year after the time of completion and acceptance.

PART 2 – PRODUCTS

2.01 FABRICATION AND MANUFACTURE

- A. Workmanship and Materials:
 1. CONTRACTOR shall guarantee all equipment against faulty or inadequate design, improper assembly or erection, defective workmanship or materials, and leakage, breakage or other failure. Materials shall be suitable for service conditions.
 2. All equipment shall be designed, fabricated, and assembled in accordance with recognized and acceptable engineering and shop practice. Individual parts shall be manufactured to standard sizes and gages so that repair parts, furnished at any time, can be installed in the field. Like parts of duplicate units shall be interchangeable. Equipment shall not have been in service at any time prior to delivery, except as required by tests.

PART 3 – EXECUTION

(Not Applicable)

END OF SECTION

SECTION 15066 – STAINLESS STEEL PIPE AND FITTINGS

PART 1 – GENERAL

1.01 DESCRIPTION

A. Scope of Work

Furnish all labor, materials, equipment and incidentals required to supply, store, install, clean, and test all stainless steel pipe and fittings where shown on the Contract Drawings and as specified herein.

B. Related Work Specified Elsewhere

1. Section 11310 – Submersible, Non Clog Wastewater Pump
2. Section 15101 – Gate Valves and Appurtenances
3. Section 15110 – Check Valves

C. The Contract Drawings are based on installation of Schedule 40 stainless steel piping and fittings for the wet well discharge piping and all exposed piping.

1.02 QUALITY ASSURANCE

A. All stainless steel pipe, fittings and appurtenances shall be furnished by a single manufacturer who is fully experienced, reputable, and qualified in the manufacture of the items to be furnished. The stainless steel pipe, fittings and appurtenances shall be fabricated and installed in accordance with the best practices and methods and shall comply with these Specifications.

Stainless steel pipe and fittings shall be supplied by PBM Constructors, Inc., Felker Brothers Corporation, Douglas Brothers, Aerex Industries, Inc. or an City/Engineer approved equal.

B. Welder Qualifications: All welding shall be done by certified welders, welding operators, and tackers who have had adequate experience in the methods and materials to be used. All field welding shall be per the pipe manufacturer's written instructions.

1.03 SUBMITTALS

A. The CONTRACTOR shall submit shop drawings of pipe, fittings, and valves in accordance with Section 01310, Administrative Requirements and the following supplemental requirements as applicable.

1. Certified dimensional drawings of all valves, fittings, and appurtenances.
2. Joint and pipe/fitting wall construction details which indicate the type and thickness of pipe, manufacturing tolerances, and all other pertinent information required for the manufacture of the product.
3. Fittings and specials details such as elbows, wyes, tees, outlets, connections, test bulkheads, and nozzles or other specials where shown on the Contract Drawings which indicate amount and position of all reinforcement. All fittings and specials shall be properly reinforced to withstand the internal pressure, both circumferential and longitudinal.
4. Submit materials list showing material of pipe and fittings with ASTM reference and grade.

1.04 PRODUCT DELIVERY, STORAGE AND HANDLING

The equipment provided under this Section shall be shipped, handled and stored in accordance with the manufacturer's written instructions. Exercise care in transporting and handling pipe and fittings in order to avoid damage to materials. Lifting shall be by straps or on skids when hand lifting is not feasible. Dropping shall not be permitted. Store pipe in a dry covered area. Pipe shall not be stained or scratched. Damaged pipe and fittings shall be replaced prior to installation. Pipe and fittings shall not come in contact with other metals such as but not limited to forklift forks.

PART 2 – PRODUCTS

2.01 MATERIALS AND EQUIPMENT

- A. Stainless Steel Pipe and Fittings shall be Schedule 40 ASTM 316 and suitable for 100 psi operating pressure and 150 psi test pressure. All stainless steel pipe and fittings shall be fabricated from Type 316L extra low carbon grade austenitic stainless steel sheet.
 1. Pipe shall conform to ASTM A-312 and be die-formed or rolled true to dimension and round.
 2. The two edges of sheet shall be brought to line so as not to leave a shoulder on the inside of the pipe. Fittings shall conform to ASTM A-403.
 3. Ends of pipe and fittings shall be true and perpendicular to the longitudinal axis with the edges deburred.
 4. Longitudinal seams on pipe and fittings shall be welded by either the tungsten gas plasma, flux coved or the metallic gas method. Welding rod or wire shall be of the same composition or superior to the pipe and fittings material. Weld deposit at the seams shall have a slight crown on both sides of the weld and no cracks or crevices shall be allowed. Excessive weld deposits, slag, weld spatter and projections into interior of pipe shall be removed by grinding. The interior welds shall be smooth, even and shall not have an internal bead higher than $\frac{1}{16}$ inch.
 5. All pieces shall be marked with gauge and type of stainless steel.
 6. All stainless steel piping shall have a minimum nominal wall thickness dimensioned as shown on the Contract Drawings. Actual Schedule/Gauge/Plate and Wall Thickness shall be verified by the manufacturer's shop drawings.
 7. Fittings shall be manufactured in accordance with ASTM A-403 of the same raw material and in the same thickness as the pipe. Long radius elbows up

to twenty four (24) inch diameter shall be smooth flow (i.e., centerline to end of elbow equals 1.5 times the nominal pipe size). All short radius, special radius, and reducing elbows and long radius elbows greater than twenty-four (24) inch diameter shall be of mitered construction with at least five (5) miter sections for 90° bends, three (3) mitered sections for 45° and 60° bends, and two (2) mitered sections for 30° and smaller bends. Reducers shall be straight tapered, and of the cone type. Tees, crosses, laterals and wyes shall be shop fabricated from pipe.

8. Fittings three inches and smaller shall be threaded conforming to ASTM A-182 forged, Class WP, same material and wall thickness as the pipe, conforming to ANSI B16.11.
9. Fittings for above ground or exposed pipe larger than three (3) inches shall be flanged, as shown on the Contract Drawings, conforming to ASTM A-403, and of the same material and wall thickness as the pipe, conforming to ANSI B16.9. Elbows shall be of the long radius type.

B. Joints

1. Joints for pipes three (3) inches and smaller shall be threaded or socket welded, of the same material as the pipe, 3,000 pound WOG, conforming to ANSI B16.11.
2. Joints for submerged pipe shall be flanged.
3. Joints for aboveground or exposed pipe shall be flanged.

C. Flanges

1. Provide weld-neck flanges conforming to ANSI B16.5 for piping three (3) inches and smaller to connect to flanged valves, fittings, or equipment. Provide slip-on flanges for piping larger than three (3) inches. Flanges shall be Class 150 per ANSI B16.5 unless specified otherwise. Material for weld-neck and slip-on flanges shall conform to ASTM A-182, Grade F316. Flanges shall match the connecting flanges on the adjacent fitting, valve or piece of equipment.
2. Where a raised face steel flange connects to a flat face flange, remove the raised face on the steel flange.
3. Field welding will be allowed when approved by the Engineer. All field welding shall be performed by an AWS Certified welder and shall be tested for verification of weld.
4. Pipe ends shall be prepared for either mechanical or flexible couplings where shown on the Contract Drawings.
5. Pipe and fittings shall be cleaned and acid pickled after manufacture in accordance with Article 3.01 of this specification.
6. Dead ends of pipe runs shall have flanged ASME Code dished heads designed to meet the test pressures for the various pipes.

D. Mechanical Couplings (N/A)

1. If provided, mechanical couplings shall be provided. Gaskets shall be suitable for the service conditions.
2. The pipe ends shall be roll grooved to the coupling manufacturer's

specifications for piping eight (8) inches and under. Where roll grooving is impractical, the pipe shall have heavy wall machine grooved pipe nipples or machined ring collars fully welded to the pipe or fitting. Nipples shall be taper bored to the internal diameter (ID) of the adjoining pipe to allow full weld penetration. Collars shall be welded on both sides to the piping. Nipples and collars shall be of the same alloy as the piping.

F. Flanged Fittings

1. If flanged fittings are provided, the gaskets shall be suitable for the service conditions.

2.02 ACCESSORIES

A. Bolts and Nuts for Flanges

Bolts and nuts for flanges shall be Type 316 stainless steel conforming to ASTM A193, Grade B8M, for bolts and ASTM A 194, Grade 8M, for nuts. Both the bolts and nuts shall be passivated and electropolished in order to produce a lasting bright finish.

B. Gaskets for Flanges

Provide full-face gaskets for flat faced flanges. Provide ring gaskets for raised face flanges. All gaskets shall be for high temperature air service.

2.03 QUALITY CONTROL

- A. The CONTRACTOR shall follow the manufacturer's and supplier's recommended product quality control specifics as required for the Project.
- B. The piping subcontractor shall submit a list of welders who will work on this Project along with a welder's current certification (less than one year old) and two sample weld coupons. Only approved certified welders will be allowed to work on this Project.
- C. The weld should be made as rapidly as possible, with the least amount of generated heat.
- D. At random, CONTRACTOR shall visually examine, via x-ray, approximately ten percent (10%) of all welds.
- E. All shop welds shall be visually inspected by the fabricator's quality control division. Each weld shall be marked with an inspection stamp, certifying that the weld is acceptable.
- F. All pipes shall be pressure tested for two hours at 150 psi.

2.04 PIPE EXPANSION JOINTS

- A. Pipe expansion joints shall be EPPM rubber expansion joints with ductile iron (baked enamel) retaining rings and with a factory applied hypalon coating.
- B. Pipe expansion joints shall be Mercer Style 451 or equal.
- C. 316 stainless steel retaining rods, suitable for 150 psi, shall be provided with expansion joints.

PART 3 – EXECUTION

3.01 PREPARATION

A. Descaling, Cleaning, and Passivation

- 1. Following fabrication, individual stainless steel pipe lengths and fittings shall be cleaned and descaled in accordance with the requirements of ASTM A-380. Descaling shall include immersion in an appropriate pickling solution for the type and grade of material being treated. Caution shall be taken to avoid over-pickling.
- 2. The type of acid used, acid concentration, solution temperature, and contact time shall be consistent with industry standards for such work. In addition to pickling, piping and fittings shall be scrubbed and washed until removed.
- 3. After chemical descaling, surfaces shall be thoroughly rinsed to remove residual chemicals. Surfaces shall not be permitted to dry between successive steps of the acid descaling and rinsing procedure. Following the final rinse, thorough air drying shall be performed.

B. Handling and Storage

- 1. Extreme care shall be used to avoid the contact of any ferrous materials with the stainless steel piping. All saws, drills, files, wire brushes, etc. shall be used for stainless steel piping only. Pipe storage and fabrication racks shall be non-ferrous, stainless steel or rubber lined. Nylon slings or straps shall be used for handling stainless steel piping. Contact with ferrous items may cause rusting of iron particles embedded in the piping walls. After installation, the CONTRACTOR shall wash and rinse all foreign matter from the piping surface. If rusting of embedded iron occurs, the CONTRACTOR shall pickle the affected surface with Oakite Deoxidizer SS or equal, scrub with stainless steel brushes and rinse clean.
- 2. The use of chains, hooks, or other equipment which might injure the pipe will not be permitted. All other pipe handling equipment and methods shall be acceptable to the Engineer.
- 3. All fabricated piping shall have openings plugged and flanges screened for storage and/or transport after fabrication.
- 4. The CONTRACTOR shall be fully liable for the cost of replacement or repair of pipe which is damaged.

3.02 INSTALLATION

Stainless steel piping shall be installed true to alignment and rigidly supported. After installation, completed pipelines shall be washed clean with steam or hot water to remove any foreign material picked up during transportation.

A. Installation Welded Piping (3" and smaller)

1. Joint welding shall be in accordance with the American Welding Society (AWS) Standards. The strength of the weld shall develop the strength of the pipe.
2. All field welds shall be treated with pickling paste, scrubbed and washed with stainless wire brushes until clean.

B. Installation Threaded Piping (3" and smaller)

1. Ream, clean and remove burrs from threaded straddling the pipe's horizontal and vertical centerline.
2. Install pipe without springing, forcing, or stressing the pipe or any adjacent connecting valves or equipment.

C. Fabrication, Assembly and Erection of Welded Piping slag by chipping or grinding. Surfaces shall be clean of paint, oil, rust, scale, slag, and other material detrimental to welding.

1. Fabrication shall comply with ANSI B31.3, Chapter V. The minimum number of passes for welded joints shall be as follows:

Steel Cylinder Thickness (inch)	Minimum Number of Passes for Welds
Less than 0.1875	1
0.1875 through 0.25	2
Greater than 0.25	3
Welds shall be full circumferential	

2. Use the shielded metal arc welding (SMAW) or the tungsten inert gas (TIG) process for welding. Use the SMAW process for any pipe. Use the TIG process only on pipe having a maximum thickness of Schedule 10S.
3. Welding preparation shall comply with ANSI B31.3, paragraph 327.3. Limitations on imperfections in welds shall conform to the requirements in ANSI B31.3, Tables 327.4.1A and 327.4.1a, and paragraph 327.4 for visual examination. Identify welds in accordance with ANSI B31.3, paragraph 327.4.

4. Clean each layer of deposited weld metal prior to depositing the next layer of weld metal, including the final pass, by a power-driven wire brush of the same material.
5. Welding electrodes shall comply with AWS A5.4. Bare wire shall comply with AWS AS.9.
6. The CONTRACTOR shall install the stainless steel piping system with minimal field welds in conformance with procedures detailed in the mechanical specifications.
7. Mark each weld (field and manufacturing facility) with symbol identifying welder and date of weld.
8. The stainless steel pipe shall not be painted.

END OF SECTION

SECTION 15100 - VALVES AND SPECIALTIES - GENERAL

PART 1 – GENERAL

1.01 DESCRIPTION

- A. Scope of Work: Furnish, install, support, and test valves, gates, cocks, stops, and faucets, when applicable, (hereinafter referred to as ("valves")) in the location(s) and of the size(s) and quantities shown on the Drawings and/or as directed by the Owner/Engineer.
- B. Related Work Described Elsewhere:
 - 1. Mechanical - General Requirements: Section 15000
 - 2. Gate Valves and Appurtenances: Section 15101
 - 3. Check Valves: Section 15110

1.02 QUALITY ASSURANCE

- A. Qualifications:
 - 1. All equipment furnished under this Specification shall be new and unused and shall be a standard product which has a successful record of reliable service in similar installations for a minimum of five (5) years.
 - 2. All valves of same type and duty shall be furnished by a single manufacturer.
- B. Standards:
 - 1. ANSI
 - 2. AISI
 - 3. SSPC
 - 4. AWWA

1.03 SUBMITTALS

- A. Materials and Shop Drawings: Copies of all materials required to establish compliance with the Specification shall be submitted in accordance with the provisions of Section 01310: Administrative Requirements. Submittals shall include at least the following:
 - 1. Certified shop drawings showing all important details of construction, dimensions (including laying length), and weight.
 - 2. Descriptive literature, bulletins, and/or catalogs showing all valve parts, and describing material of construction by material and specification (e.g., AISI).
 - 3. Valve coatings and linings, if any.
 - 4. A complete total bill of materials for all equipment.
 - 5. See individual sections for additional requirements.
- B. Operating Instructions: Copies of operating and maintenance instructions shall be furnished in accordance with Section 01730: Operation and Maintenance Data. These shall include equipment lists, descriptions, and information necessary to instruct operating and maintenance personnel unfamiliar with the valves.

1.04 PRODUCT DELIVERY, STORAGE AND HANDLING

A. Shipping:

1. All parts shall be properly protected so that no damage or deterioration will occur during a prolonged delay from the time of shipment until installation is completed.
2. Factory assembled parts and components shall be dismantled for shipment unless permission is received in writing from the Owner/Engineer.
3. Finished surfaces of all exposed openings shall be protected by wooden blanks, strongly built and securely bolted thereto.
4. Finished iron or steel surfaces not painted shall be properly protected to prevent rust and corrosion.
5. After hydrostatic or other tests, all entrapped water shall be drained prior to shipment, and proper care shall be taken to protect parts from the entrance of water during shipment, storage and handling.
6. Each box or package shall be properly marked to show its net weight in addition to its contents.

B. Storage:

1. Store valves and accessories in an area on the construction site protected from weather, moisture, or possible damage.
2. Do not store valves or accessories directly on the ground.

C. Handling:

1. Handle valves and accessories to prevent damage of any nature.
2. Carefully inspect all materials for:
 - a. Defects in workmanship and materials.
 - b. Removal of debris and foreign material in valve openings and seats.
 - c. Proper functioning of all operating mechanisms.
 - d. Tightness of all nuts and bolts.

1.05 WARRANTY AND GUARANTEES (See Section 01740: Warranties and Bonds).

PART 2 – PRODUCTS

2.01 MATERIALS

- A. Materials shall be as indicated in specific sections, or on the Drawings, and compatible with intended use.
- B. Valves shall have the name of the manufacturer and the size of the valve cast or molded onto the valve body or bonnet or shown on a permanently stainless steel attached plate.
- C. Bolts, washers, nuts, and gaskets for flanged valves shall be as described in the specific piping sections.
- D. Coat metal valves located above grade or in vaults and structures the same as the adjacent piping. Apply the specified prime coat at the place of manufacture. Apply finish coat in field. Finish coat shall match color of the adjacent piping.

PART 3 – EXECUTION

3.01 PREPARATION

- A. Apply a shop coat finish of asphalt varnish to:
 - 1. Interior surfaces of all valves except corrosion resistant or specially coated valves as specified.
 - 2. Exterior surfaces of buried or submerged valves.
 - 3. Miscellaneous piping appurtenances.
- B. Apply coats of paint primer and enamel to parts customarily finished at the shop.
- C. Apply a shop coat of grease or other suitable rust resistant coating to ferrous surfaces obviously not to be painted.
- D. Do not apply any coatings to valves that have a factory-applied epoxy coating inside and out.

3.02 INSTALLATION

- A. Install valves and accessories in strict accordance with manufacturer's instruction and recommendations, as shown on the Drawings and/or as directed by the Owner/Engineer.
- B. Carefully erect all valves and support them in their respective positions free from distortion and strain.
- C. Bolt holes of flanged valves shall straddle the horizontal and vertical centerlines of the pipe run to which the valves are attached. Clean flanges by wire brushing before installing flanged valves. Clean flange bolts and nuts by wire brushing, lubricate threads with oil and graphite, and tighten nuts uniformly and progressively. Clean threaded joints by wire brushing or swabbing. Apply Teflon joint compound or Teflon tape to pipe threads before installing threaded valves. Joints shall be watertight.
- D. Support all valves connected to pumps and equipment, and in piping systems that cannot support valves.
- E. Repair any scratches, marks and other types of surface damage etc., with original coating as supplied by the factory.

3.03 INSPECTION AND TESTING

- A. Check and adjust all valves and accessories for smooth operation.
- B. Test valves for leakage at the same time that connecting pipelines are tested. See Section 02661: Pressure Testing of Piping, for pressure testing requirements. Protect or isolate any parts of valves, operators, or control and instrument systems whose pressure rating is less than the pressure tests.
- C. If flanges leak under pressure testing, loosen or remove the nuts and bolts, reseal or replace the gasket, reinstall or retighten the bolts and nuts, and retest the joints.

END OF SECTION

SECTION 15101 - GATE VALVES AND APPURTENANCES

PART 1 – GENERAL

1.01 DESCRIPTION

- A. Scope of Work: The CONTRACTOR shall furnish and install all gate valves and appurtenances as shown on the Drawings and specified herein.

1.02 GENERAL REQUIREMENTS

- A. The CONTRACTOR'S attention is directed to the requirements of Section 15000 in regard to the general requirements for all equipment furnished and installed under this section of the specifications.
- B. The valves shall be furnished with end connections as shown on the Drawings. Flanged valves shall be faced and drilled to the ANSI B16.1-latest, Class 125 Standard. Mechanical joint and bell ends shall conform to ANSI A21.11 latest Standard. Threaded ends shall conform to ANSI B2.1-latest NPT Standard.
- C. All exposed nuts, bolts, springs, washers, etc., shall be 316 SS on above ground service and 316 SS on buried or submerged service.
- D. When extension stems are required, substantial, adjustable wall brackets and extension stems shall be furnished and located as directed. Extension stems shall be provided on all buried valves when the operating nut is deeper than 4 feet below the final grade.

PART 2 – PRODUCTS

2.01 GATE VALVES

- A. Gate valves 2 to 48 inches in diameter shall be designed for 250 psi maximum working pressure. When full open, gate valves shall have a clear waterway equal to the nominal diameter of the pipe. Valves, 2-inch to 48-inch shall be iron body, resilient-wedge gate valves with non-rising stems. All valves shall open by turning in a counter-clockwise direction. Valves shall have O-ring seals. Valves 2-inch to 48-inch shall conform to ANSI/AWWA C515. The operating nut or wheel shall have an arrow cast in the metal indicating the direction of opening. Each valve shall have the manufacturer's name, pressure rating, and year of manufacture cast on the body. Prior to shipment from the factory, each valve shall be tested by applying to it a hydraulic pressure equal to twice the specified working pressure.
- B. Gate valves smaller than 2 inches, unless otherwise noted on the Drawings, shall be all bronze/brass construction and shall conform to Federal Specification WW-V-54.
- C. All gate valves smaller than 2 inches shall be handwheel operated and if installed below ground shall have an adjustable valve box with cover. Minimum weight of valves shall be as follows:

VALVE SIZE IN INCHES	VALVE WEIGHT IN POUNDS
1/2	1.0
3/4	1.3
1	2.5
1-1/4	3.8

1-1/2	5.2
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- D. Buried Valves: Gate valves larger than 2" in size shall be mechanical joint and equipped with a two-inch operating nut and adjustable valve box and cover.
- E. Above Grade Valves: Gate valves located above grade or inside structures shall be handwheel operated, non-rising stem type with flanged ends.
- F. Valve Joints: All gate valves shall have either mechanical joint ends, flanged ends, or screw joints to fit the pipe run in which they are to be used, except valves installed on slip joint pipe shall have mechanical joint ends, unless otherwise specified.
- G. Manufacturers shall be limited to the following:
 - 1. Mueller Models A-2360, A-2361.
 - 2. M&H Model 4067, 7000.
 - 3. Kennedy KS-FW, KS-RW, R/W.
 - 4. American Flow Control Series 2500

2.02 ACCESSORIES

A. Valve Boxes

- 1. General: The CONTRACTOR shall furnish, assemble and place a valve box for each buried valve.
- 2. Valve Boxes: Adjustable screw type valve boxes of suitable length shall be used, having cast iron base, 5-1/4" shaft, center section and top section with cover. Cover shall be marked "Water" or "Sewer" as appropriate. The top section shall be adjustable for elevation and shall be set to allow equal movement above and below finished grade. The base shall be centered over the valve and shall be approximately on line with nut at top of valve stem and the entire assembly shall be plumb. The castings shall be manufactured of clean, even grain, gray cast iron conforming to ASTM Designation A48, Class 20B, Gray Iron Castings. The casting shall be smooth, true to pattern, free from blow holes, sand holes, projections, or other harmful defects. The valve boxes shall be coated with a single thin coat of coal tar pitch varnish before machining, so that machined seating surfaces will be free of any coating. The seating surfaces of both the cover and the jacket shall be machined to fit so that the cover will not rock after it has been seated in any position in its associated jacket.
- 3. The CONTRACTOR shall mount the valve box in a concrete collar with bronze disc giving the nomenclature of the valve. Refer to detail Drawings.

- B. Valve Coatings: All interior and exterior surfaces of valves for buried service shall have a factory-applied epoxy coating. The exterior of all above ground valves shall be shop painted with two coats of a primer compatible with the finish paint schedule.

PART 3 – EXECUTION

3.01 CLEANING AND FLUSHING

- A. All gate valves shall be thoroughly cleaned of all dirt, dust, oil, grease, and other foreign matter. This work shall be done with care to avoid damage to any inside coating.
- B. All gate valves shall be thoroughly flushed with clean water to clear the lines of foreign matter.

C. After cleaning, gate valves shall be tested for pressure and leakage.

3.02 FIELD TESTING

A. All gate valves shall be tested in accordance with the requirements of AWWA Standard C-515 and C-600.

3.03 DISINFECTION

A. All gate valves within the potable water and raw water system(s) shall be disinfected in accordance with AWWA Standard C-651 and Section 02650: Disinfection.

END OF SECTION

SECTION 15110 – CHECK VALVES

PART 1 – GENERAL

1.01 DESCRIPTION

- A. Scope of Work: Furnish all labor, materials, equipment and incidentals required, and install and test check valves including all appurtenances required as shown on the Drawings and specified herein.
- B. Related Work Described Elsewhere:
 - 1. Section 15100: Valves and Specialties – General.

1.02 QUALITY ASSURANCE

- A. Manufacturer shall have a minimum of ten (10) years' experience in the manufacture of air-cushioned swing check valves.
- B. Manufacturer shall have an ISO-9001 quality management system certified by an accredited body.

1.03 SUBMITTALS

- A. Materials and Shop Drawings: Copies of all materials required to establish compliance with the Specification shall be submitted in accordance with the provisions of the General Terms and Conditions; Section 01310: Administrative Requirements; and Section 15100: Valves and Specialties - General.
- B. See individual product types under PART 2 - PRODUCTS of this Section for additional requirements.

1.04 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. All materials shall be delivered, stored and handled in accordance with Section 15100: Valves and Specialties - General.

1.05 WARRANTY AND GUARANTEES

- A. The manufacturer's written warranty shall be submitted for all major pieces of equipment, as specified in Section 01740: Warranties and Bonds. The manufacturer's warranty period shall be concurrent with the CONTRACTOR'S correction period for two (2) years after the time of completion and acceptance.

PART 2 – PRODUCTS

2.01 CHECK VALVES

- A. Air-Cushioned Lever and Weight Swing Check Valves:
 - 1. The swing check valve shall conform to the design, materials of construction and testing required by AWWA C508 (latest revision) plus be supplied with an outside lever, adjustable counterweight and adjustable air-cushion chamber to minimize slam and hammer caused by rapid flow reversal.

2. The valve flow area anyplace through the valve shall be no less than the area of the nominal inlet pipe size when the disc has swung no more than 25 degrees away from the seat
3. The standard valve shall have the same size flanged inlet and outlet connections faced, drilled and of the thickness required by ANSI/ASME B16.1 Class 125 or Class 250, as shown on plans or in the valve schedule.
4. All air-cushioned swing check valves of same type and style shall be manufactured by:
 - a. GA Industries, GA250
 - b. Approved equivalent
5. The valve shall be equipped with a double pole, double throw NEMA 1, 4 and 13 limit switch to indicate valve closed position.

2.02 MATERIALS

- A. The valve body shall be made from cast iron conforming to ASTM A126 Class B with a bolted cover through which all internal parts can be removed for service. The body shall have a mechanically retained and replaceable Type 316 stainless steel seat ring.
- B. The hinge shaft shall be made from Type 303 stainless steel and be supported at both ends by non-corrosive, lead free bushings. The shaft shall be sealed where it passes through the body by compression packing retained by a packing gland, gland studs and nuts. Non-adjustable or O-ring shaft packing is not acceptable.
- C. A ductile iron disc arm shall be keyed to and suspended from the hinge shaft. A non-rotational, cast iron disc with replaceable Buna-N rubber disc seat ring shall be attached to the disc arm by means of a center pin and nut providing 360-degree oscillation. The disc seat ring shall be retained by a Type 316 stainless steel follower ring and stainless steel screws.
- D. Valve closure shall be cushioned by the action of a bronze piston in a bronze cushion cylinder. The cushion chamber assembly shall be non-pivoting and be mounted to the side of the valve body on machined pads without the need for brackets. The amount of cushioning shall be adjustable. Pivoting and/or commercial pneumatic cylinders are not acceptable.
- E. Cover bolts, nuts and studs shall be zinc plated carbon steel.

2.03 JOINTS

- A. Check valves shall be fitted with joints suitable for the pipe with which they are to be used.
- B. Gaskets for use with flanges shall be rubber, either ring or full face, 1/8-inch thick and shall conform to the dimensions shown in the Appendix to ANSI/AWWA C115/A21.15.
- C. Bolts and nuts for flanged joints shall be hex head with hex nuts and shall conform to the requirements of ANSI B18.2.1 and B18.2.2.
- D. Gaskets, bolts and nuts for mechanical joints shall conform to the requirements of ANSI/AWWA – A21.11/C111.
- E. Threaded joints shall conform to ANSI B2.1 Standards for Pipe Threads.

2.04 COATINGS AND LININGS

- A. The exterior of check valves in exposed locations, which are to be painted, shall receive a primer coat, which will be compatible with the finished paint to be applied.
- B. The exterior of check valves, which are to be installed in concealed locations, shall receive an epoxy coating conforming to the requirements of ANSI/AWWA C550.
- C. The interior ferrous surfaces, except stainless steel parts, of all check valves shall receive an epoxy coating conforming to the requirements of ANSI/AWWA C550, NSF-61.

PART 3 – EXECUTION

3.01 INSTALLATION

- A. Install in accordance with Section 15100: Valves and Specialties - General.

END OF SECTION

SECTION 15122 - AIR RELEASE AND VACUUM RELIEF VALVES

PART 1 – GENERAL

1.01 DESCRIPTION

- A. Scope of Work: This work under this Section includes materials and installation of air and vacuum valves, air release valves, combination air release valves, slow-closing air and vacuum valves, and slow-closing combination air release valves for wastewater service.
- B. Related Work Described Elsewhere:
 - 1. Section 02661: Pressure Testing of Piping
 - 2. Section 15000: Mechanical - General Requirements

1.02 QUALITY ASSURANCE

- A. Qualifications:
 - 1. The specified equipment shall be the standard product of manufacturers who regularly engage in the production of this type of equipment and who are fully experienced, reputable, and qualified in the manufacture of the equipment to be furnished. The equipment shall be designed, constructed, delivered, and installed in accordance with the best practices and methods.
 - 2. Each component and ancillary equipment item furnished under this specification shall be new and unused, and the product of manufacturer having a successful record of operation, manufacturing and servicing the equipment for a minimum of five years.
- B. All air and vacuum release valves shall be manufactured by one (1) manufacturer.
- C. Acceptable Manufacturers:
 - 1. Val-Matic
 - 2. APCO
 - 3. A.R.I.

1.03 SUBMITTALS

- A. Materials and Shop Drawings: Copies of all materials required to establish compliance with the Specification shall be submitted in accordance with Section 01310: Administrative Requirements.

PART 2 – PRODUCTS

2.01 COMPONENTS

- A. Clean Water Service:
 - 1. Air Release Valves:
 - a. 3/4 inch and smaller:
 - (1) Simple-lever type.

- (2) Cast iron body ASTM A-48, Class 35, 316 stainless steel trim, viton orifice button.
- (3) Valves shall have a working pressure rating of at least 150 psi.
- (4) Val-Matic No. 22, 25; APCO Model 55, 65 or equal.

b. 1 inch or larger:

- (1) Valves to have heavy duty compound lever operating mechanism with stainless steel pivot pins and 316 stainless steel retaining rings.
- (2) Valves to be constructed of cast iron ASTM A-48, Class 35 with 316 stainless steel trim and float.
- (3) Valves to have an adjustable orifice button, constructed of 316 stainless steel with viton or Buna-N seating.
- (4) 1/2 inch threaded outlet and stainless steel plug for top cover and body drain.
- (5) Valves shall have a working pressure rating of at least 300 psi.
- (6) Val-Matic No. 38, 45; APCO Model 200; ARI D-040-C with one-way valve (for use on pipe exposed to atmosphere), ARI D-040 with one-way valve (for use on pipe in valve vaults).

B. Valve End Connections:

- 1. Valves smaller than 3 inches shall have threaded ends. Valves 3 inches or larger shall have flanged ends.
- 2. Flanges for Class 150 valves shall comply with ANSI B-16.1, Class 125.
- 3. Flanges for Class 300 valves shall comply with ANSI B-16.1, Class 250.
- 4. Threaded ends shall comply with ANSI B-2.1.

C. Bolts and Nuts for Flanged Valves:

- 1. Bolts and nuts for flanged valves located outdoors above ground shall be Type 316 stainless steel conforming to ASTM A-183, Grade B&M for bolts, and ASTM A-194, Grade 8M for nuts.

D. Gaskets: Gaskets for flanged end valves shall be described in the detail piping specifications.

2.02 ACCESSORIES

- A. All air release and vacuum release valves shall be isolated from the service line with a stainless steel ball valve for valves up to 2 inches, and a flanged body butterfly valve for valves greater than 2 inches (provide a spacer plate if required to clear the rotation of the butterfly disc).

PART 3 – EXECUTION

3.01 INSTALLATION

- A. Install valves in accordance with manufacturer's instructions and recommendations and as shown in the Drawings.
- B. Install all valves in the vertical position and allow sufficient clearance around valve for proper maintenance and removal.

- C. Clean flanges by wire brushing before installing flanged valves. Clean flange bolts and nuts by wire brushing, lubricate threads with oil and graphite, and tighten nuts uniformly and progressively. If flanges leak under pressure testing, loosen and remove the nuts and bolts, reseal or replace the gasket, reinstall or re-tighten the bolts and nuts, and retest the joints. Joints shall be watertight.
- D. Clean threaded joints by wire brushing and swabbing. Apply Teflon joint compound or Teflon tape to pipe threads before installing threaded valves. Joints shall be watertight.
- E. Valve Pressure Testing: Test valves at the same time that the connecting pipelines are pressure tested. Refer to Section 02661: Pressure Testing of Piping for pressure testing requirements. Protect or isolate any parts of valves, operators, or control and instrumentation systems whose pressure rating is less than the test pressure.

3.02 STARTUP

- A. Check all air release valves for proper operation in the presence of the Owner/Engineer.

END OF SECTION

SECTION 15125 - WALL SLEEVES AND SEALS

PART 1 – GENERAL

1.01 DESCRIPTION

- A. Scope of Work: Furnish and install wall sleeves and seals of the types and sizes and in the locations shown on the Drawings and specified herein.

1.02 QUALITY ASSURANCE

- A. Qualifications:
 - 1. Provide and install all sleeves of the types specified herein, as shown on the Drawings and as directed by the OWNER/ENGINEER.
 - 2. Provide sleeves that are airtight, gas-tight or water-tight as required.

PART 2 – PRODUCTS

2.01 MATERIALS AND EQUIPMENT (Type per Location)

- A. Masonry Walls (Unless otherwise shown on the Drawings):
 - 1. 24-gauge, zinc coated (galvanized) steel tubes with wired or hemmed edges.
 - 2. Minimum 1/4 inch annular space between sleeve and pipe or insulation.
 - 3. Firmly pack with oakum and seal both ends with silicone sealant.
- B. Concrete Tank Wall Sleeves:
 - 1. High Density Polyethylene (HDPE) Sleeves:
 - a. Provide with integrally formed hollow water stop sized having a minimum of four (4) inches larger than the outside diameter of the sleeve.
 - b. Shall allow for 1/2-inch movement between wall forms to resist pour forces.
 - c. Each sleeve assembly shall have end caps manufactures of the same material as the sleeve and installed at each end of the sleeve to prevent deformation during concrete pour.
 - d. Sleeves shall be model CS Century-Line, as manufactured by Thunderline/Link-Seal or approved equal.
 - e. Each concrete tank wall sleeve shall include Model S-316 Link-Seal Modular Seal, as manufactured by Thunderline/Link-Seal or approved equal.
- C. Concrete foundation walls, pipe below grade and into interior space: Same as concrete tank walls.
- D. Other conditions shall be sleeved as shown on the Drawings or as approved by the OWNER/ ENGINEER.
- E. Wall Plates: Provide split type cast iron or brass wall plates on pipes penetrating walls in finished spaces such as labs and offices.

- F. Provide high temperature “link seals” where shown on the Drawings.

PART 3 – EXECUTION

3.01 INSTALLATION

- A. New Construction:
 - 1. Concrete: Set sleeves in proper location prior to placing concrete.
 - 2. Masonry: Provide sleeves and locations to masonry trades for installation.
 - 3. Partitions: Cleanly cut partitions and patch prior to any finish work.
- B. Wall sleeves and Seals: Install as required and in strict accordance with the manufacturer's instruction and recommendations.

END OF SECTION

SECTION 15130 - PRESSURE GAUGES

PART 1 – GENERAL

1.01 DESCRIPTION

- A. Scope of Work: This section includes materials and installation of pressure gauges and accessories.
- B. Related Work Described Elsewhere:
 - 1. Section 15000: Mechanical - General Requirements
- C. General Design: Gauges and tools shall be as manufactured by Ashcroft, Crosby, Marshalltown, Marsh, or equal.

1.02 SUBMITTALS

- A. Materials and Shop Drawings:
 - 1. Submit Shop Drawings in accordance with Section 01310: Administrative Requirements.
 - 2. Submit manufacturer's catalog data and descriptive literature. Call out materials of construction by ASTM reference and grade. Submit manufacturer's certificate of compliance with the referenced ANSI standards.

PART 2 – PRODUCTS

2.01 GENERAL

- A. Gauge Design: Gauges shall comply with ANSI B40.1, Grade 2A. Gauges shall incorporate the following features.
 - 1. Solid or open front with side or rear blowout relief.
 - 2. Pressure tight.
 - 3. 270 degree arc with adjustable pointer.
 - 4. Stem mounted.
 - 5. Liquid filled unless specified otherwise.
 - 6. Size of gauge shall be a minimum of 4 inches for all process liquid and 6 inches for process air unless otherwise indicated on the Drawings.
 - 7. Stem or connection size shall be ¼-inch.
 - 8. For potable water, provide a gauge having a pressure range determined by the greater of the following two criteria:
 - a. Two times the normal operating pressure; and
 - b. One and one-third times the test pressure. (Test pressure is defined as the pressure shown in Section 02661: Pressure Testing of Piping).
 - 9. For sewage force mains, provide a gauge having a pressure range determined by the greater of the following two criteria:
 - a. Two times the normal operating pressure; and

- b. Two-thirds the test pressure. (Test pressure is defined as the pressure shown in Section 02661: Pressure Testing of Piping).

2.02 MATERIALS

- A. Materials of construction shall be as shown in the following table:

1. Case	Stainless steel	AISI 316
2. Bourdon tube	Stainless steel	AISI 316
3. Windows	Glass	-----
4. Ring	Stainless steel	AISI 316
5. Stem	Stainless steel	AISI 316
6. Dial face	Aluminum with clear baked-on acrylic coating	6061-T6, ASTM B 209

2.03 ACCESSORIES

- A. Pipe Nipples and Fittings: Nipples for connecting gauges to piping shall be Schedule 80S, Grade TP 316 seamless stainless steel, conforming to ASTM A 312. Fittings shall conform to ASTM A 403, Class WP316. Threads shall conform to ANSI B2.1. Size of pipe nipple shall be as shown on the Drawings.
- B. Tools for Gauges: Provide one gauge tool kit, containing a hand jack set, screwdriver, five reamers (minimum), two pin vise holders, wiggler, tweezer, and carrying case.
- C. Gauge Protectors (For use in process piping containing liquids having a solids concentration greater than 0.50 percent or on raw sewage lines).
 1. Gauge protectors shall consist of an interchangeable top housing and diaphragm capsule.
 2. A fill / bleed connection shall be provided, which permits filling the seal and instrument simultaneously after evacuation.
 3. An O-ring, compatible with all standard fill liquids and a Teflon back-up ring shall provide a seal between the diaphragm capsule and the top housing.
 4. The diaphragm shall be Teflon coated, thus assuring a leak-tight connection between the diaphragm and bottom housing.
 5. Protector shall be Ashcroft Type 100 or approved equivalent.

PART 3 – EXECUTION

3.01 INSTALLATION

- A. Install gauges before conducting pressure tests. Ream, clean, and remove burrs from threaded piping before making up joints. Apply thread lubricant to threaded ends before assembling.
- B. Gauges shall be installed on each pump suction and discharge line.
- C. Pump suction gauges shall be provided as compound, positive and negative scale.

3.02 INSPECTION AND TESTING

- A. Compare pressure readings of permanent gauges with hydrostatic test gauge.

END OF SECTION

SECTION 15155 – MAGNETIC FLOW METER – (FULL BODY)

PART 1 – GENERAL**1.01 SCOPE OF WORK**

- A. The CONTRACTOR shall furnish and install, at the location(s) shown on the Contract Drawings, as specified or as directed, the metering equipment and other appurtenances, and furnish all labor, supervision, materials, tools, and incidentals.
- B. In general, this work shall include the furnishing and installation of the following:
 - 1. One (1) magnetic flow meter – (full body) with ANSI CL-150 flange fittings and neoprene liner.
- C. This Section shall include the complete installation and responsibility for the proper operation of the various components of this Section. It shall also include painting, field testing and additional services of the equipment supplier.
- D. It is the intent of this Contract that the installation shall be complete in all respects and ready for use and operation. The CONTRACTOR will be responsible for all incidental details and for any special construction necessary to complete the work in an acceptable manner.

1.02 WORKMANSHIP AND MATERIALS

- A. All equipment and materials furnished under this Contract shall be new, suitable for the conditions of service to which they will be subject, and equal to the best of their respective classes. Grade and quality shall meet or exceed the applicable City of Ormond Beach's specifications and standards.
- B. Workmanship shall be the highest quality and shall be carried out by competent and experienced workmen.

1.03 SHOP DRAWINGS AND MANUALS

- A. Detailed, dimensioned shop drawings and data conforming to the requirements of Section 01310: Administrative Requirements, shall be submitted to the OWNER/ENGINEER and approved before fabrication, shipment or work specified under this Section begins.
- B. The CONTRACTOR shall also furnish under this Section four (4) bound copies of the complete and detailed instructions for the operation, lubrication, and maintenance of all equipment furnished and installed hereunder. The manuals shall be furnished after final approval of all shop and working drawings but prior to shipment of equipment. Manuals shall be complete with lubrication schedules and recommended lubricants, drawings, cut parts lists, and other necessary data. All parts shall be numbered and otherwise clearly identified to facilitate ordering of replacements. Descriptions of all operational control devices and their specific functions shall also be included.

1.04 PATENTS AND CLAIMS

- A. Under this Section, the CONTRACTOR shall be responsible for all patents and licenses relating to the furnishing and use of the equipment supplied hereunder and to any special construction inherent to the installation of said equipment. The CONTRACTOR shall pay all patent fees and license costs and shall indemnify the OWNER and the ENGINEER

from all claims pertaining thereto in accordance with the General Terms and Conditions of these Specifications.

1.05 WARRANTY

- A. All equipment supplied under this Section shall be warranted by the CONTRACTOR and equipment manufacturers for a period of one (1) year. Warranty period shall commence on date of final payment as outlined in the General Conditions and the Contract.

PART 2 – PRODUCTS

2.01 GENERAL

- A. The CONTRACTOR shall furnish and install, at the location shown on the Contract Drawings, flow meter(s) and associated appurtenances.

2.02 ELECTROMAGNETIC FLOW METER – (FULL BODY-FLANGED)

A. Materials of Construction

- 1. The body shall be constructed of painted 304 stainless steel.
- 2. A neoprene liner shall be incorporated within the body of the meter.
- 3. Electrodes shall be self-cleaning and fabricated of 316 stainless steel.
- 4. A grounding ring, fabricated of 316 stainless steel, shall be incorporated into the meter.

B. Metering Tube

- 1. Keypad: 3-line, 16-character, backlit LED display for flow rate and two lines for engineering units, totalizers, alarm status, velocity and percent of range.
- 2. Internal Totalizer: Resettable 9-digit for forward, reverse and net totals. The totalizer shall be able to be programmed to reset from an external input.
- 3. Time Constant: Fully programmable from one to greater than 100 seconds.

C. Outputs

- 1. Analog: Fully programmable for zero, full scale, up to 21 mA and flow direction. Fully isolated. Output capability ≤ 16 (800 ohm, 4-20 mA).
- 2. Pulse / Frequency: One frequency / pulse output for forward and one for reverse flow. Forward and reverse flows 0 to 800 Hz square wave or fixed pulse width up to 2.5 sec. Fully programmable for pulse rate, pulse factor, low flow cut off, pulse width, etc. Hart protocol.
- 3. Dual Alarms: Two separate outputs. Fully programmable for high / low rates, percentage of range, empty-pipe zero, fault conditions, forward / reverse polarity, analog over-range, pulse over-range, pulse cutoff, etc.
- 4. RS-232C: 9-pin data connector for local hand-held configurator or any computer with several communications.

- D. Accuracy shall be ± 0.5 percent reliability durability, and shall accurately measure velocities between 1.0 ft. / sec. and 39 ft. / sec.

- E. Microprocessor-based signal converter shall be housed in a NEMA 4X IP 65 enclosure of polypropylene. 120VAC power. Transmitter shall include a process display with keypad for menu driven configuration.

- F. Mag meter shall be an 8-inch Rosemount, 8750.

PART 3 – EXECUTION

3.01 INSPECTION AND TESTING

- A. Meter shall be hydrostatically tested in place in accordance with AWWA standards.

END OF SECTION

SECTION 15485 – GENERATOR FUEL PIPING SYSTEM

PART 1 - GENERAL

1.01 REQUIREMENTS

General Conditions of the Contract, Special Conditions, Instructions to Bidders, and other General Requirements contained in Division 1 and 2 are a part of these Specifications.

1.02 SECTION INCLUDES

- A. Pipe and pipe fittings
- B. Valves
- C. Accessories

1.03. REFERENCES

- A. ANSI B31.1 - Power Piping
- B. ANSI B31.4 - Liquid Petroleum Transportation Piping Systems
- C. ANSI B31.9 - Building Service Piping
- D. ASME SEC IX - Welding and Brazing Qualifications
- E. ASME B16.3 - Malleable Iron Threaded Fittings
- F. ASME B36.10 - Welded and Seamless Wrought Steel Pipe
- G. ASTM A53 - Pipe, Steel, Black and Hot-Dipped Zinc Coated, Welded and Seamless
- H. ASTM A234/A234M - Pipe Fittings of Wrought Carbon Steel and Alloy Steel for Moderate and Elevated Temperatures
- I. ASTM D2310 - Machine-Made Reinforced Thermosetting Resin Pipe
- J. ASTM D2996 - Filament-Wound Reinforced Thermosetting Resin Pipe
- K. AWS A5.8 - Brazing Filler Metal
- L. NFPA 30 - Flammable and Combustible Liquids Code

1.04 SUBMITTALS

- A. Submit shop drawings in accordance with Division 1 and the General Conditions.
- B. Product Data: Provide data on pipe materials, pipe fittings, valves and accessories. Provide manufacturers catalog information. Indicate valve data and ratings.
- C. Shop Drawings: Indicate tanks, system layout, pipe sizes, location, and elevations. For fuel oil tanks, indicate dimensions and accessories including manholes and hold down straps.

1.05 QUALITY ASSURANCE

- A. Welding Materials and Procedures: Conform to ASME Code.
- B. Welders Certification: In accordance with ASME SEC IX and NCPWB Standard Procedure Specifications.
- C. Manufacturer Qualifications: Company specializing in manufacturing the Products specified in this section with minimum of three (3) years of documented experience.
- D. Installer Qualifications: Company specializing in performing the work of this section with minimum of five (5) years of documented experience approved by the manufacturer.
- E. Valves: Manufacturer's name and pressure rating marked on valve body.

1.06 REGULATORY REQUIREMENTS

- A. Conform to applicable federal, state and local regulations for installation of fuel oil system.
- B. Conform to ANSI B31.1 for installation of fuel oil piping.

- C. Provide certificate of compliance from the local authority having jurisdiction and local fire marshal indicating approval of installation of fuel oil system.
- D. Products Requiring Electrical Connection: Listed and classified by Underwriters Laboratories Inc. as suitable for the purpose specified and indicated.

1.07 WARRANTY

- A. Provide a 3-year manufacturer warranty for piping, and ancillary piping fittings and equipment.

PART 2 – PRODUCTS

2.01 ABOVE GROUND PIPING

- A. Steel Pipe: ASTM A53 or ASME B36.10, Schedule 40 black.
 - 1. Fittings: ASTM B16.3, malleable iron, or ASTM A234/A234M, wrought carbon steel and alloy steel welding type.
 - 2. Joints: threaded or welded to ANSI B31.1, ANSI B31.4 and ANSI B31.9.
- B. FRP: ASTM D2310 and ASTM D2996, UL listed filament wound fiberglass reinforced epoxy pipe with integral epoxy liner and exterior coating.
 - 1. Fittings: Compression molded, filament wound fiberglass reinforced epoxy.
 - 2. Joints: Tapered bell and spigot adhesive bonded.

2.02 PIPE HANGERS AND SUPPORTS

- A. Conform to NFPA 31.
- B. Hangers for Pipe Sizes 1/2 to 1-1/2 Inch (15 to 40 mm): Carbon steel, adjustable swivel, split ring.
- C. Hangers for Pipe Sizes 2 Inches (50 mm) and Over: Carbon steel, adjustable, clevis.
- D. Multiple or Trapeze Hangers: Steel channels with welded spacers and hanger rods.
- E. Wall Support for Pipe Sizes to 3 Inches (80 mm): Cast iron hook.
- F. Floor Support: Cast iron adjustable pipe saddle, lock nut, nipple, floor flange, and concrete pier or steel support.

2.03 FLANGES, UNIONS, AND COUPLINGS

- A. Pipe Size 2 Inches and Under:
 - 1. Ferrous pipe: 150 psi malleable iron threaded unions.
 - 2. FRP:
- B. Pipe Size Over 2 Inches:
 - 1. Ferrous pipe: 150 psi forged steel slip-on flanges; 1/16 inch (1.6 mm) thick preformed neoprene gaskets.
 - 2. FRP:.

2.04 GATE VALVES

- A. Acceptable manufacturers:
 - 1. Stockham

2. Nibco
3. Milwaukee
4. Powell

- B. MSS SP-80, Class 150, bronze body, bronze trim, rising stem, hand wheel, inside screw, solid wedge disc, threaded ends.

2.05 GLOBE VALVES

- A. Acceptable manufacturers:

1. Crane
2. Stockham
3. Milwaukee

- B. MSS SP-80, Class 150 bronze body, bronze trim, hand wheel, bronze disc, threaded ends.

2.06 BALL VALVES

- A. Acceptable manufacturers:

1. Conbraco
2. Jamesbury
3. Stockham
4. Grinnell

- B. MSS SP-110, Class 400 psi CWP minimum, carbon steel, two piece body, chrome plated brass ball, regular port, PTFE seats and stuffing box ring, blow-out proof stem, lever handle, threaded ends with union .

2.07 SWING CHECK VALVES

- A. Acceptable Manufacturers:

1. Milwaukee
2. Stockham
3. Crane

- B. MSS SP-80, Class 150, bronze body and cap, bronze swing disc, threaded ends.

2.08 RELIEF VALVES

- A. Type "R", brass, disc type external relief valve with 25 to 100 psi adjustable pressure range, UL listed for fuel oil, capacities ASME certified and labeled.. Relief valve factory set at 75 psi.

2.09 STRAINERS

- A. Acceptable manufacturers:

1. Hayward
2. Approved Alternate

- B. Duplex, cast iron body rated for 175 psi CWP, continuous flow with no shut down for cleaning. Quick open cover, large capacity basket, threaded drain, perforated 60 mesh stainless steel basket, pressure differential gauge and switch connection.

2.10 FLEXIBLE CONNECTORS

- A. Bronze inner hose and braided exterior sleeve, suitable for minimum 200 psi CWP and 250 degrees F..

PART 3 – EXECUTION

3.01 EXAMINATION

- A. Verify existing conditions before starting work.

3.02 PREPARATION

- A. Ream pipe and tube ends. Remove burrs. [Bevel plain end ferrous pipe.]
- B. Remove scale and dirt, on inside and outside, before assembly.
- C. Prepare piping connections to equipment with flanges or unions.

3.03 INSTALLATION

- A. Install piping in accordance with existing tank manufacturer's instructions and AP1 1615.
- B. Provide non-conducting dielectric connections wherever jointing dissimilar metals. Install to NACE RP-01-69.
- C. Route piping in orderly manner and maintain gradient.
- D. Install piping to conserve building space and not interfere with use of space.
- E. Group piping whenever practical at common elevations.
- F. Install piping to allow for expansion and contraction without stressing pipe, joints, or connected equipment.
- G. Provide access where valves and fittings are not exposed.
- H. Where pipe support members are welded to structural building framing, scrape, brush clean, weld, and apply one coat of zinc rich primer.
- I. Prepare pipe, fittings, supports, and accessories not pre-finished, ready for finish painting. Refer to Section 09900.
- J. Install valves with stems upright or horizontal, not inverted.
- K. Protect piping systems from entry of foreign materials by temporary covers, completing sections of the work, and isolating parts of completed system.

3.04 TESTING

- A. The Contractor is responsible for testing all installed systems for liquid tightness and proper operation.
- B. Test each component of the system for calibration, tightness and proper operation in accordance with the instructions of the component manufacturer.
- C. Testing shall be documented by the Contractor and witnessed by the Engineer.

END OF SECTION

DIVISION 16

ELECTRICAL

SECTION 16100 – ELECTRICAL WORK (Small Scope Projects)

PART 1 - GENERAL

1.01 DESCRIPTION

- A. Scope: CONTRACTOR shall provide all labor, materials, equipment and incidentals as shown, specified, and required to complete the Electrical Work.
- B. Coordination:
 - 1. Review installation procedures under other Sections and coordinate the installation of items that must be installed with the formwork, walls, partitions, ceilings and panels.
- C. Intent:
 - 1. Drawings show the principal elements of the electrical installation. They are not intended as detailed working drawings for the electrical Work but as a complement to the Specifications to clarify the principal features of the electrical systems.
 - 2. It is the intent of this Section that all equipment and devices, furnished and installed under this and other Sections, be properly connected and interconnected with other equipment so as to render the installations complete for successful operation, regardless of whether all the connections and interconnections are specifically mentioned in the Specifications or shown.
- D. Grounding: Ground all equipment in conformance with the National Electrical Code.
- E. Temporary Power:
 - 1. CONTRACTOR shall provide temporary light and power for construction purposes to be utilized by all trades on the project.
- F. Utilities:
 - 1. CONTRACTOR is to coordinate with Florida Power & Light to provide a size increase and relocation of the existing 3-Phase, 480V service as shown on the contract drawings.
 - 2. CONTRACTOR to coordinate with owner provided service contract with Verizon & Data Flow Inc. to provide cellular service for lift station controls.
- G. The relocation of existing generator diesel fuel tanks shall be performed in accordance with NFPA 1, NFPA 30, NEC, NFPA 70E, EPA and the Florida Fire Prevention Code current edition requirements.

1.2 QUALITY ASSURANCE

- A. Requirements of Regulatory Agencies:
 - 1. Permits: Obtain all permits required to commence work and, upon completion of the Work, obtain and deliver to ENGINEER a Certificate of Inspection and Approval from the State Board of Fire Underwriters or other authority having jurisdiction.

2. Codes: Material and equipment shall be installed in accordance with the current standards and recommendations of the National Electrical Code, Nation Fire Protection Agency and the National Electrical Safety Code and with local codes which apply. Where discrepancies arise between codes, the most restrictive regulation shall apply.
 3. Tests by Independent Regulatory Agencies: Electrical material and equipment shall be new and shall bear the label of the Underwriters' Laboratories, Inc., or other nationally-recognized, independent testing laboratory, wherever standards have been established and label service regularly applies.
 4. Utilities:
 - a. Power Company: Work in connection with the electric service and utility metering shall be done in strict conformance with the requirements of the Power Company.
 - b. Telephone Company: Work in connection with the telephone lines for the telephone service shall be done in strict conformance with the requirements of the Telephone Company.
- B. Reference Standards: Electrical material and equipment shall conform in all respects to the latest approved standards of the following:
1. National Electrical Manufacturers Association (NEMA).
 2. The American National Standards Institute (ANSI).
 3. The Institute of Electrical and Electronic Engineers (IEEE).
 4. Insulated Cable Engineers Association (ICEA).
 5. National Electrical Code (NEC).
 6. National Electrical Safety Code (NESC).
 7. National Fire Protection Association (NFPA).
 8. Instrumentation Society of America (ISA).
 9. Underwriters' Laboratories, Inc. (UL).

1.3 SUBMITTALS

- A. Shop Drawings: Submit for approval the following:
1. Manufacturer's name and product designation or catalog number.
 2. Electrical ratings.
 3. Dimensioned plan, section, and elevations showing means for mounting, conduit connection, and grounding.
 4. Materials and finish specification, including paints.
 5. List of components including manufacturer's names and catalog numbers.
 6. Internal wiring diagrams indicating all connections to components and numbered terminals for external connections.

1.4 JOB CONDITIONS

- A. Existing Conditions:
1. CONTRACTOR shall examine the site and existing facilities in order to compare them with the Drawings and Specifications with respect to the conditions of the premises, location of and connection to existing facilities and any obstructions which may be encountered.

2. CONTRACTOR is cautioned to perform his work with due regard to safety and in a manner that will not interfere with the existing equipment or in any way cause interruption of any of the functions of the plant.

1.5 AREA CLASSIFICATIONS

- A. Wet Locations: The following areas shall be considered wet locations:
 1. All outdoor areas.
 2. All indoor areas below grade unless otherwise specified.
 3. Indoor areas above grade where designated and shown.
 4. Materials, equipment and incidentals in areas identified as wet locations shall meet NEC and NEMA requirements for wet locations. Enclosures shall meet NEMA 4X requirements. Conduits shall be terminated at enclosures with watertight, threaded hubs. Top entry to be avoided.
- B. Corrosive Locations: The following areas shall be considered corrosive locations:
 1. Materials, equipment and incidentals in areas identified as corrosive shall meet NEC and NEMA requirements for corrosive locations. Conduit systems shall be PVC coated galvanized steel and enclosures shall meet NEMA 4X requirements. Conduits shall be terminated at enclosures with watertight, threaded hubs. Independent supports shall be PVC-coated galvanized steel, or fiberglass-reinforced epoxy struts.
- C. Hazardous Locations: The following areas shall be considered hazardous locations:
 1. Materials, equipment and incidentals in areas identified as hazardous locations shall meet NEC & NFPA 820 requirements for the Class and Division designated.

PART 2 – PRODUCTS

2.1 RACEWAY SYSTEMS

- A. General:
 1. The types of raceways required include the following:
 - a. PVC Coated Aluminum Rigid Conduit for exposed conduit runs in corrosive areas and in all outdoor areas.
 - b. PVC Coated Aluminum Rigid Conduit or Schedule 80 PVC (with 2" concrete cap) for individual conduit runs direct buried in earth.
 - c. Schedule 40 PVC for conduit runs embedded in structural concrete slabs.
 - e. Flexible conduit for connections to motors and equipment.
 2. Coordination:
 - a. Conduit runs shown are diagrammatic.
 - b. Coordinate conduit installation with piping, ductwork, lighting fixtures and other systems and equipment and locate so as to avoid interferences.

B. PVC Coated Aluminum Rigid Conduit, Elbows and Couplings:

1. Material: Rigid, heavy walled aluminum, smooth interior, tapered threads, carefully reamed ends, 3/4 inch NPS minimum size with an exterior factory coating of 40 mil and an interior coating of 2 mil thick polyvinyl chloride.
2. Color: Color of coating shall be the same on all conduit and fittings.
3. Manufacturer: Provide PVC Coated Aluminum Rigid Conduit and fittings of one of the following:
 - a. Robroy Industries.
 - b. Perma-Cote Industries.
 - c. OCAL, Inc.
 - d. Or equal.

C. Aluminum Conduit, Elbows, and Couplings:

1. Material: Rigid, heavy-wall aluminum, smooth interior, tapered threads and carefully reamed ends; 3/4-inch NPS minimum size.
2. Manufacturers: Provide products of one of the following:
 - a. Allied Tube and Conduit.
 - b. Wheatland Tube Company.
 - c. Or equal.

D. PVC Conduit:

1. Material: Schedule 40 or 80 PVC plastic, NEMA Type EPC 40 PVC or NEMA Type EPC 80 PVC, 90 C rated, conforming to UL No. 651.
2. Fittings: Form elbows, bodies, terminations, expansions and fasteners of same material and manufacturer as base conduit. Provide cement by same manufacturer as base conduit.
3. Manufacturer: Provide PVC conduit of one of the following:
 - a. Amoco Chemicals Corporation.
 - b. Carlon, Division of Indian Head, Incorporated.
 - c. Or equal.

E. Conduit Hubs:

1. Material: Threaded conduit hub, vibration proof, weather proof with captive O ring seal, 316 stainless steel with insulated throat. Hubs used on PVC coated conduit systems shall have a factory applied PVC coating.
2. Use: Provide for all conduit terminations to boxes, cabinets and other enclosures located in areas designated as wet locations.
3. Manufacturer: Provide material manufactured by Myers Electrical Products Company or equal.

F. Flexible Conduit:

1. Material: Flexible 316 stainless steel with smooth, abrasion resistant, liquid tight, polyvinyl chloride cover. Continuous copper ground built in for sizes 3/4 inch through 1 1/4 inch. Material shall be UL listed.
2. Product and Manufacturer: Provide one of the following:
 - a. Sealtite UA, as manufactured by Anaconda Metal Hose Division, Anaconda American Brass Company.
 - c. Liqueatite Type L.A., as manufactured by Electric Flex Company.
 - c. Or equal.

G. Flexible Conduit Fittings:

1. Material and Construction: 316 stainless steel with smooth, abrasion resistant, liquid tight, polyvinyl chloride cover. Fittings shall adapt the conduit to standard threaded connections, shall have an inside diameter not less than that of the corresponding standard conduit size and shall be UL listed.
2. Manufacturer: Provide flexible conduit fittings of one of the following:
 - a. Crouse Hinds Company.
 - b. Appleton Electric Company.
 - c. Or equal.

H. Pull and Junction Boxes:

1. Material and Construction:
 - a. 316 Stainless steel bodies and covers.
 - b. Neoprene gaskets. Gaskets to be of an approved type designed for the purpose. Improvised gaskets are not acceptable.
 - c. Stainless steel cover screws.
 - d. External mounting lugs.
 - e. Drilled and tapped conduit holes.
 - f. Boxes where conduits enter a building below grade shall have 1/4 inch drain hole.
2. Manufacturer: Provide pull and junction boxes of one of the following:
 - a. Crouse Hinds Company.
 - b. Appleton Electric Company.
 - c. Or equal.

3. Boxes for installation in areas classified as hazardous locations shall be explosion proof and shall comply with UL886.

I. Sealing Fittings:

1. Materials and Construction:
 - a. 316 Stainless steel bodies.
 - b. Ample opening with threaded closure for access to conduit hub for making dam.
2. Sealing fiber for forming the dam within the hub and the sealing compound shall be approved for use with the fittings furnished.
3. Product and Manufacturer: Provide one of the following:
 - a. Chico Fiber.
 - b. No equal.

2.2 WIRE AND CABLE

A. 600 Volt Cable:

1. Insulated Cable In Raceways:
 - a. Material: Single conductor copper cable conforming to ASTM B 3 and B 8 with flame retardant, moisture and heat resistant cross linked polyethylene or thermoplastic insulation rated 90 C in dry locations and 75 C in wet locations and listed by UL as Type XHHW-2 or THWN-2.
 - b. Application: Use XHHW-2 for #4 and larger and /THWN-2 or XHHW-2 for #6 and smaller.
 - c. Wire Sizes: Not smaller than No. 12 AWG for power and lighting and No. 14 AWG for 120 volt control circuits.
 - d. Stranding: All 600 volt cable shall be stranded except that solid cable, size 10 and smaller may be used for lighting circuits.
 - e. Manufacturer: Provide cable of one of the following:
 - 1) Southwire.
 - 2) The Okonite Company.
 - 3) American Insulated Wire
 - 4) General Cable
 - 5) Or equal.
2. Cable Connectors, Solderless Type:
 - a. For wire sizes up to #6 AWG, use compression type.
 - b. For sizes #4 AWG and above, use either compression type or bolted type with silver plated contact faces.

- c. For sizes #250 MCM and larger, use connectors with at least 2 cable clamping elements or compression indents and provision for at least 2 bolts for joining to apparatus terminal.
- d. Properly size connectors to fit fastening device and wire size.

B. Instrumentation Cable:

1. Single Shielded Pair:

- a. Tinned copper, stranded conductors, #18 AWG minimum, twisted with aluminum polyester shield, stranded tinned 20 AWG copper drain wire and overall chrome vinyl jacket. Rated for 300 volts minimum.

2. Multipaired Shielded:

- a. Tinned copper, 7 strand XLPE insulated conductors, #18 AWG minimum, twisted in pairs with aluminum mylar shield over each pair, silicone rubber fiberglass fire barrier tape, tinned copper drain wire, aluminum mylar overall shield, Hypalon outer jacket.

3. Manufacturer: Provide shielded cable of one of the following:

- a. Okonite Company.
- b. Belden Company.
- c. Dekoron Wire and Cable Company.
- d. Or equal.

2.3 WIRING DEVICES

A. Outlet Boxes:

- 1. Material: Cast gray iron alloy, or cast malleable iron, with zinc electroplate finish in damp, wet or exterior locations and zinc coated sheet steel in dry locations.
- 2. Device Cover Plates:
 - a. Stainless steel Type 302 alloy for indoor finished areas.
 - b. Gasketed spring door type for devices designated as weatherproof.
 - c. Integral with device for hazardous locations.
 - d. Stainless steel screws and hardware.
- 3. Manufacturer: Provide device boxes of one of the following:
 - a. Crouse Hinds Company.
 - b. Appleton Electric Company.

c. Or equal.

B. Snap Switches:

1. Switches for Non Hazardous Locations:

a. Single pole AC toggle switch, quiet type, 120/277 volt AC, 20 ampere, Ivory, specification grade.

1) Product and Manufacturer: Provide one of the following:

a) Cat. #1221 I, as manufactured by Harvey Hubbell Incorporated.

b) Cat. #1991 I, as manufactured by Arrow Hart Incorporated.

c) Or equal.

b. Single pole, 3 way AC toggle switch, quiet type, 120/277 volt AC, 20 ampere, Ivory, specification grade.

1) Product and Manufacturer: Provide one of the following:

a) Cat. #1223 I, as manufactured by Harvey Hubbell Incorporated.

b) Cat. #1993 I, as manufactured by Arrow Hart Incorporated.

c) Or equal.

2. Switches for Hazardous Locations:

a. Material: Factory sealed tumbler switch suitable for installation in Class I, Group D hazardous locations. Cast gray iron alloy or cast malleable iron body and cover with zinc electroplate finish. Switch rated at 20 amperes, 120/277 volt AC.

b. Product and Manufacturer: Provide one of the following:

1) Series EDS, as manufactured by Crouse Hinds Company.

2) Type EDS, as manufactured by Appleton Electric Company.

3) Or equal.

C. Receptacles:

1. Receptacles for Non Hazardous Locations:

a. Duplex grounding receptacle, two pole, three wire, 125 volt AC, 20 ampere.

1) Product and Manufacturer: Provide one of the following:

- a) Cat. #53CM62, as manufactured by Harvey Hubbell Incorporated.
- b) Cat. #5362 CR, as manufactured by Arrow Hart Incorporated.
- c) Or equal.

2. Receptacles for Hazardous Locations:

- a. Material: Factory sealed receptacle suitable for installation in Class I, Group D hazardous locations. Copper free aluminum receptacle and cover with cast gray iron alloy or cast malleable iron mounting box with zinc electroplate finish. Receptacle rated at 20 amperes, 125 250 volt AC, 2 wire, three pole.
- b. Product and Manufacturer: Provide one of the following:
 - 1) Series CPS, as manufactured by Crouse Hinds Company.
 - 2) Type CPS, as manufactured by Appleton Electric Company.
 - 3) Or equal.

D. Disconnect Switches:

1. Service Disconnect Switches:

- a. Type: Fused, heavy duty, single throw, quick make, quick break mechanism, visible blades in OFF position and safety handle.
- b. Rating: Voltage, number of poles and short circuit rating as shown on the Drawings. Switch shall bear a UL label and shall be suitable for use as service equipment.

2. Single Throw, Circuit Disconnect Switches:

- a. Type: Unfused, horsepower rated, heavy duty, single throw, quick make, quick break mechanism, visible blades in the OFF position and safety handle.
- b. Rating: Voltage and number of poles as required for motor or equipment circuits being disconnected. Switches shall bear a UL label.

3. Enclosure:

- a. NEMA 12 for dry, non corrosive areas.
- b. NEMA 4X for wet or corrosive locations and all outdoor locations.
- c. NEMA 7 for areas classified as hazardous locations.
- d. Nameplate identifying equipment for which switches serve as the disconnecting means.

4. Manufacturer: Provide disconnect switches of one of the following:

- a. Square D Company.
- b. General Electric Company.
- c. Or equal.

E. Automatic Transfer Switches (ATS):

- 1. Size and ratings as shown on contract drawings.
- 2. NEMA 4X 316 stainless steel non-ventilated wall-mounted enclosure, suitable for outdoor installation.
- 3. Control panel shall utilize the following;
 - a. Voltage & phase monitoring (3-phase L-L) with field adjustable drop off and pickup values.
 - b. Open transition switching with field adjustable time delays for generator start, transfer to emergency source, retransfer to normal source and generator cooldown.
 - c. LED indicators, test switch, maintenance disconnect, remote status and generator start command field contacts.
 - d. Engine generator exercising time with load: adjustable in 15 minute increments.
- 4. ATS equipment shall be provided by ASCO/ Schneider Electric, or equal.

2.4 GROUNDING SYSTEMS

A. Bare Ground Cable:

- 1. Material: Annealed, Tin-plated stranded copper, Size per Article 250.102.
- 2. Manufacturer: Provide ground cable of one of the following:
 - a. Cablec Corporation.
 - b. General Cable Corporation.
 - c. Rome Cable Company.
 - d. Or equal.

B. Ground Rods:

- 1. Material: Copperclad rigid steel rods, 3/4 inch diameter, 10 feet long.
- 2. Manufacturer: Provide ground rods by one of the following:
 - a. Copperweld, Bimetallics Division.
 - b. ITT Blackburn Company.
 - c. Or equal.

C. Grounding Connectors:

1. Material: Pressure connectors to be copper alloy castings, designed specifically for the items to be connected, and assembled with Durium or silicone bronze bolts, nuts and washers. Welded connections to be by exothermic process utilizing molds, cartridges and hardware designed specifically for the connection to be made.
2. Manufacturer: Provide grounding connectors of one of the following:
 - a. Pressure Connectors:
 - 1) O.Z./Gedney, Division of General Signal Corporation.
 - 2) Burndy Corporation.
 - 3) Or equal.
 - b. Welded Connections:
 - 1) Cadweld by Erico Products, Incorporated.
 - 2) Therm O Weld by Burndy Corporation.
 - 3) Or equal.

2.5 SERVICE AND DISTRIBUTION

A. Lighting and Distribution Panelboards:

1. Panelboards:
 - a. Rating: Voltage rating, current rating, number of phases, number of wires and number of poles shall be as shown.
 - b. Circuit Breakers: Molded case, bolt in thermal magnetic type with number of poles and trip ratings as shown.
 - c. Branch circuit interrupting capacity to exceed the maximum fault current available at the panelboard bus.
 - d. Bus Bars: 98 percent conductivity copper. All 4 wire panelboards shall have a solid neutral bar. All panels shall have ground bus.
 - e. Main: All panelboards shall have a main circuit breaker unless Drawings specifically call for main lugs only.
 - f. Branch circuit breakers connected for sequence phasing.
 - g. Construction: Code grade steel, ample gutter space, flush door, flush snaplatch and lock.
 - h. Trim: Surface or flush as required.
 - i. Directory: Typed card, with glass cover in frame on back of door giving the circuit numbers and the area or equipment served.
 - j. Identification: Nameplate identifying the panel number and voltage.

k. Manufacturer: Provide panelboards of one of the following:

- 1) General Electric Company.
- 2) Westinghouse Electric Corporation.
- 3) Square D Company.
- 4) Or equal.

2. Mini Power Centers:

- a. General: Mini power center shall consist of an encapsulated dry type transformer, primary and secondary main circuit breakers, and secondary panelboard all in one enclosure.
- b. Transformer Rating: KVA, primary voltage, secondary voltage, frequency and number of phases shall be as indicated on the Drawings.
- c. Branch Circuits: Molded case circuit breakers, plug in thermal magnetic type with number of poles and trip ratings as shown on the Drawings.
- d. Enclosure: Weatherproof.
- e. Product and Manufacturer: Provide one of the following:
 - 1) Mini Power Zone, as manufactured by Square D Company.
 - 2) Mini Power Center, as manufactured by Westinghouse Electric Corporation.
 - 3) Panel Tran, as manufactured by Acme Electric Corporation.
 - 4) Or equal.

B. Dry Type Transformers:

1. General:

- a. Type: General purpose, dry type.
- b. Rating: KVA, primary voltage and connection, secondary voltage and connection, frequency and number of phases shall be as indicated on the Drawings.
- c. Taps: Full capacity, two 2 1/2 percent primary taps above normal and two 2 1/2 percent primary taps below normal.
- d. Sound Level: ANSI C89.1 standard.
- e. Enclosure: UL listed for either indoor or outdoor use.
- f. Insulation: Class 185 C, 115 C rise.
- g. Identification: Nameplate identifying the transformer number and voltages.

2. Manufacturer: Provide transformers of one of the following:

- a. General Electric Company.

- b. Westinghouse Electric Corporation.
- c. Sorgel by Square D Company.
- d. Or equal.

2.6 LIGHTING SYSTEMS

A. Lighting Fixtures:

1. Type: Lighting fixtures are noted in the Fixture Schedule. Fixtures to be complete with supports, ballasts, lamps and incidentals as required.
2. LED Luminaire Assembly:
 - a. Fixture: minimum 4000K, CRI $\geq$ 70, 50k operating hours pre-L70.
 - b. Conforming with UL 8750 and complying with FCC CFR Section 15.
 - c. Input voltage shall be 24VDC or 36VDC.
3. LED Driver:
 - a. Must operate input voltage between 120VAC to 277VAC ($\pm 10\%$).
 - b. Operating frequency must be 60Hz.
 - c. Must be rated to operate between -40°C to $+50^{\circ}\text{C}$.
 - d. Must have a minimum efficiency of 85%.
 - e. Self-protected including short circuit protection.
 - f. Compliance to FCC CFR Section 15.
4. Fixtures located in an area which is identified as a hazardous location shall be approved as a complete assembly for the hazardous location classification indicated on the Drawings, shall be clearly marked to indicate maximum wattage of lamps for which they are approved, and shall be protected against physical damage by suitable guards.
5. Hardware: All necessary hangers, supports, conduit adapters, reducers, hooks, brackets and other hardware required for safe fixture mounting shall be furnished. Hardware shall have a protective, noncorrosive finish.

2.7 CONTROL EQUIPMENT

A. Magnetic Motor Starters:

1. Type: Magnetic coil operated, horsepower rated with thermal overload protection.
2. Combination starter with magnetic only motor circuit protector.
3. Functional Type: Full voltage, single speed, nonreversing unless otherwise noted on Drawings.
4. Control power transformer fused and grounded on low voltage (120 V) side for each starter.

5. Auxiliary contacts for motor space heaters, remote status signals and interlocks as required.
6. Overload relays of the temperature compensated type and overload heaters sized to coordinate with actual motors being controlled.
7. Start and stop control stations, selector switches, pilot lights and other devices as required.
8. Nameplate identifying the equipment controlled.
9. Product and Manufacturer: Provide one of the following:
 - a. Type A 206, as manufactured by Westinghouse Electric Corporation.
 - b. Type CR287, as manufactured by General Electric Company.
 - c. Bulletin 512, as manufactured by Allen Bradley Company.
 - d. Class 8539, as manufactured by Square D Company.
 - e. Or equal.

B. Manual Motor Starters:

1. Type: Toggle operated, horsepower rated with thermal overload protection.
2. Nameplate identifying the equipment controlled.
3. Product and Manufacturer: Provide one of the following:
 - a. Type MS, as manufactured by Westinghouse Electric Corporation.
 - b. Type CR101, as manufactured by General Electric Company.
 - c. Type 609T, as manufactured by Allen Bradley Company.
 - d. Or equal.

C. Control Stations:

1. Type: Industrial, heavy duty, oiltight construction with clearly marked legend plates.
2. Lockout Stop: Maintained contact type with provisions for locking.
3. Pushbuttons: Momentary or maintained types, NEMA A600 contact rating.
4. Selector Switches: Rotary type with round or oval handles and positioning device to securely hold switch in selected position.
5. Indicating Lights: Transformer type with 6 volt lamp. Lens color red for running, green for stopped or ready and amber for failure.
6. Nameplates identifying equipment controlled if not readily apparent.
7. Manufacturer: Provide control stations of one of the following:
 - a. "Flygt" Xylem Brand.
 - b. No equal.
8. Control Stations shall conform to the requirements of Division 13.

D. Relay Panels:

1. General: Provide relay panels for control of equipment as shown on the Drawings.
 - a. Relays shall be industrial type, 600 volt with convertible contact cartridge to convert from either NO or NC contacts. Number of contacts shall be as required for the control functions shown on the Drawings.
 - b. 300 volt barrier screw type terminal strips for all wiring entering and leaving the panel.
2. Enclosures:
 - a. NEMA 12 for dry indoor locations.
 - b. NEMA 4X for wet or corrosive locations.
 - c. NEMA 7 for Class I hazardous locations.
3. Relay Panels shall conform to the requirement of Division 13.

E. Reduced Voltage Soft Starter Units (RVSS):

1. RVSS shall include a digital keypad for adjusting the RVSS parameters and viewing the motor, RVSS, and fault status mounted such that it is accessible without opening the panel's interior dead-front door.
2. A shorting contactor shall be supplied in each RVSS to reduce temperature rise within the enclosure. Shorting contactor shall be rated to carry the motor full load current during steady state after full voltage has been applied to the motor by the RVSS.
3. Electrical Ratings:
 - a. Designed to operate from an input voltage between -10% and +10% of nominal voltage rating.
 - b. Operate from an input frequency range of $\pm 10\%$.
 - c. Power and control devices shall be rated capable of six (6) evenly spaced starts per hour at 350% of full rated current for 20 seconds per start without tripping.
 - d. Maximum ambient temperature of 40C, with enclosure fan as required.
4. Protection:
 - a. A microprocessor-based thermal protection system shall be included that shall continuously calculate the temperature rise of the motor and RVSS and shall provide the following:
 - 1) Motor overload pre-alarm that shall indicate by relay contact or logic output that the motor windings have exceeded 110% of their rated temperature rise; this function shall be for alarm only.
 - 2) Motor overload fault shall stop the motor if the windings have exceeded 125% of their rated temperature rise.

- 3) An electronic circuit with a time-constant adjustable to the motor's thermal cooling time-constant that shall ensure memorization of the thermal state even if power is removed from the RVSS.
 - b. RVSS controller unit shall provide line and motor phase loss, phase reversal, underload, stall, and jam protection.
 - c. RVSS controller unit shall include, but not be limited to, a shorting contactor which shall close after full voltage has been applied to the motor by the RVSS to reduce the current carrying duty on the SCRs. The integral protective features shall be active even when the shorting contactor is used to bypass the SCRs during steady state operation.
 - d. Diagnostic faults and soft start status shall be displayed on the door-mounted keypad after a fault condition.
 - e. The motor shall be automatically protected from solid state component failure by one of the following means:
 - 1) Shunt trip coil to trip disconnect in the event of a RVSS fault condition, including, but not limited to, a shorted SCR.
 - 2) Isolation contactor that shall open when the motor is stopped or when the controller detects a fault condition, including, but not limited to, a shorted SCR.
5. Adjustments and Configurations:
- a. Programming/configuration devices, display units, and field control wiring terminals shall be accessible on the front of the control module. Exposure to control circuit boards or electrical power devices during routine adjustments is prohibited.
 - b. Digital indication shall provide, as a minimum, the following conditions:
 - 1) RVSS status; ready, starting/stopping, run.
 - 2) Motor status; current, torque, thermal state, power factor, operating time, power in kW.
 - 3) Fault status; motor thermal overload, RVSS thermal fault, loss of line or motor phase, line frequency fault, low line voltage fault, locked rotor fault, motor underload, maximum start time exceeded, external fault, serial communication fault, line phase reversal fault, motor overcurrent fault.
 - c. RVSS controller unit shall be preset to the following for operation without adjustment in most applications:
 - 1) Linear (torque-controlled) acceleration ramp of 10SEC.
 - 2) Current limitation to 350% of the motor full load current rating.
 - 3) Class-10 overload protection.
 - 4) Motor current preset per NEC Table 430.150 for standard horsepower motors.
 - d. A digital keypad shall be used to configure the following operating parameters as required:

- 1) Motor full load amperes adjustable from 40 to 100% of the RVSS controller unit rating.
 - 2) Current limitation on starting adjustable from 200 to 700% of the motor current rating, not to exceed 350% of the RVSS controller unit rating.
 - 3) Voltage ramp adjustable from 1 to 60SEC.
 - 4) Initial voltage adjustable from 10 to 50% of nominal motor torque.
 - 5) Maximum start time adjustable from 1 to 250SEC.
 - 6) Voltage boost duration adjustable from 0.1 to 1SEC.
 - 7) Selection of freewheel or soft stop.
 - 8) Linear (torque-controlled) deceleration ramp time adjustable from 1 to 60SEC.
 - 9) Threshold to change to freewheel following a soft stop from 0 to 10% of the nominal motor torque.
 - 10) Selection of Class-10, Class-20, or Class-30 motor thermal overload protection.
- e. Digital keypad shall be used configure the following controller parameters as required:
- 1) Assignment of RVSS inputs and outputs.
 - 2) Activation of phase reversal protection.
 - 3) Reset of motor thermal state.
 - 4) Return to factory parameter settings.
 - 5) Activation of self-test mode.
 - 6) Indication of elapsed time in hours of starting, running, and stopping.
- f. Output relays shall provide the following status indications:
- 1) Two (2) Form A (normally open) minimum for indication of trip.
 - 2) Two (2) Form A (normally open) for indication that RVSS controller is running.
- g. Additional inputs and outputs shall be available to provide the following status indications:
- 1) Two (2) assignable control inputs for the following functions: external fault input, disable serial link control, second set of parameters, or general fault reset.
- h. Relay and I/O functions listed above shall be isolated with respect to common.
6. Controls:
- a. Start and stop control stations, selector switches, pilot lights and other devices as required.
 - b. RVSS control circuitry shall be operated from a control power transformer included within or mounted adjacent to the control panel enclosure.

PART 3 – EXECUTION

3.1 INSTALLATION

A. General:

1. Mount equipment so that sufficient access and working space is provided for safe operation and maintenance.
2. Securely fasten enclosures to walls and other structural surfaces on which they are mounted. Provide independent supports where no walls or other structural surface exists.
3. Install in conformance with the National Electrical Code.

B. Raceway Systems:

1. Supports:

- a. Rigidly support conduits by clamps, hangers or unistrut channels.
- b. Support single conduits by means of one hole pipe clamps in combination with one screw back plates, to raise conduits from the support surface. Support multiple runs of conduits on trapeze type hangers with steel horizontal members and threaded hanger rods, Kindorff or equal. Rods shall be not less than 3/8 inch diameter, and shall be cadmium coated.
- c. For PVC coated rigid steel conduit runs, supports and hardware shall be PVC coated or stainless steel.

2. Fastenings: Fasten raceway systems rigidly and neatly to supporting structures by the following methods:

- a. To Wood: Wood screws.
- b. To Hollow Masonry Units: Toggle bolts.
- c. To Brick Masonry: Price expansion bolts, or equal.
- d. To Concrete: Phillips; Hilti Corporation; or equal, anchors.
- e. To Steel: Welded threaded studs, beam clamps or bolts with lockwashers or locknuts.

3. Exposed Conduit:

- a. Install parallel or perpendicular to structural members or walls.
- b. Wherever possible, run in groups. Provide galvanized conduit racks of suitable width, length and height and arranged to suit field conditions. Support every ten feet minimum.
- c. Install on structural members in protected locations.
- d. Locate clear of interferences.

- e. Maintain 6 inches from hot fluid lines and 1/4-inch from walls.
 - f. Install vertical runs plumb. Unsecured drop length not to exceed 12 feet.
4. Conduit Embedded in Concrete:
- a. Separation: Three times outer diameter of larger conduit center to center.
 - b. Minimum Slab Thickness:
 - 1) With no crisscrossing of conduit, three times outer diameter of conduit.
 - 2) With crisscrossing of conduits, four times outer diameter of larger conduit.
 - c. Run conduit in center of slab.
 - d. Before concrete is placed, make the necessary location measurements of the conduit to be embedded so that the information is available to prepare record drawings.
5. Underground Conduits:
- a. Install individual underground conduits a minimum of 20 inches below grade unless otherwise indicated.
 - b. Perform all excavation, bedding, backfilling and surface restoration including pavement replacement where required.
 - c. Make conduit connections watertight.
 - d. Protect metallic conduits from corrosion by one of the following means:
 - 1) Provide three inches of concrete all around conduits.
 - 2) Tape conduits with an all weather polyvinyl chloride plastic tape with a high tack adhesive formulated to resist corrosion, Scotchrap #50 or equal.
 - 3) Apply 2 coats of a bitumastic coating.
6. Empty Conduits:
- a. Install nylon pull wire in each empty conduit and cap conduits not terminating in boxes with permanent fittings designed for the purpose.
 - b. Identify each empty conduit with a durable tag showing the conduit number indicated on the Drawings.
7. Field Bends: No indentations. Diameter of conduit shall not vary more than 15 percent at any bend.
8. Joints:
- a. Apply conductive compound to all joints before assembly.

- b. Make up joints tight and ground thoroughly.
 - c. Use standard tapered pipe threads for conduit and fittings.
 - d. Cut conduit ends square and ream to prevent damage to wire and cable.
 - e. Use full threaded couplings. Split couplings not permitted.
 - f. Use strap wrenches and vises to install conduit. Replace conduit with wrench marks.
 - g. Apply zinc rich paint to exposed threads and other areas of galvanized conduit system where the base metal is exposed.
9. Terminations:
- a. Install insulated bushings on conduits entering boxes or cabinets, except threaded hub types.
 - b. Provide locknuts on both inside and outside of enclosure for grounding.
 - c. Bushings not to be used in lieu of locknuts.
10. Moisture Protection:
- a. Plug or cap conduit ends at time of installation to prevent entrance of moisture or foreign materials.
 - b. Make underground and embedded conduit connections watertight.
 - c. Thruwall Seals: Install for conduits passing through new exterior subsurface walls or base slabs of buildings and for conduits passing through existing exterior walls. For individual exposed conduits passing through interior walls, install non-metallic sleeves to protect the conduit against action of alkaline substances which may be present.
 - d. Drainage: Pay particular attention to drainage for conduit runs. Wherever possible, install conduit runs so as to drain to one end and away from buildings. Avoid pockets or depressions in conduit runs.
11. Corrosion Protection:
- a. Conduit Curb:
 - 1) In concrete slabs or floors, provide a two inch high curb extending two inches from the outer surface of the conduit penetrating the floor, to prevent corrosion.
 - 2) Terminate conduit stub ups in couplings, slightly above the finished concrete curb.
 - 3) Apply corrosion protection tape, Scotchrap #50 or equal to the stub up, a minimum of 6 inches above and below the finished surface of the concrete.

- b. Dissimilar Metals:
 - 1) Take every action to prevent the occurrence of electrolytic action between dissimilar metals.
 - 2) Do not use copper products in connection with aluminum work, and do not use aluminum in locations subject to drainage of copper compounds on the bare aluminum.
 - 3) Back paint aluminum in contact with masonry or concrete with two coats of aluminum pigmented bituminous paint.
 - c. PVC Coating: Field apply a 40 mil thick polyvinyl chloride coating to supports and fasteners for PVC coated conduit runs.
12. Reused Existing Conduits:
- a. Pull rag swab through conduits to remove water and to clean conduit prior to installing new cable.
 - b. Repeat swabbing until all foreign material is removed.
 - c. Pull mandrel through conduit, if necessary, to remove obstructions.
13. Core drill for individual conduits passing through existing concrete slabs. Obtain authorization from OWNER prior to core drilling. Seal spaces around conduit with epoxy grout.
14. PVC Conduit:
- a. Install in accordance with manufacturer's recommendations.
 - b. Join sections in accordance with manufacturer's installation procedures for push fit, bell and spigot type joints, if applicable or with manufacturer's recommended cement.
 - c. During installation provide expansion fittings for expansion and contraction to compensate for temperature variations. Expansion fittings shall be watertight and of the type suitable for direct burial.
 - d. Make transition to intermediate or rigid steel conduit before making turn up to enclosures and equipment.
 - e. Provide watertight expansion/deflection fittings at wall and floor penetrations of buildings and equipment concrete pads.
15. Flexible Conduit:
- a. Install at motors and equipment which are subject to vibration or require movement for maintenance purposes. Provide necessary reducer where equipment furnished cannot accept 3/4 inch size flexible conduit. Limit flexible conduit length to three feet maximum.

16. Pull and Junction Boxes:
 - a. Install pull boxes in runs containing more than three 90 degree bends, runs exceeding 200 feet, where indicated on the Drawings and where required to conform with the National Electrical Code.
 - b. Size junction and pull boxes in accordance with the requirements of the National Electrical Code.
 - c. Provide terminal blocks in junction boxes where cable terminations or splices are required.
17. Sealing Fittings: Install for hazardous and corrosive locations as required by the National Electrical Code and where shown on the Drawings.
18. Expansion/Deflection Fittings: Install fittings where conduits cross structural expansion joints.

C. Wire and Cables:

1. 600 Volt Cable:
 - a. Install all cables complete with proper terminations at both ends. Check and correct for proper phase sequence and proper motor rotation.
 - b. Pulling:
 - 1) Use insulating types of pulling compounds containing no mineral oil.
 - 2) Pulling tension shall be within the limits recommended by the wire and cable manufacturer.
 - 3) Use a dynamometer where mechanical means are used.
 - 4) Cut off section subject to mechanical means.
 - c. Bending Radius: Limit to 6 times cable overall diameter.
 - d. Slack: Provide maximum slack at all terminal points.
 - e. Splices:
 - 1) Where possible, install cable continuous, without splice, from termination to termination.
 - 2) Where required, splice in junction box using terminal boards.
 - 3) Splices in conduits not allowed.
 - f. Identification: Identify all conductors by circuit number and phase at each terminal or splice location.
 - g. Color code power cables in accordance with OWNER'S standards.
2. Instrumentation Cable:
 - a. Install in conduit separate from power cables unless otherwise noted.
 - b. Ground shield on shielded cables at one end only.

- c. Terminate stranded conductors with pre insulated crimp type spade or ring torque terminals properly sized to fit fastening device and wire size.
- d. Install and terminate vendor furnished cable in accordance with vendor equipment requirements.

D. Wiring Devices:

1. Outlet Boxes:

- a. Fasten boxes rigidly and neatly to supporting structures.
- b. For units mounted on masonry or concrete walls, provide suitable 1/2 inch spacers to prevent mounting back of box directly against wall.
- c. Leave no open conduit holes in boxes. Close unused openings with capped bushings.
- d. Label each circuit in boxes and identify with durable tag.

2. Snap Switches:

- a. Install switches in outlet or device boxes in nonhazardous locations.
- b. Install switches in rigid metallic conduit systems in hazardous locations.
- c. Mount wall switches 4 feet 6 inches above finished floor unless otherwise noted.

3. Receptacles:

- a. Install receptacles in outlet or device boxes in nonhazardous locations.
- b. Install receptacles in rigid metallic conduit systems in hazardous locations.
- c. Install receptacles with ground pole in the down position.
- d. Mount receptacles 18 inches above finished floor in nonhazardous locations and 4 feet 6 inches above finished floor in hazardous locations unless otherwise noted.

E. Grounding Systems:

1. Equipment Grounding:

- a. Ground all electrical equipment in compliance with the National Electrical Code.
- b. Equipment grounding conductors shall be stranded copper cable of adequate size installed in conduit where necessary for mechanical protection. Ground conductors, pulled into conduits with non-grounded conductors, shall be insulated. Color of insulation shall be green.

- c. Connect ground conductors to conduit with copper clamps, straps or with grounding bushings.
- d. Connect to piping by welding or brazing. Use copper bonding jumpers on all gasketed joints.
- e. Connect to equipment by means of lug compressed on cable end. Bolt lug to equipment frame using holes or terminals provided on equipment specifically for grounding. Do not use holddown bolts. Where grounding provisions are not included, drill suitable holes in locations designated by ENGINEER.
- f. Connect to motors by bolting directly to motor frames, not to sole plates or supporting structures.
- g. Connect to service water piping by means of copper clamps. Use copper bonding jumpers on all gasketed joints.
- h. Scrape bolted surfaces clean and coat with a conductive oxide resistant compound.

F. Service and Distribution:

1. Lighting and Distribution Panelboards:

- a. Mounting: Install panelboards at locations shown on Drawings. Set cabinets so that top branch circuit breaker is not over 6 feet from the floor.
- b. Directory: Complete typewritten directory indicating items controlled by each circuit breaker and the size of feeder serving the panel.
- c. Arrange circuits to balance the loads on the panelboards.

2. Dry Type Transformers:

- a. Install transformers on walls or floors.
- b. Mount transformers so that vibrations are not transmitted to the structural parts of the building or to other equipment.
- c. Adjust tap settings to provide proper voltage at panelboards.
- d. Ground transformer in conformance with the National Electrical Code.

3. Lighting Fixtures:

- a. General: Fixture mounting heights and locations indicated on the Drawings are approximate and are subject to revision in the field where necessary to clear conflicts and obstructions.
- b. Suspended Fixtures: Pendant mount using 1/2 inch conduit stems. Ground to outlet box. Attach mounting to building structure with

expansion anchors. Fixtures shall not be dependent on the outlet box cover screws for support.

- c. Surface Mounted Fixtures: Attach to appropriate outlet box.
- d. Boxes and Fixtures:
 - 1) For units mounted against masonry or concrete walls, provide suitable 1/2 inch spacers to prevent mounting back of box directly against wall.
 - 2) Bolt units rigidly to building with expansion anchors, toggle bolts, hangers or Unistrut.
 - 3) No boxes shall be installed with open conduit holes.
 - 4) Cable each circuit and identify with tag.
- e. Mounting Heights: Mounting heights or elevations are to bottom of the fixture or to centerline of device.
- f. Relamp all fluorescent fixtures with new lamps at end of construction period, prior to final acceptance of the new facilities by OWNER.

3.2 INSPECTIONS, TESTING AND ADJUSTMENTS

- A. Inspections: Accompany the normal installation tests with inspections to demonstrate to the satisfaction of the OWNER the following:
 - 1. Connections: All circuits are properly connected in accordance with the Drawings and applicable approved Shop Drawings.
 - 2. Operation: All circuits and devices are operable.
 - 3. Identification: All conductors are properly identified at each terminal.
- B. Testing:
 - 1. 600 Volt Cable:
 - a. Test each electrical circuit after permanent cables are in place to demonstrate that the circuit and connected equipment perform satisfactorily and that they are free from improper grounds and short circuits.
 - b. Individually test 600 volt cables for insulation resistance between phases and from each phase to ground. Test after cables are installed and before they are put in service with a Megger whose rating is suitable for the tested circuit. Tests shall meet with the applicable specifications of ICEA S 66 524 and NEMA WC7 1971.
 - c. The insulation resistance for any given conductor shall not be less than 1 megohm for 600 volt and less service. Any cable not meeting this value or which fails when tested under full load conditions shall be replaced with a new cable for the full length.

2. Instrumentation Cable:
 - a. Test shielded instrumentation cable shields with an ohmmeter for continuity along the full length of the cable and for shield continuity to ground.
 - b. Connect shielded instrumentation cables to a calibrated 3 20 milliamp DC signal transmitter and receiver. Test at 4, 12, and 20 milliamp transmitter settings.
3. Grounding System:
 - a. Test the completed ground systems for continuity and for resistance to ground using an electrical ground resistance tester.
4. Operation Tests:
 - a. Operate all starters, circuit breakers and associated equipment to demonstrate suitability and compliance with Specifications and reference standards, except for short circuit interrupting rating or other inherent design features covered by shop tests.
 - b. Test all motors for direction of rotation and reverse connections if necessary.
 - c. Check control circuits to determine that operation and sequence are correct and adjust limit switches, pressure switches, float switches, timers and other devices to give proper operation.

END OF SECTION

APPENDIX A

PERMITS



FLORIDA DEPARTMENT OF Environmental Protection

Central District Office
3319 Maguire Blvd., Suite 232
Orlando, Florida 32803

Ron DeSantis
Governor

Jeanette Nuñez
Lt. Governor

Shawn Hamilton
Secretary

July 30, 2024

In the Matter of an
Application for Permit by:

PERMITTEE:

Mr. Shawn Finley
Public Works Director
City of Ormond Beach
501 N. Orchard Street
Ormond Beach, FL, 32174
shawn.finley@ormondbeach.org

PERMIT NUMBER: 0019119-037-DWC/CM

COUNTY: Volusia

PROJECT NAME: Lift Station 4P Improvements

WASTEWATER TREATMENT:

Ormond Beach WWTF

FACILITY ID: FL0020532

NOTICE OF PERMIT ISSUANCE

Enclosed is Permit Number 0019119-037-DWC/CM to construct a domestic wastewater collection/transmission system, issued pursuant to Section 403.087(1), Florida Statutes.

NOTICE OF RIGHTS

This action is final and effective unless a petition for an administrative hearing is timely filed under Sections 120.569 and 120.57, F.S., before the deadline for filing a petition. On the filing of a timely and sufficient petition, this action will not be final and effective until further order of the Department. Because the administrative hearing process is designed to formulate final agency action, the hearing process may result in a modification of the agency action or even denial of the application.

Petition for Administrative Hearing

A person whose substantial interests are affected by the Department's action may petition for an administrative proceeding (hearing) under Sections 120.569 and 120.57, F.S. Pursuant to Rules 28-106.201 and 28-106.301, F.A.C., a petition for an administrative hearing must contain the following information:

- (a) The name and address of each agency affected and each agency's file or identification number, if known;
- (b) The name, address, any e-mail address, any facsimile number, and telephone number of the petitioner, if the petitioner is not represented by an attorney or a qualified representative; the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; A statement of when and how the petitioner received notice of the agency decision;
- (c) A statement of all disputed issues of material fact. If there are none, the petition must so indicate;
- (d) A concise statement of the ultimate facts alleged, including the specific facts that the petitioner contends warrant reversal or modification of the agency's proposed action;

- (e) A statement of the specific rules or statutes that the petitioner contends require reversal or modification of the agency's proposed action, including an explanation of how the alleged facts relate to the specific rules or statutes; and
- (f) A statement of the relief sought by the petitioner, stating precisely the action that the petitioner wishes the agency to take with respect to the agency's proposed action.

The petition must be filed (received by the Clerk) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, or via electronic correspondence at Agency_Clerk@dep.state.fl.us. Also, a copy of the petition shall be mailed to the applicant at the address indicated above at the time of filing.

Time Period for Filing a Petition

In accordance with Rule 62-110.106(3), F.A.C., petitions for an administrative hearing by the applicant and persons entitled to written notice under Section 120.60(3), F.S., must be filed within 14 days of receipt of this written notice. Petitions filed by any persons other than the applicant, and other than those entitled to written notice under Section 120.60(3), F.S., must be filed within 14 days of publication of the notice or within 14 days of receipt of the written notice, whichever occurs first. You cannot justifiably rely on the finality of this decision unless notice of this decision and the right of substantially affected persons to challenge this decision has been duly published or otherwise provided to all persons substantially affected by the decision. While you are not required to publish notice of this action, you may elect to do so pursuant Rule 62-110.106(10)(a).

The failure to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention (in a proceeding initiated by another party) will be only at the discretion of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C. If you do not publish notice of this action, this waiver will not apply to persons who have not received written notice of this action.

Extension of Time

Under Rule 62-110.106(4), F.A.C., a person whose substantial interests are affected by the Department's action may also request an extension of time to file a petition for an administrative hearing. The Department may, for good cause shown, grant the request for an extension of time. Requests for extension of time must be filed with the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, or via electronic correspondence at Agency_Clerk@dep.state.fl.us, before the deadline for filing a petition for an administrative hearing. A timely request for extension of time shall toll the running of the time period for filing a petition until the request is acted upon.

Mediation

Mediation is not available in this proceeding.

Judicial Review

Once this decision becomes final, any party to this action has the right to seek judicial review pursuant to Section 120.68, F.S., by filing a Notice of Appeal pursuant to Florida Rules of Appellate Procedure 9.110 and 9.190 with the Clerk of the Department in the Office of General Counsel (Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000) and by filing a copy of the Notice of

Mr. Finley
0019119-037-DWC/CM
Page 3
July 30, 2024

Appeal accompanied by the applicable filing fees with the appropriate district court of appeal. The notice must be filed within 30 days from the date this action is filed with the Clerk of the Department.

EXECUTION AND CLERKING

Executed in Orange County, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION



Joyce Gonzalez, MPH
Environmental Specialist II
Domestic and Industrial Wastewater Permitting

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this document and all attachments were sent on the filing date below to the following listed persons:

Charles H. Hill, P.E., McKim & Creed, Inc., chill@mckimcreed.com
Laurel Smith, P.E., McKim & Creed, Inc., lsmith@mckimcreed.com
Anthony Wang, P.E., McKim & Creed, Inc., awang@mckimcreed.com
FDEP: Allison Chancy; Charles LeGros; Joyce Gonzalez

FILING AND ACKNOWLEDGMENT

FILED, on this date, pursuant to Section 120.52, F. S., with the designated Department Clerk, receipt of which is hereby acknowledged.



Clerk

July 30, 2024
Date



FLORIDA DEPARTMENT OF Environmental Protection

Central District Office
3319 Maguire Blvd., Suite 232
Orlando, Florida 32803

Ron DeSantis
Governor

Jeanette Nuñez
Lt. Governor

Shawn Hamilton
Secretary

STATE OF FLORIDA DOMESTIC WASTEWATER COLLECTION/TRANSMISSION INDIVIDUAL PERMIT

PERMITTEE:

Mr. Shawn Finley
Public Works Director
City of Ormond Beach
501 N. Orchard Street
Ormond Beach, FL, 32174
shawn.finley@ormondbeach.org

PERMIT NUMBER: 0019119-037-DWC/CM

ISSUANCE DATE: July 30, 2024

EXPIRATION DATE: July 29, 2029

COUNTY: Volusia

PROJECT NAME: Lift Station 4P
Improvements

WASTEWATER TREATMENT: Ormond
Beach WWTF

FACILITY ID: FL0020532

This permit is issued under the provisions of [Chapter 403](#), Florida Statutes (F.S.), and [Chapters 62-4](#) and [62-604](#), Florida Administrative Code (F.A.C.).

The above named permittee is hereby authorized to construct the facilities shown on the application and other documents on file with the Department and made a part hereof and specifically described as follows:

DESCRIPTION OF PROJECT:

Construction of a sewage collection/transmission system serving a conversion of a wet pit/dry pit pump station to a submersible pump station.

The sewage collection/transmission system shall consist of: A) 4 linear feet (LF) of 6-inch DIP force main, B) 9 LF of 8-inch DIP force main, C) 25 LF of 10-inch DIP force main, D) associated valves and appurtenances.

LOCATION OF PROJECT:

This project is located north of Seminole Ave., and east of Oleeta St. in Volusia County, FL, 32174.

IN ACCORDANCE WITH: The limitations, requirements and other conditions set forth in pages 1 through 4 of this permit.

PERMIT CONDITIONS:

1. This permit is subject to the general conditions of [Rule 62-4.160, F.A.C.](#), as applicable. [[62-4.160](#)]
2. Upon completion of construction of the collection/transmission system project, and before placing the facilities into operation for any purpose other than testing for leaks or testing equipment operation, the permittee shall submit [Form 62-604.300\(3\)\(b\), Notification of Completion of Construction for a Domestic Wastewater Collection/Transmission System](#). The form shall be submitted electronically by using the Department's Business Portal at <https://www.fldepportal.com/go/> (via "Submit" then "Registration/Notification" and "Submit Notifications to DEP." The submission is "Division of Water Resource Management Domestic/Industrial Wastewater" and the submittal type is "Notification of Completion of Construction for a Domestic Wastewater Collection/Transmission System."). This form is available at the Department's Internet site at: <https://floridadep.gov/water/domestic-wastewater/content/domestic-wastewater-forms>. [[62-604.700\(2\)](#)]
3. Permit revisions shall only be made in accordance with [Rule 62-4.050\(4\)\(s\), F.A.C.](#) Request for revisions shall be made to the Department in writing and shall include the appropriate fee. Revisions not covered under Rule 62-4.050(4)(s), F.A.C., shall require a new permit. [[62-604.600\(8\)](#)]
4. Abnormal events shall be reported to the Department's Central District Office in accordance with [Rule 62-604.550, F.A.C.](#) For unauthorized spills of wastewater in excess of 1000 gallons per incident, or where information indicates that public health or the environment may be endangered, oral reports shall be provided to the STATE WATCH OFFICE TOLL FREE NUMBER, (800) 320-0519, as soon as practical, but no later than 24 hours from the time the permittee or other designee becomes aware of the circumstances. Unauthorized releases or spills less than 1000 gallons per incident are to be reported orally to the Department's Central District Office within 24 hours from the time the permittee, or other designee becomes aware of the circumstances.

The oral notification shall be followed by a written submission, which shall be provided within five days of the time that the owner/operator becomes aware of the circumstances. The written submission shall contain: a description of the spill, release or abnormal event and its cause; the period and duration of noncompliance including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; clean-up actions taken and status; steps taken or planned to reduce, eliminate, and prevent recurrence; the type of sanitary sewer overflow structure (e.g., manhole); the discharge location address and latitude/longitude; type of water discharged; discharge volumes and volumes recovered; volume discharged to surface waters and receiving waterbody name; types of human health and environmental impacts of the sanitary sewer overflow (e.g., beach closure); whether the noncompliance was caused by a third party (e.g., contractor); and, whether the sanitary sewer overflow was related to wet weather. The written submission shall be provided electronically. Electronic submission is available using the [Department's Business Portal](#) at <https://www.fldepportal.com/go/> (via "Submit" followed by "Report" or "Registration/Notification").

In accordance with Section 403.077, F.S., unauthorized releases or spills reportable to the State Watch Office shall also require a public notice of pollution report. Reporting may be made or by reporting electronically using the [Department's Business Portal](#) at <https://www.fldepportal.com/go/> (via "Submit" followed by "Report" or "Registration/Notification") and selecting the option to also

submit the public notice of pollution report, or reporting may be made to the [Department's Public Notice of Pollution](https://floridadep.gov/pollutionnotice) web page at <https://floridadep.gov/pollutionnotice>. [62-604.550]

ADDITIONAL INFORMATION:

Once a collection/transmission system is cleared for operation, the provisions below shall be met by the owner/operator of the system in accordance with [Rule 62-604.500, F.A.C.](#)

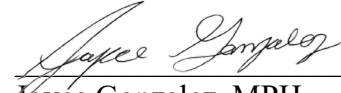
1. All collection/transmission systems shall be operated and maintained to provide uninterrupted service. All pump stations shall be operated and maintained to provide the emergency pumping capability requirements in paragraph 62-604.400(2)(a), F.A.C., the lightning and transient voltage surge protections in paragraph 62-604.400(2)(b), F.A.C., and the design and signage requirements in paragraph 62-604.400(2)(d), F.A.C. Also, all equipment, pipes, manholes, pump stations, and other appurtenances necessary for the collection/transmission of domestic wastewater, including equipment provided pursuant to subsection 62-604.400(2), F.A.C., shall be maintained to function as intended. [[62-604.500\(2\) and \(3\)](#)]
2. The owner/operator of a collection/transmission system shall evaluate and update the emergency response plan portion of the operation and maintenance manual annually. The emergency response plan shall assess system security including cybersecurity; water quality monitoring for sanitary sewer overflows affecting surface waters; and, hurricane and severe storm preparedness and response. [[62-604.500\(4\)](#)]
3. Collection/transmission systems shall be maintained to minimize excessive infiltration and inflow into the collection/transmission system, as well as excessive leakage from the collection/transmission system. The owner/operator of a collection/transmission system shall take corrective actions when infiltration, inflow, or leakage is excessive. Infiltration and inflow are considered excessive if one or both cause or contribute to sanitary sewer overflows. Leakage, or exfiltration, is considered excessive if it causes or contributes to a violation of surface water quality standards or ground water quality standards. [[62-604.500\(5\)](#)]
4. All collection/transmission systems shall be operated and maintained to prevent sanitary sewer overflows. Owners/operators shall evaluate the cause of all sanitary sewer overflows and evaluate potential corrective measures to avoid future sanitary sewer overflows. Corrective actions shall be taken by the owner/operator of the collection/transmission system if excessive inflow and infiltration causes or contributes to a sanitary sewer overflow. The owner/operator of a satellite collection system shall take corrective actions for a sanitary sewer overflow in the receiving collection system caused by excessive inflow and infiltration in the satellite collection system. [[62-604.500\(6\)](#)]
5. The approved Operation and Maintenance Manual and emergency response plan pursuant to [Rule 62-604.500\(4\), F.A.C.](#), shall be kept available at a site convenient for use by operation and maintenance personnel and for inspection by the Florida Department of Environmental Protection personnel. [[62-604.500\(4\)](#)]

PROJECT NAME: Lift Station 4P
Improvements

PERMIT NUMBER: 0019119-037-DWC/CM

Executed in Orange County, Florida

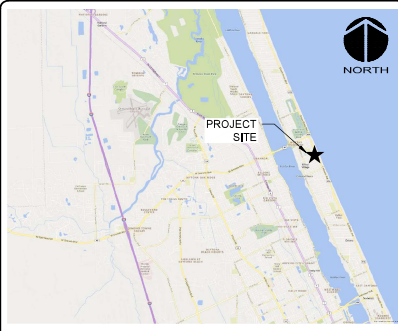
STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION



Joyce Gonzalez, MPH
Environmental Specialist II
Domestic and Industrial Wastewater Permitting

DATE: July 30, 2024

CITY OF ORMOND BEACH
LIFT STATION 4P IMPROVEMENTS
CITY OF ORMOND BEACH BID NO.: 2026-04
OCT 2025
ISSUED FOR BIDDING NOT FOR CONSTRUCTION



VICINITY MAP

NOT TO SCALE

PROJECT NAME: LIFT STATION 4P IMPROVEMENTS

PROJECT ADDRESS:
205 SEMINOLE AVENUE
ORMOND BEACH, FLORIDA



MAYOR:
JASON LESLIE

CITY MANAGER:
JOYCE SHANAHAN

CITY COMMISSIONERS:

PUBLIC WORKS DIRECTOR:
SHAWN FINLEY, P.E.

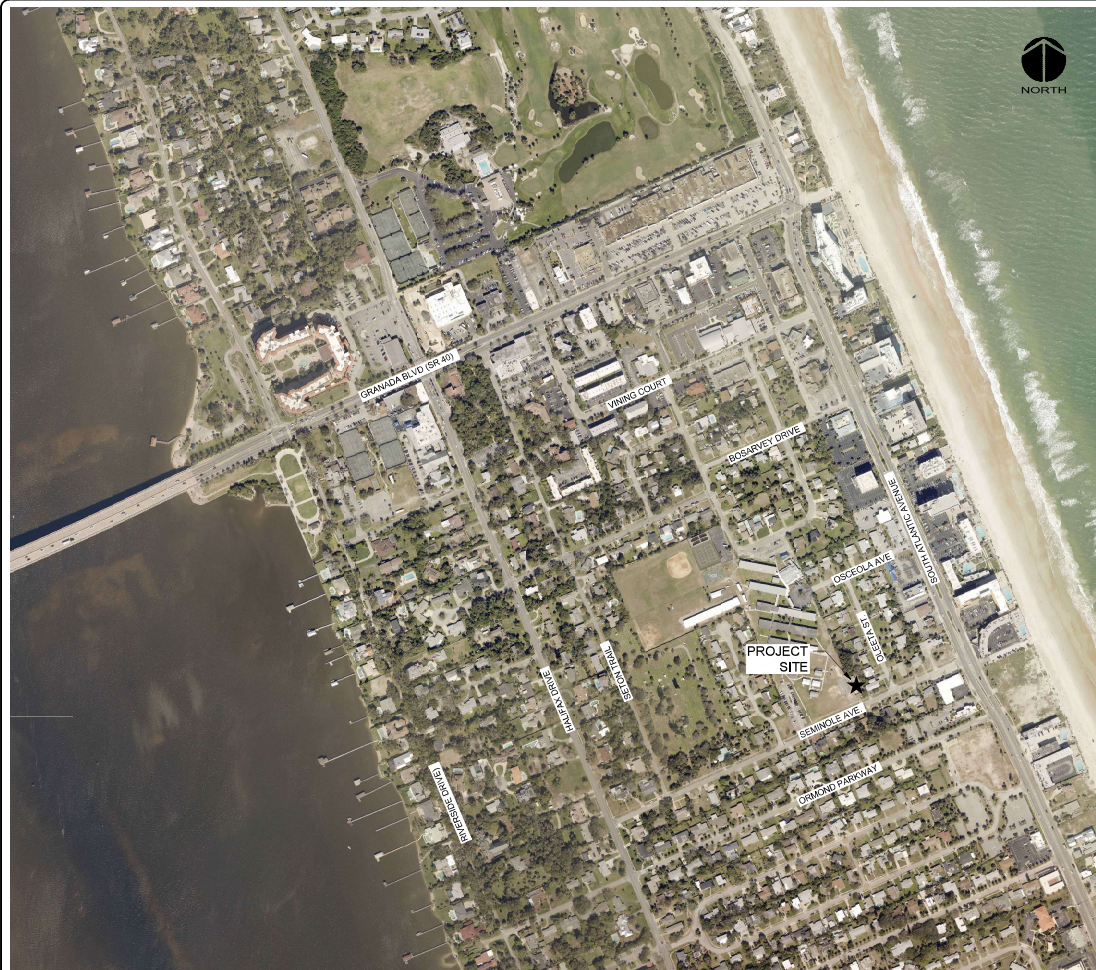
LORI TOLLAND
TRAVIS SARGENT
KRISTIN DEATON
HAROLD BRILEY



139 Executive Circle, Suite 201
Daytona Beach, FL 32114-7102
Phone: (386) 274-2828, Fax: (386) 274-1393

CA Lic. No. 29568
www.mckimcreed.com

PROJECT INFORMATION



SITE MAP

SCALE: 1" = 300'

Sheet List Table

Sheet Number	Sheet Title
GENERAL	
G01	COVER SHEET
G02	ENGINEERS SIGN AND SEAL SHEET
G03	GENERAL SANITARY SEWER NOTES
G04	NOTES, LEGEND AND ABBREVIATIONS
CML	
C01	EXISTING SITE PLAN REMOVAL AND RELOCATION
C02	PROPOSED SITE PLAN
C03	PROPOSED BYPASS PLAN AND NOTES
MECHANICAL	
M01	EXISTING PUMP STATION PLANS REMOVAL
M02	EXISTING PUMP STATION SECTIONS REMOVAL
M03	EXISTING PUMP STATION SECTION AND ELEVATIONS REMOVAL
M04	PROPOSED PUMP STATION IMPROVEMENTS-PLANS
M05	PROPOSED PUMP STATION IMPROVEMENTS-PLAN AT GRADE
M06	PROPOSED PUMP STATION IMPROVEMENTS-SECTIONS
M07	PUMP STATION NOTES
DETAILS	
D01	DETAILS
D02	DETAILS
D03	DETAILS
STRUCTURAL	
S01	STRUCTURAL GENERAL NOTES
S02	STRUCTURAL DESIGN LOADS, CRITERIA & LEGEND
S03	PUMP STATION PLANS AND SECTIONS
S04	STRUCTURAL DETAILS
S05	STRUCTURAL DETAILS
ELECTRICAL	
E01	ELECTRICAL NOTES AND ABBREVIATIONS
E02	ELECTRICAL SYMBOLS
E10	ELECTRICAL SITE PLAN
E20	ELECTRICAL ONE LINE DIAGRAM
E30	ELECTRICAL DETAILS
E40	SITE LIGHTING PLAN
INSTRUMENTATION	
I01	SYMBOLS & ABBREVIATIONS I
I02	SYMBOLS II AND COMMUNICATIONS
I10	ENCLOSURE LAYOUT
I11	PANEL LAYOUT & BOM
I20	CONTROL POWER WIRING
I21	ANALOG INPUTS & DISCRETE OUTPUTS - PLC I/O WIRING
I22	DIGITAL INPUTS - PLC I/O WIRING

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY CHARLES HILL
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CHARLES HILL, P.E., SCEE
No. 81509



SHEET INDEX

PROJECT NO. 01026-0138 LIFT STATION 4P IMPROVEMENTS

SUBMITTAL DATE: OCT 2025

I:\01026\0138\END\80-DRAWINGS\GENERAL\G01 COVER SHEET.DWG ----- 10/24/2025 07:24:43 DOREN FADGETT

MCKIM & CREED
139 EXECUTIVE CIRCLE, SUITE 201
DAYTONA BEACH, FL 32114-7102
(386) 274-2828

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MCKIM & CREED
7785 BAYMEADOWS WAY, SUITE 101
JACKSONVILLE, FL 32256
(904) 587-0134

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY A.E.ANDERSON, III ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

MCKIM & CREED
1365 HAMLET AVENUE
CLEARWATER, FL 33756
(727) 442-7196

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Sheet List Table	
Sheet Number	Sheet Title
STRUCTURAL	
S01	STRUCTURAL GENERAL NOTES
S02	STRUCTURAL DESIGN LOADS, CRITERIA & LEGEND
S03	PUMP STATION PLANS AND SECTIONS
S04	STRUCTURAL DETAILS
S05	STRUCTURAL DETAILS

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I20	CONTROL POWER WIRING
I21	ANALOG INPUTS & DISCRETE OUTPUTS - PLC I/O WIRING
I22	DIGITAL INPUTS - PLC I/O WIRING

REF ID	DESCRIPTION	DATE
X	PAID FOR REPAIRS	OCT 2008

THIS ITEM HAS BEEN
DIGITALLY SIGNED AND SEALED
BY CHARLES H. HILL, P.J.
ON THE DATE ADJACENT TO
THE SEAL. PRINTED COPIES
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CHARLES HILL, P.E., OCEE
No. 81509



CA Lic. No. 29588
www.mckimcreed.com



THE CITY OF
ORMOND BEACH

GENERAL
ENGINEERS SIGN AND SEAL SHEET

PROJ. START DATE:	2024, DEC
MCE PROJ. #	01026-0131
DRAWN	DMR
DESIGNED	DMR
CHECKED	CHR
PROJ. MGR.	CHR

STATUS:

SCALE
HORIZONTAL: TBD
VERTICAL: TBD

DRAWING NUMBER

A

REVISION

ISSUED FOR BIDDING
NOT FOR CONSTRUCTION

SANITARY SEWER CONSTRUCTION GENERAL NOTES

- THE CITY'S PUBLIC WORKS - UTILITY DIVISION DEPARTMENT SHALL BE NOTIFIED PRIOR TO BEGINNING ANY SEWER CONSTRUCTION.
- ALL GRAVITY SANITARY SEWER LINES SHALL BE A MINIMUM OF 8" IN DIAMETER. SERVICE LATERALS SHALL BE A MINIMUM OF 4" DIAMETER (RESIDENTIAL) OR A MINIMUM OF 6" DIAMETER (COMMERCIAL).
- ALL SANITARY SEWER MAINS SHALL BE PVC SDR 26, IN PLACES WHERE A MINIMUM COVER OF 4'-0" CANNOT BE MAINTAINED, C-900 GREEN PVC DR-25, CLASS 100 OR CONCRETE ENCASEMENT SHALL BE USED.
- MINIMUM ALLOWABLE SANITARY SEWER SLOPES ALLOWED ARE:
8" PIPE 0.40%
10" PIPE 0.30%
12" PIPE 0.22%
- SEWER LINE CONSTRUCTION SHALL BE ACCOMPLISHED BY THE USE OF A LASER INSTRUMENT.
- THE CONTRACTOR SHALL, AT ALL TIMES, DURING PIPE LAYING, DEWATER THE GROUND SUFFICIENTLY TO KEEP THE GROUNDWATER ELEVATION A MINIMUM OF 6" BELOW THE PIPE BEING LAID WITHIN THE AREA OF THE TRENCH.
- ALL PIPES SHALL BE LAID ON A FIRM FOUNDATION, SOFT OR SPONGY BEDDING FOR PIPES WILL NOT BE ACCEPTED. ANY UNSUITABLE MATERIAL SHALL BE REMOVED AND REPLACED WITH A DRY, COMPACTED, GRANULAR MATERIAL SATISFACTORY TO THE CITY.
- TRENCHES SHALL BE BACKFILLED WITH CLEAN GRANULAR MATERIAL IN MAX. 1' LIFTS WITH A MINIMUM COMPACTION OF 98 PERCENT (ASTM-D1557) IN PAVED AREAS AND 95 PERCENT IN UNPAVED AREAS.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT TRENCH COMPACTION TEST BE PROVIDED AT POINTS 1 FOOT ABOVE THE PIPE AND AT 1 FOOT VERTICAL INTERVALS TO FINISH GRADE, AT A MINIMUM SPACING OF EVERY 300 FEET, AND TO FURNISH COPIES OF TEST REPORTS PROMPTLY TO THE CITY INSPECTOR.
- EXCAVATION AND BACKFILL: THE CONTRACTOR SHALL PROVIDE ADEQUATE SHEETING AND BRACING OF EXCAVATION WORK OR USE OF TRENCH BOX IN ORDER TO PROVIDE FOR THE SAFETY OF WORKMEN, AS WELL AS REPRESENTATIVES OF THE CITY, THE DESIGN ENGINEER, AND THE DEVELOPER.
- THE CONTRACTOR SHALL INSTALL A METALLIZED FOIL LOCATOR TAPE, OR SIMILAR DEVICE AS MAY BE APPROVED BY THE CITY FOR THE FULL LENGTH OF ALL PVC WATER, RECLAIMED WATER AND SEWAGE FORCE MAINS. THIS PIPE LOCATOR AID SHALL BE INSTALLED 18 INCHES ABOVE TOP OF PIPE OR AS DIRECTED BY THE MANUFACTURER AND IS IN ADDITION TO THE LOCATOR WIRE. REQUIRED IN THE UTILITY PIPE LOCATION MATERIALS DETAIL (MISCELLANEOUS DETAILS SECTION - M10).
- MANHOLES SHALL BE LOCATED AT INTERVALS NOT EXCEEDING 400 FEET.
- MANHOLE RIMS SHALL MATCH FLUSH WITH THE FINISH GRADE ELEVATION IN PAVED AREAS AND A MINIMUM OF 0.2 FEET ABOVE GRADE IN UNPAVED AREAS.



STANDARD CONSTRUCTION DETAIL GENERAL NOTES SANITARY SEWER CONSTRUCTION

INDEX
S-1A
JUNE 2023

SANITARY SEWER CONSTRUCTION GENERAL NOTES

- THE CONTRACTOR SHALL CONSTRUCT SANITARY SEWER MANHOLES IN SUCH A WAY THAT SEWER LINES DO NOT INTERSECT SEALED JOINTS BETWEEN SECTIONS OF THE MANHOLE.
- RUBBER BOOTS AND STAINLESS STEEL BANDS SHALL BE UTILIZED IN THE CONNECTION OF THE SEWER MAIN TO THE MANHOLES (SEE RUBBER BOOT AND PRECAST JOINT CONNECTION DETAIL).
- DOGHOUSE TYPE MANHOLES ARE NOT PERMITTED WITHIN THE CITY OF ORMOND BEACH.
- INDIVIDUAL SANITARY SERVICE CONNECTORS ON NEW CONSTRUCTION SHALL NOT BE CONNECTED DIRECTLY INTO MANHOLS, BUT TO SEWER MAIN LINES BY USE OF PVC WYE CONNECTIONS.
- FOR SINGLE FAMILY HOMES, SINGLE FOUR INCH SEWER SERVICES SHALL BE CONSTRUCTED AT EACH LOT OR UNIT AND LOCATED ON THE DOWNSTREAM SIDE OF THE LOT CENTER LINE. THESE SERVICES SHALL BE EXTENDED 4 FEET ABOVE GROUND AT THE PROPERTY LINE WITH A PVC RISER AND PLUG BEING FASTENED TO THE RISER FROM THE ROAD (RUBBER SEAL FITTINGS TO BE USED ON ALL LINES, NO GLUED JOINTS).
- FOR MULTI-FAMILY AND COMMERCIAL SITES, SIX INCH MINIMUM SEWER SERVICES AND CLEANOUTS SHALL BE PROVIDED AS APPROVED BY THE CITY.
- SANITARY SEWER LATERALS LONGER THAN 70 FEET, MEASURED FROM THE SEWER MAIN TO THE RIGHT-OF-WAY LINE MAY BE APPROVED ON A CASE BY CASE BASIS. SUCH LATERALS SHALL BE D.I.P. EPOXY LINED OR C-900 PVC.
- SANITARY SEWER MANHOLES WHICH HAVE SEWER FORCE MAINS DISCHARGING DIRECTLY INTO THEM, OR ANY MANHOLE WITHIN 200 FEET OF A LIFT STATION, SHALL BE FIBERGLASS OR PVC LINED. PROTECT FITTING AT MANHOLES WITH LINERS SHALL BE REQUIRED WITH NEW CONNECTIONS SUCH AS THIS ARE MADE. LINING SHALL BE AGRI-SURE-GRIP, RAVEN, SEMPERCOAT, GREEN MONSTER, OR PRE-APPROVED EQUAL.
- SEE CHART ON DETAIL INDEX S-1C FOR FORCE MAIN AND REUSE PIPE SIZE AND MATERIALS.
- THE CITY OF ORMOND BEACH REQUIRES THE DEVELOPER/CONTRACTOR TO TELEVIEW ALL SANITARY SEWER MAINS AND LATERALS PRIOR TO ACCEPTANCE AND RESERVES THE RIGHT TO REQUEST WATER AND AIR TESTING. A REPUTABLE COMPANY THAT ENGAGES IN THIS TYPE OF WORK SHALL CONDUCT THE TELEVISION PROCESS. THE DVD AND/OR DIGITAL FILE SHALL BE NON STOP WITH AUDIO DESCRIBING WHAT IS BEING REVIEWED. WRITTEN DVD LOGS DESCRIBING THE CONDITION OF THE LINES SHALL ACCOMPANY THE DVD SUBMISSION TO THE CITY. THIS PROCESS SHALL BE WITNESSED BY A REPRESENTATIVE OF THE CITY OF ORMOND BEACH.
- ALL DUCTILE IRON VALVES AND FITTINGS SHALL HAVE PROTECTO 401 LINER OR APPROVED EQUAL.
- ALL DIRECT BURY FORCE MAINS SHALL BE AWWA C-900 PVC.
- ALL DIRECTIONAL DRILL FORCE MAINS SHALL BE AWWA C-900 FUSIBLE PVC. HDPE IS ONLY ALLOWED TO BE USED UNDER SPECIAL CIRCUMSTANCES APPROVED BY UTILITIES ENGINEER OR UTILITIES MANAGER.
- FORCE MAINS SHALL HAVE VALVES EVERY 1,000 LF.



STANDARD CONSTRUCTION DETAIL GENERAL NOTES SANITARY SEWER CONSTRUCTION

INDEX
S-1B
JUNE 2023

SANITARY SEWER CONSTRUCTION GENERAL NOTES

- ALL MANHOLES CONSTRUCTED IN SIDE YARDS, BACKYARDS, AND EASEMENTS OFF THE RIGHT-OF-WAY SHALL BE OUTFITTED WITH FIBERGLASS LINERS OR OTHER TYPES OF LINERS OR COATINGS APPROVED BY THE CITY. IN ADDITION THE CITY MAY REQUIRE LINERS OR COATINGS TO BE INSTALLED IN OTHER AREAS WHERE THE PUBLIC UTILITY DEPARTMENTS BELIEVE THE NEED IS JUSTIFIED.
- ALL SEWER LINES WHICH ARE CONSTRUCTED OFF PUBLIC RIGHTS-OF-WAY WITHIN SIDEYARDS, BACKYARDS, AND OTHER POORLY ACCESSIBLE AREAS SHALL BE CONSTRUCTED OF C-900 PVC. ABSOLUTELY NO USE OF PLASTIC STYRENE FITTINGS SHALL BE ALLOWED.
- SEWER LATERAL LOCATIONS SHALL BE MARKED ALONG THE OUTSIDE OF THE CURB WITH A SAW CUT 'X' OR BY A METAL NAIL SET INTO THE PAVEMENT.
- EZ-WRAP PLASTIC, AS MANUFACTURED BY PRESS-SEAL GASKET CORPORATION OR APPROVED EQUAL, SHALL BE USED ON THE OUTSIDE OF ALL MANHOLE AND WET WELL JOINTS. APPLY ONE LAYER OF 9" WRAP ENTERED ON EACH JOINT. A CITY INSPECTOR SHALL PERSONALLY INSPECT ALL JOINT SEALS PRIOR TO BACKFILLING OPERATIONS.
- ALL PROPOSED SEWER MAINS, 4" OR GREATER, SHALL BE FLUSHED AND CLEANED WITH A POLY PIG IN ACCORDANCE WITH LATEST AWWA STANDARDS AND THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION REQUIREMENTS.
- ALL SEWER MAINS SHALL HAVE A MINIMUM COVER OF 36 INCHES AND A MAXIMUM DEPTH OF 18" TO ANY MANHOLE OR 22" TO ANY WETWELL. IN SPECIAL CASES WHERE IT IS IMPOSSIBLE OR INAPPROPRIATE, TO PROVIDE ADEQUATE COVER C900/C905 OR CONCRETE ENCASEMENT MAY BE USED AS APPROVED BY THE CITY.
- FORCE MAIN SYSTEMS SHALL BE PRESSURE TESTED AT 100 PSI STATIC PRESSURE FOR A PERIOD OF 2 HOURS PER AWWA STANDARDS. TESTS SHALL BE CONDUCTED BEFORE FINAL PAVING AND IN THE PRESENCE OF THE CITY'S INSPECTOR. SUBMIT FOR FDEP CLEARANCE BEFORE PAVING.
- DURING CONSTRUCTION, CONTRACTOR SHALL ISOLATE NEW SANITARY SEWER CONSTRUCTION FROM EXISTING SANITARY SEWER MAINS. THIS ISOLATION MAY BE BY INSTALLATION OF A BLADDER/PLUG PLACED AT POINT OF CONNECTION OR BY OTHER METHODS. THE PURPOSE OF THIS ISOLATION IS TO ENSURE SURFACE WATER IS NOT RELEASED TO THE TREATMENT PLANT. SURFACE WATER SHALL BE REMOVED PRIOR TO THE BLADDER BEING REMOVED.

FORCE MAIN & REUSE MAIN STANDARDS		
DIAMETER	MATERIAL	STANDARD
2" - 4"	PVC 1120 / SDR 21	ASTM D 2241
> 4" - 12"	PVC 1120 / CLASS 100	AWWA C 900
14" - 36" (16" - 24" DR - 1) (30" - 36" DR - 2)	PVC 1120	AWWA C 905
ALL SIZES	HDPE (DIPS) DR 13.5	ASTM F 714
ALL SIZES	FUSIBLE PVC	AWWA C900 OR C905

NOTE: PVC PIPE COLOR SHALL BE GREEN FOR SEWER FORCE MAIN, AND PURPLE FOR REUSE MAIN.



STANDARD CONSTRUCTION DETAIL GENERAL NOTES SANITARY SEWER CONSTRUCTION

INDEX
S-1C
JUNE 2023

NO.	DESCRIPTION	DATE
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No. 51558

MCKIM & CREED
139 Executive Circle, Suite 201
Daytona Beach, FL 32114-7102
Phone: (386) 274-2628, Fax: (386) 274-1363
CA Lic. No. 2668
www.mckimcreed.com



THE CITY OF
ORMOND BEACH

LIFT STATION 4P IMPROVEMENTS GENERAL GENERAL SANITARY SEWER NOTES

PROJ. START DATE: 2024.08C	SCALE:	G03 DRAWING NUMBER A REVISION
DATE PROJ. # 0102260138	HORIZONTAL	
DRAWN DMP	VERTICAL	
DESIGNED DMP	NA	
CHECKED DMS		
PROJ. MGR. CHM		
STATUS:	ISSUED FOR BIDDING NOT FOR CONSTRUCTION	

[illegible]

SSF	SUPER / HIGH HAZARD SILT FENCE
SSWH	SANITARY SEWER MANHOLE
STA	STATION
STU	SUBSURFACE UTILITY ENGINEERING
SW	SIDE WALK
SWR	SEWER
TBM	TEMPORARY BENCH MARK
TC	TERRA COTTA
TLT	TRANSIT LIGHT POLE
TOL	TOP OF BANK
TOP	TOP OF CONCRETE
TH	TEST HOLE
TRP	TREE PROTECTION FENCE
TRSR	TRAFFIC SIGNAL BOX
TRF	TRUCK
UNK	UNKNOWN
UNK	UNKNOWN
VAR	VARIABLE
VCP	VIBRATED CLAY PIPE
WD	WOOD
WM	WATER LINE
WU	WATER METER
WV	WATER VALVE
WWF	WELDED WIRE FABRIC
XP	CROSS LIGHT POLE
YAS	YARD INLET

DESCRIPTION	SYMBOL
BACKFLOW PREVENTER	
BOLLARD	
BUSH	
CABLE TELEVISION RISER	
CATCH BASIN ROUND	
CATCH BASIN SQUARE	
CONCRETE LIGHT POLE	
CONCRETE MONUMENT FOUND	
CONCRETE POWER POLE	
CREPE MYRTLE-AS NOTED	
CYPRESS-AS NOTED	
ELECTRIC JUNCTION BOX	
ELECTRIC METER	
ELECTRIC PANEL	
ELECTRIC VAULT	
FIBER OPTIC MARKER	
FIRE HYDRANT	
GENERATOR	
GUY WIRE	
HOLLY TREE	
IRON PIPE FOUND	
IRON ROD FOUND	
IRON ROD SET	
IRRIGATION CONTROL VALVE	
LIGHT POLE FIBERGLASS	
MAGNOLIA TREE	
NAIL BOX	
METAL LIGHT POLE	
MITERED END SECTION	
NAIL AND TAG SET	
OAK TREE - SIZE AS NOTED	
PALM TREE - SIZE AS NOTED	
PERMANENT REFERENCE MONUMENT	
PINE TREES-AS NOTED	
RECLAIMED WATER METER	
RECLAIMED WATER VALVE	
SANITARY SEWER CLEAN OUT	
SANITARY SEWER MANHOLE	
SANITARY SEWER VALVE	
SANITARY SEWER VAULT	
STREET SIGN	
STORM SEWER MANHOLE	
TELECOMMUNICATIONS CABINET	
TELECOMMUNICATIONS HAND BOX	
TELECOMMUNICATIONS LINE MARKER	
WATER METER	
WATER VALVE	
WATER VAULT	
WOOD UTILITY POLE	
WOOD UTILITY POLE W/TRANSFORMER	

DESCRIPTION	LINE TYPE
UNDERGROUND CABLE TV	(TV)
UNDERGROUND PER RECORD CABLE TV	(TV-R)
UNDERGROUND ELECTRIC	(E)
PER RECORD UNDERGROUND ELECTRIC	(E-R)
UNDERGROUND FIBER OPTIC	(FO)
PER RECORD UNDERGROUND FIBER OPTIC	(FO-R)
UNDERGROUND SANITARY SEWER	(SS)
PER RECORD SANITARY SEWER (MAIN)	(SS-M)
UNDERGROUND GAS	(G)
UNDERGROUND RADIANT HEATING GAS	(GR)
OVER HEAD UTILITIES	(O)
RECLAIMED WATER LINE	(R)
PER RECORD RECLAIMED WATER LINE	(R-R)
GRAVITY SANITARY SEWER	(SS)
PER RECORD GRAVITY SANITARY SEWER	(SS-R)
STORM DRAINAGE	(S)
UNDERGROUND TELEPHONE	(T)
UNDERGROUND PER RECORD TELEPHONE	(T-R)
UNKNOWN	(U)
WATER LINE	(W)
PER RECORD WATER LINE	(W-R)
GLARIO RAIL	(GL)
BACK OF CURB	(B)
EASEMENT	(E)
EDGE OF GRAVEL	(EG)
EDGE OF PAVEMENT	(EP)
INTERSECT LINE	(I)
RIGHT OF WAY	(R)
ROAD CENTER LINE	(C)
100' TREE CIRCUMFERENCE	(100')
ATCH 1	(A)
MINOR CONTOUR	(M)
MAJOR CONTOUR	(MA)
REPAIR BUFFER ZONE 1	Z1
REPAIR BUFFER ZONE 2	Z2
TOP OF BANK	(T)
TREE LINE	(T)
WATERCOURSE	(W)
WETLAND BOUNDARY	(W)

DESCRIPTION	SYMBOL
11.25" HORIZONTAL BEND	
22.50" HORIZONTAL BEND	
45" HORIZONTAL BEND	
90" HORIZONTAL BEND	
VERTICAL BEND	
AIR RELEASE VALVE	
VALVE	
BLOWOFF VALVE	
HYDRANT	
YARD HYDRANT	
CROSS	
TEE	
TAPPING SLEEVE AND VALVE	
REDUCER	
CAPPLUG	
POTABLE WATER SERVICE METER	
RECLAIMED WATER SERVICE METER	
EXISTING UTILITY SERVICE RECONNECTION	
CONCENTRIC SANITARY SEWER MANHOLE	
ECCENTRIC SANITARY SEWER MANHOLE	
FLAT TOP SANITARY SEWER MANHOLE	
CL GUY OUT	
ARC FILTER	
CHECK DAM	
INLET PROTECTION	
RPE INLET PROTECTION	
SILT FENCE OUTLET	
WASTE	

DESCRIPTION	LINETYPE
PERMANENT EASEMENT	---
TEMPORARY EASEMENT	----
SANITARY SEWER FORCE MAIN	—FW—
RECLAIMED WATER LINE	—R—
GRAVITY SANITARY SEWER	—SS—
WATER LINE	—W—
TO BE ABANDONED	—X—
DIVERSION DITCH	—>—
LIMITS OF DISTURBANCE/CLEARING LIMITS	—>—
COMBINATION SILT FENCE/TREE PROTECTION	—SF—
TEMPORARY SILT FENCE	—SF—
TEMPORARY SUPER SILT FENCE	—SSF—
TEMPORARY TREE PROTECTION FENCE	—TF—
COMPOST SOCK	—CS—
PERMANENT FENCE	—F—
GUARD RAIL	—GR—

SURVEYOR'S NOTES:

1. THIS IS A BOUNDARY, TOPOGRAPHIC AND TREE SURVEY. THE PURPOSE OF THIS SURVEY IS TO SHOW THE EXISTING SITE IMPROVEMENTS, ELEVATIONS AND THE PROPERTY GEOMETRY AS DEFINED BY THE PROPERTY DESCRIPTION ON THE FACE OF THIS SURVEY.
2. EVERY EFFORT HAS BEEN MADE TO ACCURATELY IDENTIFY THE SPECIES OF TREES SHOWN HEREON. THE TREES SHOWN HEREON WERE IDENTIFIED BY INDIVIDUALS THAT DO NOT PRACTICE IN THE FIELD OF DENDROLOGY OR BOTANY. IT IS POSSIBLE THAT SOME TREES SHOWN ON THIS SURVEY WERE MISTAKENLY IDENTIFIED.
3. THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE COMMITMENT, TITLE REPORT OR TITLE OPINION.
4. THE PROPERTY DESCRIPTION SHOWN HEREON WAS TAKEN FROM OFFICIAL RECORD BOOK 564, PAGE 3 AS RECORDED IN THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA.
5. EASEMENTS SHOWN HEREON WERE TAKEN FROM OFFICIAL RECORD BOOK 564 PAGE 3 AND OFFICIAL RECORD BOOK 564 PAGE 5 OF THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA.
6. NO OTHER INSTRUMENTS OF RECORD WERE PROVIDED TO THIS SURVEYOR.
7. THERE MAY BE ADDITIONAL COVENANTS, EASEMENTS, RESERVATIONS AND/OR RESTRICTIONS NOT SHOWN ON THIS SURVEY RECORDED IN THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA.
8. THE HORIZONTAL LOCATION OF THE POINTS HEREON WERE ESTABLISHED BY GNSS RTK OBSERVATIONS USING A TRIMBLE SURVEYOR 660 DATA COLLECTOR AND A CARLSON BRV7 RECEIVER WITH FDOT-PPM BASELINE CORRECTIONS. THE RELATIVE POSITIONAL PRECISION DOES NOT EXCEED 3 CENTIMETERS PLUS 50 PARTS PER MILLION.
9. THIS SURVEY MAKES NO CLAIMS REGARDING OWNERSHIP OR RIGHTS OF POSSESSION.
10. ALL DIMENSIONS SHOWN HEREON ARE STATED IN U.S. SURVEY FEET AND DECIMALS THEREOF. FOOT TO METER CONVERSION FORMULA IS 1 US FT = 0.304800609601 M.
11. BUILDING DIMENSIONS AND TIES TO PROPERTY LINES ARE MEASURED TO THE NEAREST 1/16" FEET.
12. THE ELEVATION OF THE POINTS HEREON WAS BASED ON THE NORTH AMERICAN VERTICAL DATUM 1988 (NAVD88) USING NOS BENCHMARK Y319, PID AQ105S AND WERE ESTABLISHED BY DIFFERENTIAL LEVELING AND TRICHOCHROMATIC LEVELING PROCEDURES USING A LEICA AUTO LEVEL AND SOKKIA TOTAL STATION INSTRUMENTS.
13. THE VERTICAL ERROR OF CLOSURE FOR THIS SURVEY IS LESS THAN OR EQUAL TO 0.05" TIMES THE SQUARE ROOT OF THE BENCH LOOP IN MILES.
14. UNDERGROUND FOUNDATIONS, IF ANY, WERE NOT LOCATED.
15. ANY REFERENCE TO UTILITIES THAT ARE SHOWN ON THIS MAP, HAVE BEEN LOCATED FROM VISIBLE EVIDENCE THAT EXISTED AT OR ABOVE THE SURFACE OF THE EARTH AT THE TIME OF THIS SURVEY. NO UNDERGROUND UTILITY INFORMATION WAS LOCATED OR VERIFIED AS PART OF THIS SURVEY.
16. THIS PROPERTY LIES WITHIN FLOOD ZONE X, AREAS OF MINIMAL FLOOD HAZARD, PER THE NATIONAL FLOOD INSURANCE PROGRAM FLOOD INSURANCE RATE MAPS, (NFP FIRM) MAP NUMBER 121720C16K, WITH A REVISED DATE OF SEPTEMBER 29, 2017.
17. THIS SURVEY WAS PREPARED FOR THE SOLE AND EXCLUSIVE BENEFIT OF THE FOLLOWING PARTY(IES): THE CITY OF PALM BEACH AND ORS/ED INC AND IS NON-TRANSFERABLE TO ANY OTHER PARTY(IES). THIS SURVEY SHALL NOT BE RELIED UPON BY ANY OTHER ENTITY OR INDIVIDUAL, ANY REUSE OF THIS SURVEY FOR ANY PURPOSE OTHER THAN WHICH IT WAS ORIGINALLY INTENDED, WITHOUT THE WRITTEN PERMISSION OF THE UNDERSIGNED SURVEYOR AND MAPPER, WILL BE DONE SO AT THE RISK OF THE RE-USING PARTY AND WITHOUT ANY LIABILITY TO THE UNDERSIGNED SURVEYOR AND MAPPER.
18. ADDITIONS OR DELETIONS TO SURVEY MAPS OR REPORTS BY ANYONE OTHER THAN THE SIGNING SURVEYOR IS PROHIBITED WITHOUT THE WRITTEN CONSENT OF THE SIGNING SURVEYOR.
19. THIS SURVEY WAS CONDUCTED PER FLORIDA STATUTES SECTION 472.07 AND IN COMPLIANCE WITH THE STANDARDS OF PRACTICE AS OUTLINED IN CHAPTER 5-17, FLORIDA ADMINISTRATIVE CODE, UNDER THE RESPONSIBLE CHARGE OF THE SIGNING SURVEYOR NAMED BELOW.
20. THIS SURVEY IS NOT VALID UNLESS SIGNED BY THE PROFESSIONAL SURVEYOR AND MAPPER NOTED, AND EMPOWERED BY THE SURVEYOR'S SEAL.
21. THIS SURVEY MAP WAS PREPARED AT A SCALE OF 1" INCH EQUALS 30' FEET ON 24 INCH BY 36 INCH MEDIA. THIS SURVEY MAY HAVE BEEN REDUCED OR ENLARGED IN SIZE BY REPRODUCTION. THIS MUST BE CONSIDERED WHEN OBTAINING SCALED INFORMATION.
22. FIELD WORK FOR THIS SURVEY WAS PERFORMED ON 2020, 2023 AND 2024, 2023, 2023, 2023.

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M. ASCE



THE CITY OF
ORMOND BEACH

LIFT STATION 4P IMPROVEMENTS

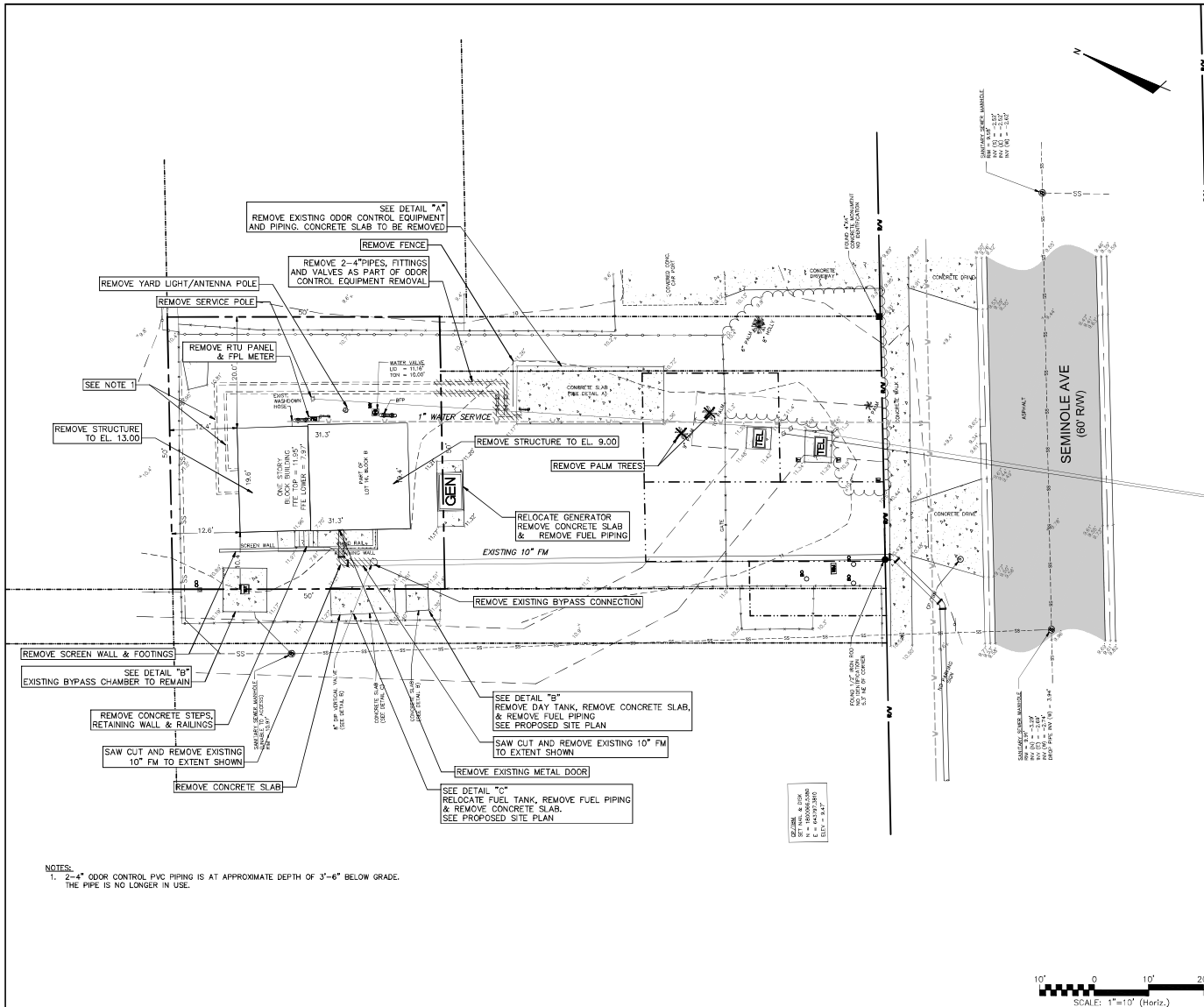
GENERAL

NOTES, LEGEND AND ABBREVIATIONS

PROJ. START DATE: 2024, DEC MCE PROJ. # 01020-0138 DRAWN DMP DESIGNED DMP CHECKED SRS PROJ. MGR. CHH	SCALE HORIZONTAL: TBD VERTICAL: TBD	G04 CHANGING NUMBER A REVISED
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STATUS:

ISSUED FOR BIDDING
 NOT FOR CONSTRUCTION



DETAIL "A"



DETAIL "B"



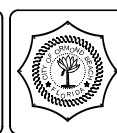
DETAIL "C"

NO.	DESCRIPTION	DATE
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MCKIM & CREED
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 Daytona Beach, FL 32114-7102
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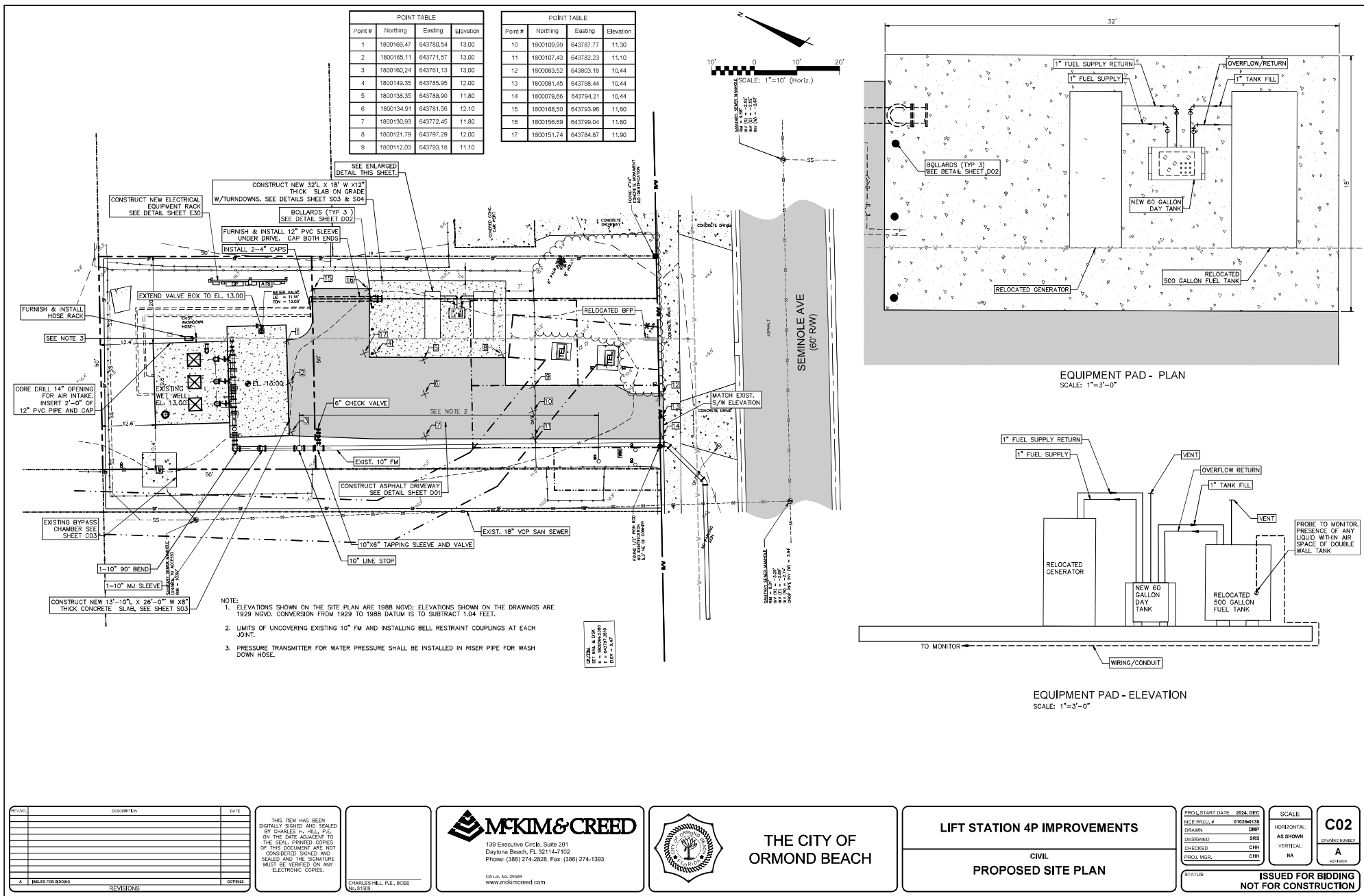


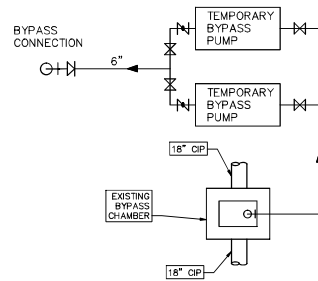
THE CITY OF ORMOND BEACH

LIFT STATION 4P IMPROVEMENTS
 CIVIL
EXISTING SITE PLAN REMOVAL AND RELOCATION

PROJ. START DATE: 3/24/2024	SCALE: HORIZONTAL AS SHOWN
DRAWN: DMP	VERTICAL: NA
CHECKED: CHW	
PROJ. MGR: CHW	

C01
 ISSUED FOR BIDDING
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BYPASS PUMPING SCHEMATIC
NOT TO SCALE

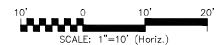
BYPASS PUMPING NOTES

1. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING ABOVE GRADE FACILITIES AS WELL AS THE LOCATION AND ELEVATION AND MATERIALS OF ALL PERTINENT BURIED UTILITIES.
2. BYPASS PUMPS SHALL DELIVER ADF AND DESIGN PEAK FLOW OF PUMP STATION. CONTRACTOR SHALL COMPLY WITH BASIS OF DESIGN. RESTRAIN AND BRACE BYPASS PIPING TO PROVIDE WATERTIGHT CONNECTIONS.

EXISTING PUMP INFORMATION	
FLOW (GPM)	HEAD (FT)
250	125
500	110
750	95
1,000	80
1,250	65

4. BYPASS PUMPS WILL TAKE SUCTION FROM THE EXISTING BYPASS CHAMBER WITH LIMITED SURGE OF THE GRAVITY SEWER SYSTEM.
5. ONE PUMP SYSTEM WILL BE ON STANDBY IF OTHER SYSTEM IS OPERATING. IF OPERATING PUMP FAILS, STANDBY PUMP WILL BE ACTIVATED IMMEDIATELY. STANDBY UNIT SHALL BE PIPED IN AS SHOWN IN DIAGRAM.
6. PAYMENT FOR BYPASS PUMPING WILL BE LUMP SUM AND SHALL BE IN ACCORDANCE WITH SECTION 01025. PROVIDER WILL WORK TO MINIMIZE THE REQUIRED BYPASS PUMPING AND TO MINIMIZE WASTEWATER FLOW FROM ENTERING THE EXISTING PUMP STATION FOR THE DURATION OF THE CONSTRUCTION PERIOD. BYPASS PUMPING CHARGES INCLUDE THE COST OF PUMPING, EQUIPMENT, INSTALLING AND MAINTAINING ALL POWER, BYPASS PUMP SYSTEMS, APPURTEANCES, PIPING, VALVES, FITTINGS AND ALL TOOLS, MATERIALS, LABOR, SUPPLIES, AND OVERHEADS NECESSARY TO MAINTAIN EXISTING SEWER FLOWS AND SERVICES.
7. CONTRACTOR SHALL FURNISH NAME AND NUMBER OF CONTACT PERSON WHO WILL BE IN CHARGE OF MAINTAINING THE SYSTEM. IF FOR REASON OF CONTRACTOR'S NEGLIGENCE OR MISMANAGEMENT PUMPING PROBLEMS THROUGH AN AUTO-DIALER SYSTEM.

3. PROVIDE A MINIMUM OF 2 COMPLETE, SELF-CONTAINED, ELECTRICALLY ENGINE-DRIVEN PUMP SYSTEMS THAT ARE AUTOMATED BY USING FLOAT LEVELS TO ACTIVATE PUMPS. BYPASS PUMPS SHALL OPERATE ON A TEMPORARY 480V ELECTRIC SERVICE W/ SOFT STARTERS.



REVNO.	DESCRIPTION	DATE
A	PAID FOR RENTING	OCT08/96
	payroll case	

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CHARLES HILL, P.E., BCEE
No. 81509



139 Executive Circle, Suite 201
Daytona Beach, FL 32114-7102
Phone: (386) 274-2828, Fax: (386) 274-1393
CA Lic. No. 29558
www.mckimcreed.com



LIFT STATION 4P IMPROVEMENTS

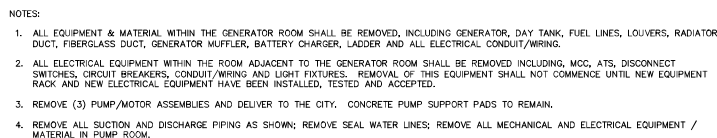
CIVIL

PROPOSED BYPASS PLAN AND NOTES

PROJ. START DATE: 2024, DEC MCF PROJ. # 01020-0138 DRAWN DMP DESIGNED SRS CHECKED CHH PROJ. MGR. CHH	SCALE HORIZONTAL: NOT TO SCALE VERTICAL: NA	C03 DRAWING NUMBER A REVISION
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STATUS:

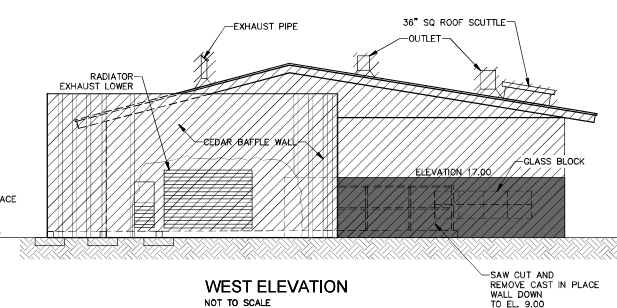
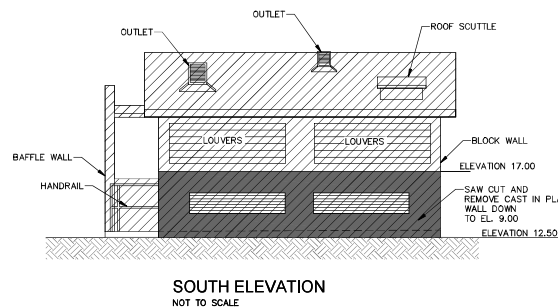
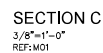
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SCALE HORIZONTAL: AS SHOWN VERTICAL: AS SHOWN	M01 DRAWING NUMBER A REVISION
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LEGEND

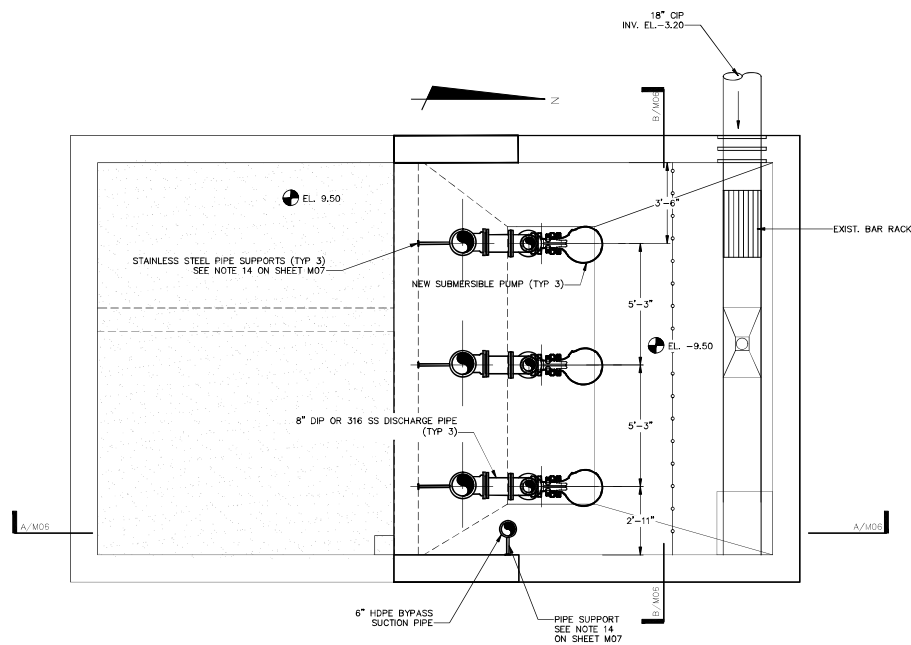
 LIMITS OF REMOVAL

REV#	DESCRIPTION	DATE
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ENCLOSURE		

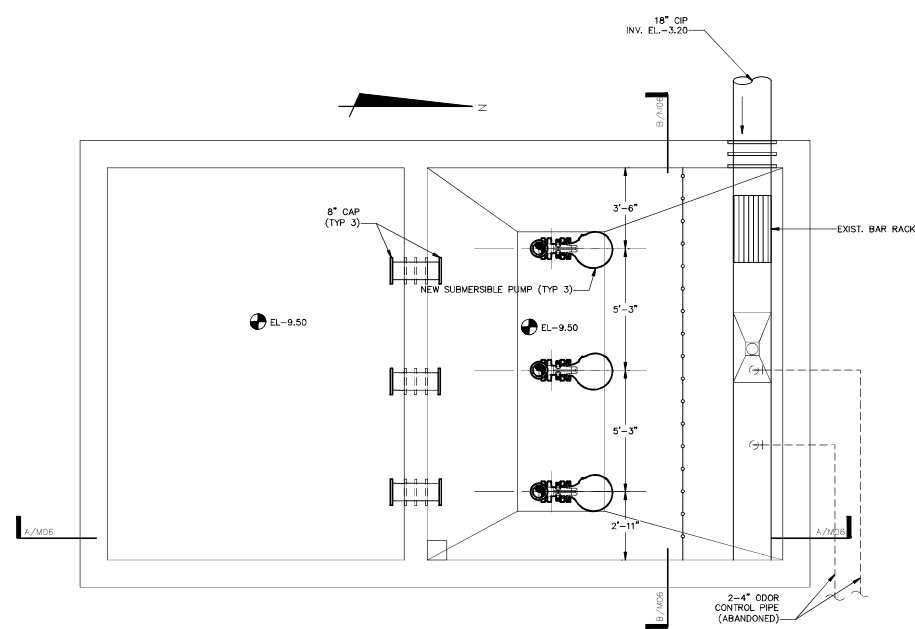
CHARLES HILL, P.E., BCEE
No. 81508



STATUS: **ISSUED FOR BIDDING**
NOT FOR CONSTRUCTION



PLAN-AT ELEVATION 9.50
3/8"=1'-0"
REF: M02



PLAN-PUMP PIT & WET WELL
3/8"=1'-0"
REF: M02

NO.	DESCRIPTION	DATE
1	ISSUED FOR BIDDING	10/23/2025
2	REVISIONS	
3		
4		
5		
6		
7		
8		
9		
10		

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No. 51058

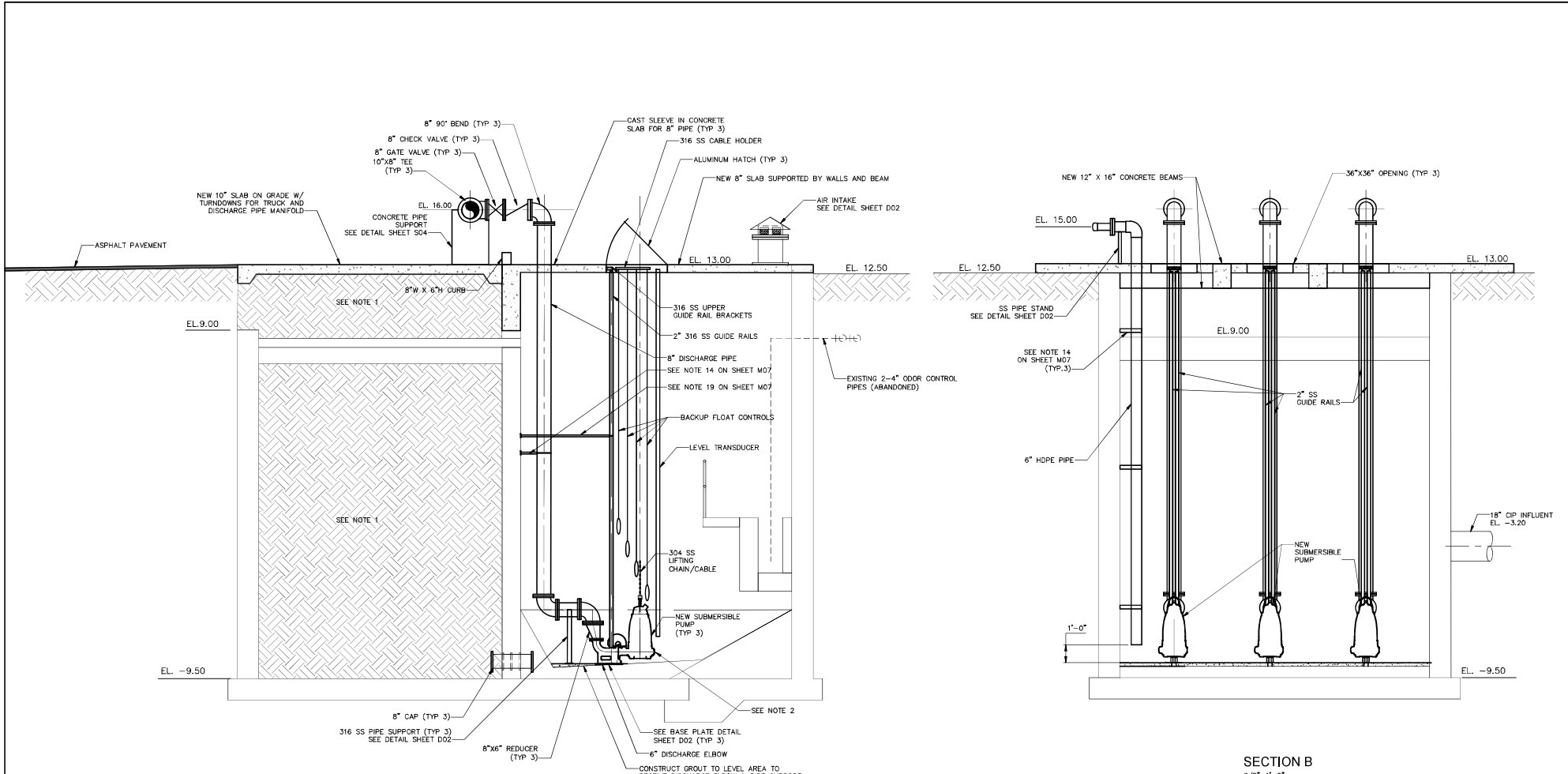
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THE CITY OF
ORMOND BEACH

LIFT STATION 4P IMPROVEMENTS
MECHANICAL
PROPOSED PUMP STATION
IMPROVEMENTS-PLANS

PROJ. START DATE: 2024, DEC DATE PROJ. # 010260138 DRAWN XXX DESIGNED XXX CHECKED XXX PROJ. MGR. XXX	SCALE HORIZONTAL TBO VERTICAL TBO	M04 CHECKING SURVEY A REVISION
STATUS ISSUED FOR BIDDING NOT FOR CONSTRUCTION		



- NOTES:
1. FILL PUMP PIT WITH CLEAN, COMPACTED SAND. SAND SHALL BE COMPACTED TO 95% MIN OF MAX DENSITY ACCORDING TO AASHTO T-180.
 2. PUMP SHALL BE EQUIPPED WITH A SPACER BLOCK ASSEMBLY TO ADAPT THE 4" PUMP DISCHARGE TO THE 6" DISCHARGE ELBOW.
 3. EXISTING WET WELL LINER IS T-LOCK. THERE ARE PATCHES AT THE SEAMS AND BY THE LADDER THAT ARE LOOSE. CONTRACTOR SHALL INCLUDE IN THE BID THE COST TO REATTACH THE PATCHES USING GLUE OR MELT-DOWN.
 4. NEW WALLS AND CEILING IN WET WELL SHALL BE COATED WITH SPECRA-SHIELD, SEMPER COAT OR GREEN MONSTER, ACCORDING TO MFR. RECOMMENDATIONS.

SECTION A
3/8"=1'-0"
REF:M04

SECTION B
3/8"=1'-0"
REF:M04

REV	DESCRIPTION	DATE

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MCKIM & CREED

139 Executive Circle, Suite 201
Daytona Beach, FL 32114-7102
Phone: (386) 274-2628, Fax: (386) 274-1363

CA Lic. No. 28568
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THE CITY OF
ORMOND BEACH

LIFT STATION 4P IMPROVEMENTS

MECHANICAL

PROPOSED PUMP STATION IMPROVEMENTS-SECTIONS

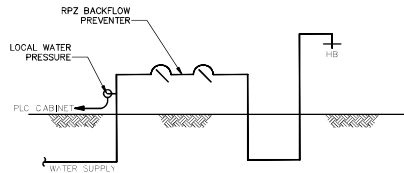
PROJ. START DATE: 2024 DEC
DATE PROJ. # 010260138
DRAWN XXX
DESIGNED XXX
CHECKED XXX
PROJ. MGR. XXX

STATUS: ISSUED FOR BIDDING
NOT FOR CONSTRUCTION

SCALE: HORIZONTAL TBO
VERTICAL TBO

M06
DRAWING NUMBER
A
REVISION

1. ALL LOCATIONS WHERE PIPES ENTER OR LEAVE THE WET WELL SHALL BE MADE WATERTIGHT WITH NON-SHRINK GROUT.
2. PUMP LIFTING DEVICE SHALL BE 304 SS LIFTING CABLE.
3. THERE SHALL BE NO ELECTRICAL JUNCTION BOXES IN WET WELL.
4. CHECK VALVES SHALL BE OUTSIDE LEVER & SPRING.
5. WET WELL COVERS SHALL BE ALUMINUM WITH 316 S.S. HARDWARE AND LOCK BAR TO ACCEPT A PAD LOCK, SIZE AS REQUIRED, AS RECOMMENDED AND REQUIRED BY PUMP MANUFACTURER (LOADING 300 P.S.F.) AND PROVIDED WITH RECESSED LOCKS. COVERS SHALL INCLUDE SAFETY GRATING.
6. CONTROL PANEL SHALL BE AS MANUFACTURED BY THE PUMP SUPPLIER OR APPROVED EQUAL.
7. ACCESS HATCH DIMENSIONS ARE APPROXIMATE, CONTRACTOR SHALL COORDINATE PUMPING EQUIPMENT, PIPING AND CONCRETE STRUCTURES TO ENSURE ADEQUATE ACCESS OPENINGS FOR INSTALLATION, OPERATION AND MAINTENANCE OF ALL EQUIPMENT.
8. ALL HARDWARE IN WET WELL SHALL BE 316 S.S.
9. FURNISH AND INSTALL GENERATOR RECEPTACLE WITH MALE END COMPATIBLE WITH CITY OF ORMOND BEACH EQUIPMENT.
10. PROVIDE LOCKS KEYS TO THE CITY'S MASTER KEY.
11. PUMPS SHALL BE XYLEM/FLYGT.
12. MIX & FLUSH VALVE SHALL BE INSTALLED ON ONE PUMP.
13. WET WELL LINER SHALL BE LIMITED TO SPECTRA-SHIELD, SEWPERCOAT OR GREEN MONSTER.
14. RISER PIPE TO BE INSTALLED WITH INTERMEDIATE BRACKETS IF WET WELL DEPTH IS GREATER THAN 15 FEET. BRACKETS SHALL BE 316 SS 2"x2"x1/2" ANGLE WELDED TO 4"x4"x1/2" 316 SS PLATE. PLATE SHALL BE ATTACHED TO WET WELL WALL WITH # 316 SS ANCHORS.
15. VENT SHALL BE POSITIONED IN THE TOP SLAB SO THAT IT IS A MINIMUM OF 5-FEET FROM THE ELECTRICAL EQUIPMENT.
16. ALL D.I. PIPE AND FITTINGS MUST BE CERAMIC EPOXY COATED INTERNALLY.
17. ALL ABOVE GRADE PUMP DISCHARGE PIPE AND PIPE WITHIN THE WET WELL SHALL BE DUCTILE IRON OR SCH. 40 316 STAINLESS STEEL. REFER TO SPEC SECTION FOR BASE BID AND ALTERNATE BID INFORMATION.
18. 4" ASHROFT MODEL 100BS S.S. PRESSURE GAUGE 0-100 PSI, ASHROFT TYPE 100 DIAPHRAGM SEAL W/ 1/2" INLET, S.S. TAPPING SADDLE W/ 3/4" TAP BUSHED DOWN TO 1/2", 1/2" S.S. BALL VALVE, SCH 40 316 STAINLESS STEEL PIPE SHALL BE USED FOR ALL PUMP STATIONS REGARDLESS.
19. GUIDE RAILS TO INTERMEDIATE 316 S.S. BRACKETS SIMILAR TO RISER SUPPORT BRACKETS, SPACED AT 10-FOOT INTERVALS.
20. AIR RELEASE VALVE SHALL BE ARI D-025P W/ ONE WAY VALVE.
21. CONTRACTOR SHALL DETERMINE SIZE AND POSITIONING OF HATCH WITHIN TOP SLAB BASED UPON THE MANUFACTURER RECOMMENDATIONS.



CITY OF ORMOND BEACH LIFT STATION REQUIREMENTS

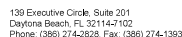
1. AUXILIARY POWER CONNECTION:
 - A) AUTOMATIC TRANSFER SWITCH (ATS) 480V, 200, 4, 3P, 4W SOLID NEUTRAL, ASCO J-#3ATS-A-3-0200-N-GX-U OR APPROVED EQUAL
 - B) CROUSE-HIND #AR2042-522, 600V, 200A, 4P, 3W, REVERSED SERVICE.
2. PUMP STATION MUST HAVE ACCESS AT ALL TIMES FOR CITY MAINTENANCE VEHICLES.
3. HAND - (ON-OFF) - AUTOMATIC SWITCHES ON ALL PUMPS.
4. MANUAL - (ON-OFF) - SWITCH ON ALL ALTERNATORS.
5. ONE ELAPSED TIME METER FOR EACH PUMP.
6. 120 VOLT RECEPTACLE INSIDE CONTROL PANEL.
7. SWITCH FROM PLC TO BYPASS ON CONTROL PANEL.
8. 3 PHASE CURRENT REQUIRED (WILL NOT ACCEPT ADD A PHASE OR CAPACITOR PHASE CHANGERS).
9. ALIGNMENT ON GUIDE RAILS (NOT TOUCHING PUMP GUIDE WHEN PUMP IS SEATED).
10. POWER CABLE TO PUMPS RUN IN CONDUIT SEPARATE FROM FLOAT SWITCH CONDUIT.
11. THE CITY WILL NOT ACCEPT 120 VOLT TO FLOAT SWITCHES, AND MUST BE TRANSFORMER ISOLATED-24 VOLT MAX. ALL CONNECTIONS MUST TERMINATE IN CONTROL PANEL OUTSIDE OF WET WELL.
12. MUST HAVE APPROVED LIFT STATION MANUALS, SHOP DRAWINGS, ETC.
13. KNIFE SWITCH DISCONNECT BETWEEN F.P.& L. AND LIFT STATION CONTROL PANEL - 3/16 STAINLESS STEEL.
14. FURNISH ORMOND BEACH STANDARD RTU, MOUNTED AND CONNECTED IN CONFORMANCE WITH CITY STANDARDS. TYPICAL SCADA WIRING INTERFACE AT LIFT STATION:
 - A) PUMP STATUS: NORMALLY OPEN DRY CONTACT ON EACH MOTOR STARTER.
 - B) PHASE ALARM: NORMALLY OPEN DRY CONTACT ON PHASE FAILURE RELAY.
 - C) HIGH LEVEL ALARM: NORMALLY OPEN DRY CONTACT ON HIGH LEVEL ALARM RELAY.
 - D) IF AVAILABLE - PROVIDE CURRENT TRANSFORMER AND TRANSMITTER TO PROVIDE 4/20 MA OUTPUT PROPORTIONAL TO THE TOTAL STATION AMPERAGE. (SELECT ONE LEAD OF 3-PHASE POWER), N/A
 - E) PROVIDE 120 VAC SOURCE - 5 AMPS - FOR RTU POWER.
 - F) ALL CONNECTIONS BROUGHT TO BARRIER TERMINAL STRIP.
15. EMERSON CONTROL WAVE MICRO SHALL PROVIDE STATUS OF THE FOLLOWING:
 - A) HIGH LEVEL ALARM
 - B) PUMP STATUS ON ALL PUMPS
 - C) PHASE MONITOR (DIVERSIFIED SL-230-ASA)
 - D) LOCAL WATER PRESSURE (DWYER 628-10-GH-PH-ES-S1, 0-100 PS) SHALL BE INSTALLED PRIOR TO THE BFP AND ELECTRICALLY TIED TO THE RTU WITH 2 #18 CONDUCTORS IN CONDUIT, MAPPED BACK TO WTP SCADA.
 - E) MASTER CONTROL RELAYS (DO) + (DO)
 - F) BACK-UP FLOAT SYSTEM ON/ OFF STATUS INDICATOR.
 - G) FORCE MAIN PRESSURE (DWYER 628-10-GH-PH-ES-S1, 0-100 PS) SHALL BE INSTALLED ON NEW FORCE MAIN MAINFOLD AND ELECTRICALLY TIED TO THE RTU WITH 2 #18 CONDUCTORS, MAPPED BACK TO WTP SCADA.
16. 30W LED LIGHT FIXTURE BY GUARDCO, LSI, HUBBELL, LITHONIA OR APPROVED EQUAL.
17. PUMP CONTROL AND MONITORING ACCOMPLISHED THRU RTU.
18. BACKUP FLOAT SYSTEM FOR PUMP CONTROL SHALL BE INSTALLED AND CONNECTED TO THE PUMP CONTROL PANEL. THIS SYSTEM SHALL BE AUTOMATICALLY ACTIVATED IN THE EVENT OF LOSS OF CONTROL FROM THE RTU
19. REMOTE CONTROL OF THE PUMP STATION SHALL ALSO BE PROVIDED THROUGH SCADA FROM THE WASTE WATER TREATMENT PLANT.
20. THE CONDUCTANCE LEVEL PROBE SHALL FOLLOW THE CRITERIA FOUND WITHIN DIVISION 13 OF THE PROJECT MANUAL.
21. SCADA PROGRAMMING SHALL INCLUDE DISPLAY OF THE WATER PRESSURE ON THE DISPLAY SCREEN AT THE WATER PLANT. THE EMERSON CONTROL WAVE SYSTEM IS IFX VERSION 4.0.
22. BACKUP FLOAT FOR HIGH LEVEL ALARM SHALL BE INSTALLED AND CONNECTED TO THE SCADA SYSTEM. THE ALARM SIGNAL FOR THE BACKUP FLOAT SHALL BE INDEPENDENT OF THE HIGH LEVEL TRANSDUCER ALARM.

PUMP DATA AND DESIGN CHARACTERISTICS	
NUMBER OF PUMPS	3
DESIGN CAPACITY PER PUMP, G.P.M.	1034
TOTAL DYNAMIC HEAD, FT.	77
MIN. EFF. AT DESIGN CAPACITY, %	75
DESIGN SPEED, MAX. R.P.M.	1760
MAX. HORSEPOWER PER PUMP, H.P.	35
MIN. SHUTOFF HEAD, FT.	140
MIN. SIZE SOLIDS, IN.	3
MIN. DISCHARGE SIZE, IN.	4
SECONDARY CAPACITY PER PUMP, G.P.M.	
SECONDARY HEAD, FT.	
PUMP MANUF. & MODEL NUMBER	FLYJOT M37171 59 4
IMPELLER DIAMETER	
PUMP R.P.M.	1760
FLECT. /SVC. /VOLTAGE & PHASE	277/480V 16

REF ID	DESCRIPTION	DATE
A	PAID FOR BONDING	OCT08/09

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CHARLES HILL, P.E., BCEE
No. 24522



CA Lic. No. 29588
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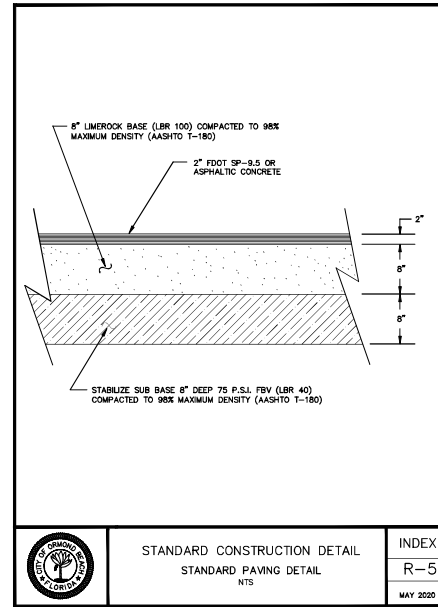
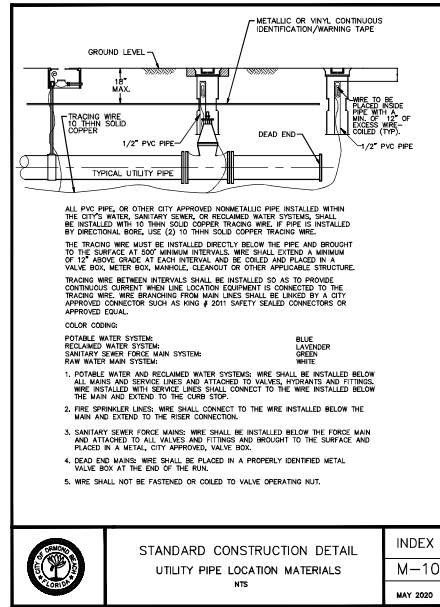
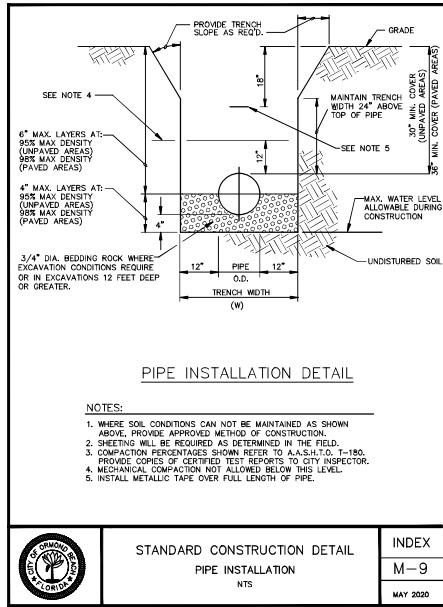
MECHANICAL
PUMP STATION NOTES

PROJ. START DATE:	2024, DEC
MCE PROJ. #	01026-013B
DRAWN	XXX
DESIGNED	XXX
CHECKED	XXX
PROJ. MGR.	XXX

STATUS:

M07
DRAWING NUMBER
A
REVISION

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ROADWAY COMPACTION AND DENSITY TESTING REQUIREMENTS				
ITEM	TEST	FREQUENCY	STANDARD	TEST METHOD
ROADWAY SURFACE (BOTTOM OF SURFACE DOWN 1 FOOT)	IN-PLACE DENSITY	ONE (1) TEST/200 LF	PER MODIFIED PROCTOR (ASTM D-1557 OR AASHTO T-180)	ASTM D-2937 D-2922 D-1558
STABILIZED SURFACE	IN-PLACE DENSITY	ONE (1) TEST/200 LF	PER MODIFIED PROCTOR (ASTM D-1557 OR AASHTO T-180)	ASTM D-2937 D-2922 D-1558
STABILIZED SURFACE	FLORIDA BEARING VALUE (FBV)	ONE (1) TEST/200 LF	FBV = 75	
STABILIZED SURFACE	LIMEROCK BEARING VALUE (LBR)	ONE (1) TEST/200 LF	LBR = 40	
LIMEROCK BASE	IN-PLACE DENSITY	ONE (1) TEST/200 LF	PER MODIFIED PROCTOR (ASTM D-1557 OR AASHTO T-180)	ASTM D-2937 D-2922 D-1558
LIMEROCK BASE	LIMEROCK BEARING VALUE (LBR)	PROVIDE CERTIFICATE FROM PLANT	LBR 100	FM 5-515
GRUNDED CONCRETE BASE	IN-PLACE DENSITY	ONE (1) TEST/200 LF	PER MODIFIED PROCTOR (ASTM D-1557 OR AASHTO T-180)	ASTM D-2937 D-1558
GRUNDED CONCRETE BASE	LIMEROCK BEARING VALUE (LBR)	(1) PER VISUAL CHANGE IN MATERIAL, RATIO	LBR 100	
ASPHALT	EXTRACTION AND GRAVIMETRY	(1) PER DAY PER MIX	PER MIX DESIGN	D-3892
ASPHALT	THICKNESS AND DENSITY	(1) FOR 300 LF ROADWAY	PER MIX DESIGN AND JOB SPEC	CONCRETE OR RIGID (CONCRETE ONLY)
SOIL OPTIMUM MOISTURE/DENSITY	PROCTOR TEST	(1) FOR SOIL OR BASE TYPE		ASTM D-1557 (MODIFIED) ASTM D-2937 (MODIFIED) ASTM T-99 (MODIFIED) ASTM T-98 (STANDARD)
CURB SURFACE	IN-PLACE DENSITY	ONE (1) TEST/200 LF	PER MODIFIED PROCTOR (ASTM D-1557 OR AASHTO T-180)	
CURB SURFACE (LBR)	LIMEROCK BEARING VALUE (LBR)	(1) TEST/200 LF	LBR 40	

STANDARD CONSTRUCTION DETAIL
TECHNICAL SPECIFICATIONS FOR TESTING REQUIREMENTS

INDEX
R-6A
MAY 2020

REV.	DESCRIPTION	DATE
1	ISSUED FOR BIDDING	05/20/20
2	REVISIONS	

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CHARLES HILL, P.E., BCCE
No. 51558

MCKIM & CREED

139 Executive Circle, Suite 201
Daytona Beach, FL 32114-7102
Phone: (386) 274-2628 Fax: (386) 274-1363

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THE CITY OF ORMOND BEACH

LIFT STATION 4P IMPROVEMENTS

DETAILS
DETAILS

PROJ. START DATE: 2024_OBC
MCE PROJ. # 010260138
DRAWN DMP
DESIGNED SRS
CHECKED CHN
PROJ. MGR. CHN

SCALE
HORIZONTAL
NA
VERTICAL
NA

D01
DRAWING NUMBER
A
REVISION

STATUS
ISSUED FOR BIDDING
NOT FOR CONSTRUCTION

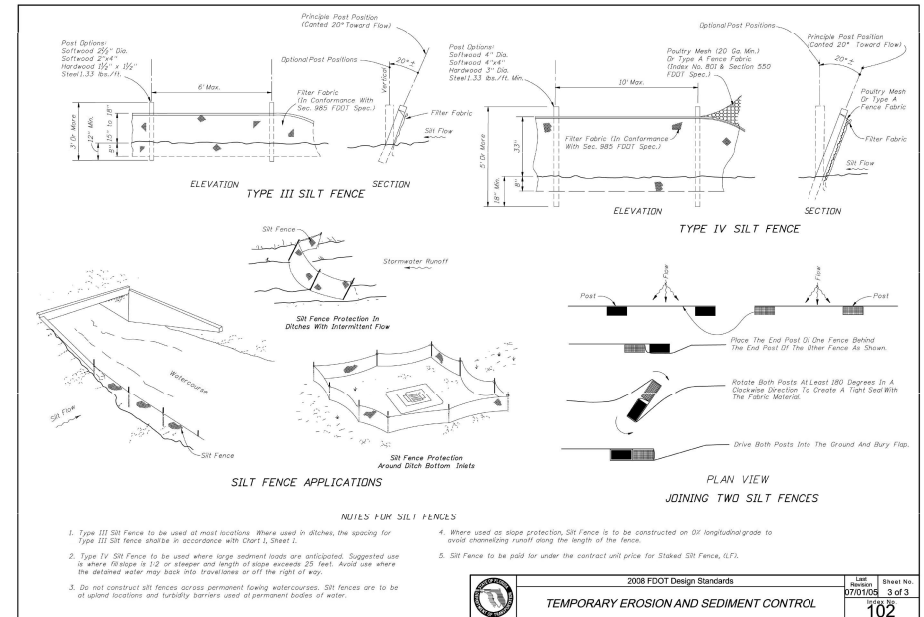
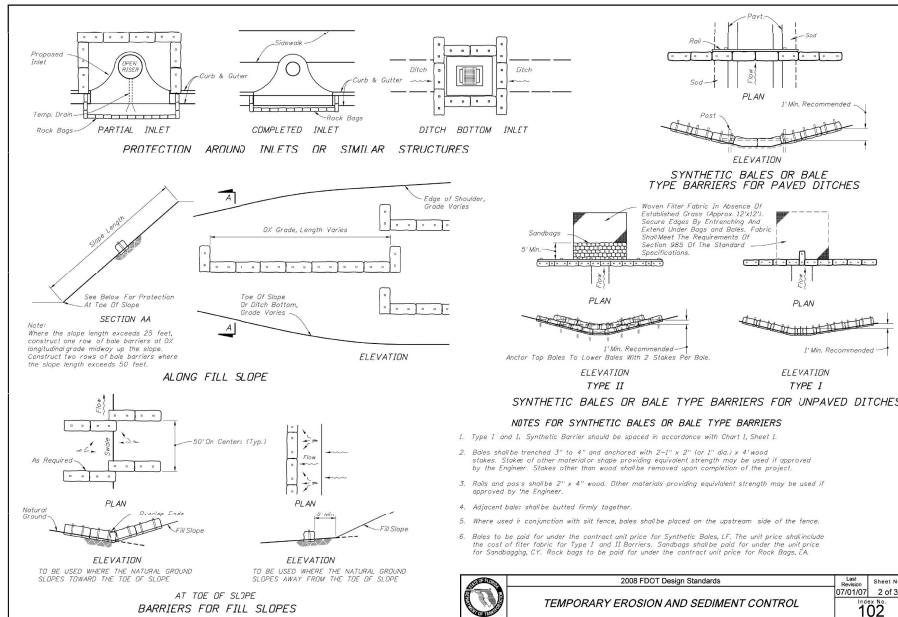


STAINLESS STEEL PIPE SUPPORT
NOT TO SCALE



REF ID#	Description	Date
A	(PAID FOR RECORD)	OCT-09
REVENUES		

STATUS: **ISSUED FOR BIDDING**
NOT FOR CONSTRUCTION



NO.	DESCRIPTION	DATE
1	DESIGNED BY	
2	CHECKED BY	
3	APPROVED BY	
4	REVISIONS	

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MCKIM & CREED
 139 Executive Circle, Suite 201
 Daytona Beach, FL 32114-7102
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 CA Lic. No. 2698
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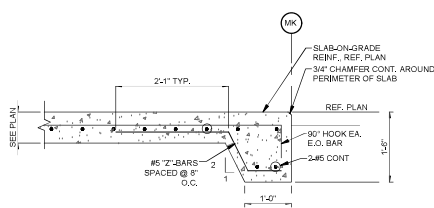


THE CITY OF ORMOND BEACH

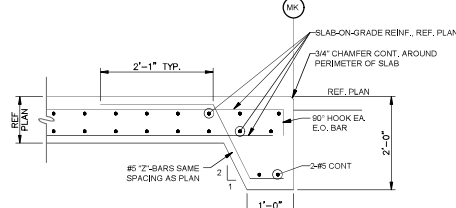
LIFT STATION 4P IMPROVEMENTS

**DETAILS
DETAILS**

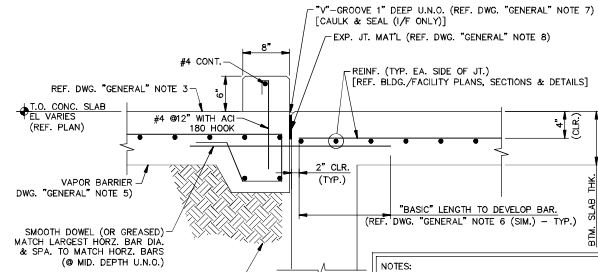
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DATE: 01/02/09	SCALE: VERTICAL	
DRAWN: DMP	CHECKED: CHN	ISSUED FOR BIDDING
DESIGNED: BRB	PROJ. MGR.: CHN	NOT FOR CONSTRUCTION



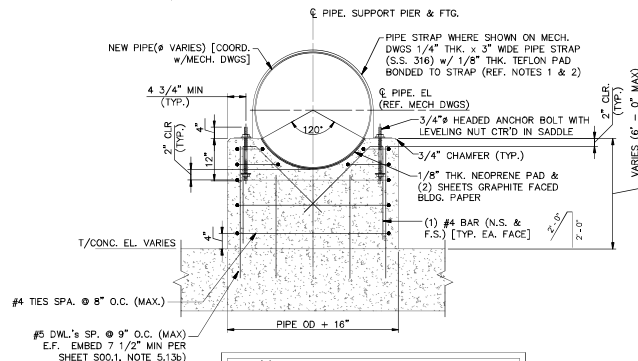
1 - SECTION
SCALE: 3/4" = 1'-0"



2 - SECTION
SCALE: 3/4" = 1'-0"

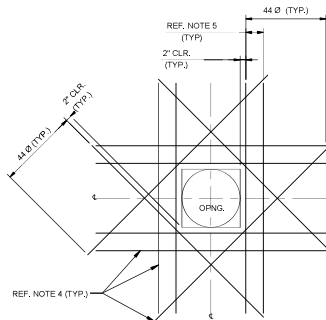


3 - DETAIL: BASE SLAB EXPANSION JOINT
N.T.S.



- NOTES:**
- PIPE SHOULD BE ALLOWED TO SLIDE UNDER STRAP.
 - ALL HOLES IN STAINLESS STEEL STRAPS ARE TO BE PUNCHED OR DRILLED. FLAME CUTTING OF THE STEEL IS STRICTLY PROHIBITED.

4 - DETAIL: CONC. CRADLE PIPE SUPPORT AT SLAB
SCALE: 3/4" = 1'-0"



5 - DETAIL: TYP. BAR REINF. REQ'S @ SLAB & WALL OPNG'S
N.T.S.

DEVELOPMENT LENGTH OF STD. HOOKS			
FOR BARS IN TENSION			
f _y = 60,000 PSI			
f'c = 4,000 PSI OR GREATER			
BAR SIZE	DEVELOPMENT LENGTH, l _{dh}		
	BASIC	w/ CONCRETE COVER	
#3	8"	6"	
#4	10"	7"	
#5	1'-0"	9"	
#6	1'-2"	10"	
#7	1'-5"	1'-0"	
#8	1'-7"	1'-1"	
#9	1'-9"	1'-3"	
#10	2'-0"	1'-5"	
#11	2'-2"	1'-6"	

* SIDE COVER NORMAL TO PLANE OF HOOK AT LEAST 2 1/2", AND FOR 90° HOOK END COVER BEYOND OUTSIDE END OF HOOK, AT LEAST 2".

BASIC DEVELOPMENT LENGTH AND SPLICE LENGTH					
FOR BARS IN COMPRESSION					
f _y = 60,000 PSI					
f'c = 4,000 PSI OR GREATER					
BASIC DEVELOPMENT LENGTH			SPLICE LENGTH		
BASIC	CONFINEMENT *	BAR SIZE	BASIC	CONFINEMENT **	
8"	8"	#3	1'-0"	1'-0"	
10"	8"	#4	1'-3"	1'-1"	
1'-0"	9"	#5	1'-7"	1'-4"	
1'-3"	1'-0"	#6	1'-11"	1'-7"	
1'-5"	1'-1"	#7	2'-2"	1'-10"	
1'-7"	1'-3"	#8	2'-6"	2'-1"	
1'-9"	1'-4"	#9	2'-10"	2'-4"	
2'-0"	1'-6"	#10	3'-2"	2'-7"	
2'-2"	1'-8"	#11	3'-6"	2'-10"	

* BAR ENCLOSED w/ IN SPIRALS OF NOT LESS THAN 1/4" DIAMETER AND NOT MORE THAN 4" PITCH OR w/ IN #4 TIES IN CONFORMANCE w/ ACI 318 / ACI 350 SECTION 7.10.5 AT NOT MORE THAN 4" O.C., FACTOR 0.75 USED.

** BAR ENCLOSED w/ IN TIES PER ACI 318 / ACI 350 SECTION 12.17.2.4.

BASIC DEVELOPMENT LENGTH AND SPLICE LENGTH											
FOR BARS IN TENSION											
f _y = 60,000 PSI											
f'c = 4,000 PSI OR GREATER (NORMAL WEIGHT CONCRETE)											
BASIC DEVELOPMENT LENGTH ** (l _{dh})						CLASS B SPLICE LENGTH ** (1.3 x l _{dh})					
CLEAR SPA ≥ 4db			CLEAR SPA ≥ 2db			CLEAR SPA ≥ 4db			CLEAR SPA ≥ 2db		
BASIC	TOP *	BAR SIZE	BASIC	TOP *	BAR SIZE	BASIC	TOP *	BAR SIZE	BASIC	TOP *	BAR SIZE
8"	1'-0"	#3	1'-3"	1'-7"	#3	1'-0"	1'-3"	#3	1'-7"	2'-0"	#3
1'-0"	1'-3"	#4	1'-7"	2'-1"	#4	1'-3"	1'-7"	#4	2'-1"	2'-8"	#4
1'-3"	1'-7"	#5	2'-0"	3'-0"	#5	1'-7"	2'-1"	#5	3'-0"	3'-10"	#5
1'-6"	1'-11"	#6	2'-5"	3'-7"	#6	2'-1"	2'-8"	#6	3'-10"	6'-0"	#6
2'-1"	2'-9"	#7	3'-6"	5'-2"	#7	2'-8"	3'-4"	#7	6'-0"	8'-9"	#7
2'-5"	3'-1"	#8	4'-0"	6'-0"	#8	3'-4"	4'-0"	#8	8'-9"	10'-0"	#8
2'-9"	3'-6"	#9	4'-6"	6'-8"	#9	4'-0"	4'-7"	#9	10'-0"	11'-3"	#9
3'-4"	4'-3"	#10	5'-5"	7'-5"	#10	4'-7"	5'-9"	#10	11'-3"	12'-6"	#10
		#11	6'-2"	10'-8"	#11	5'-9"	7'-1"	#11	12'-6"	13'-9"	#11

* TOP REINFORCEMENT IS HORIZONTAL REINFORCEMENT PLACED RESULTING w/ MORE THAN 1'-0" OF FRESH CONCRETE CAST IN THE MEMBER BELOW THE REINFORCEMENT.

** LENGTHS SHOWN IN CHART SHALL BE MODIFIED WHERE REQUIRED TO CONFORM TO THE PROVISIONS OF ACI 318 / ACI 350 SECTION 12.17.2.4.

6 - DETAIL - SCHEDULE - REINF. BAR SPLICE REQUIREMENTS
N.T.S.

NO.	DESCRIPTION	DATE
1	ISSUED FOR BIDDING	02/28/2025
REVISIONS		

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A.E. ANDERSON III, P.E.
No. 34779

MCKIM & CREED
139 Executive Circle, Suite 201
Daytona Beach, FL 32114-1102
Phone: (386) 274-2926, Fax: (386) 274-1393
CA Lic. No. 0988
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THE CITY OF
ORMOND BEACH

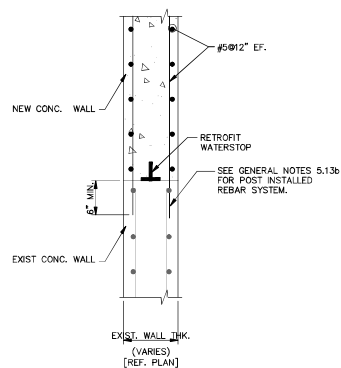
LIFT STATION 4P IMPROVEMENTS

STRUCTURAL
STRUCTURAL DETAILS

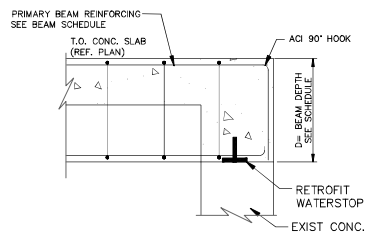
PROJ. START DATE: 2024, DEC
MCE PROJ. # 01026-0138
DRAWN: AGW
CHECKED: ASA
PROJ. MGR: SRS
STATUS:

SCALE
HORIZONTAL: TBD
VERTICAL: TBD
S04
A

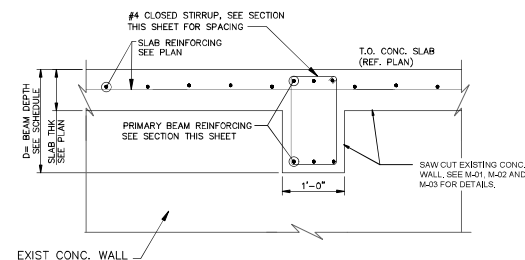
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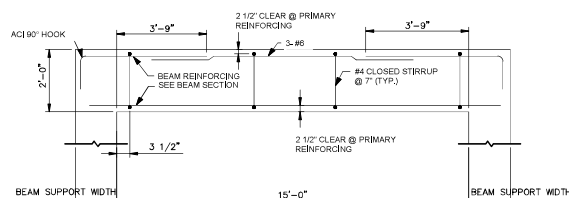
1 - DETAIL- NEW CONC. WALL DOWEL INTO EXISTING WALL
N.T.S.



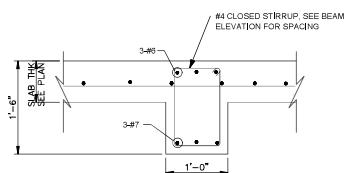
2 - DETAIL- BEAM ON EXISTING WALL
N.T.S.



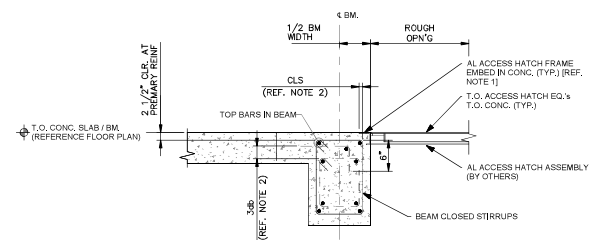
3 - SECTION- BEAM ON EXISTING WALL
N.T.S.



4 - FB-01 BEAM ELEVATION
N.T.S.



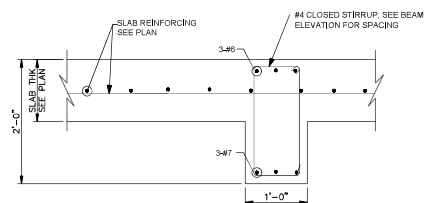
6 - FB-02 BEAM SECTION AT SLAB
N.T.S.



GENERAL NOTES:

1. ALUMINUM ACCESS FRAME & HATCH ASSEMBLY COMPONENTS IN CONTACT w/ CONCRETE SHALL BE COATED w/ BITUMASTIC OR AN APPROVED EQUAL.
2. CLS - CLEAR DIMENSION FROM FACE OF BEAM CLOSED STIRRUP TO HATCH FRAME SHALL BE 1" MIN. WHEN CLS IS LESS THAN 1". ADJUST TOP BARS IN BEAM SPACING TO TERMINATE BEAM CLOSED STIRRUP AS SHOWN. ALSO ADD TWO (2) ADDITIONAL LONGITUDINAL BARS, SAME SIZE AS TOP BARS AT 3x BAR DIAMETER CLEAR BELOW TOP BARS WITH ADDITIONAL CLOSED STIRRUP AT SAME SIZE AND SPACING AS BEAM CLOSED STIRRUP.

7 - SECTION- BEAM REIN. @ ACCESS HATCH SLAB OPNG. DETAIL
N.T.S.



5 - FB-01 BEAM SECTION AT SLAB
N.T.S.

REV.	DESCRIPTION	DATE
1	ISSUED FOR BIDDING	08/20/2024
REVISIONS		
2		
3		
4		
5		
6		
7		
8		
9		
10		

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MCKIM & CREED
139 Executive Circle, Suite 201
Daytona Beach, FL 32114-7102
Phone: (386) 274-2628, Fax: (386) 274-1363
CA Lic. No. 26988
www.mckimcreed.com

THE CITY OF ORMOND BEACH

LIFT STATION 4P IMPROVEMENTS
STRUCTURAL
STRUCTURAL DETAILS

PROJ. START DATE: 2024 DEC MCE PROJ. # 010260138 DRAWN: AGW DESIGNED: AGW CHECKED: AEA PROJ. MGR: SRS	SCALE: HORIZONTAL: TBO VERTICAL: TBO	S05 ISSUED FOR BIDDING NOT FOR CONSTRUCTION
--	--	--

E:\01026\0138\ENG\80-DRAWINGS\ELECTRICAL\ELECTRICAL NOTES AND ABBREVIATIONS.DWG 10/23/2025 14:29:01 DOREEN PADGET

	LIGHTING, INSTRUMENT OR RECEPTACLE PANELBOARD	(VS)	VOLTMETER SWITCH
	POWER PANELBOARD	(FS)	FLOAT/FLOW SWITCH
	CONTROL PANEL	(LB)	LIMIT SWITCH
	MOTOR CONTROL CENTER	(PS)	PRESSURE SWITCH
		(T)	THERMOSTAT
	POWER MONITOR	(JB)	JUNCTION BOX, SIZE PER NEC
	AMMETER	(E)	ELECTRICAL EQUIPMENT CONNECTION
	AMMETER SWITCH		
	VOLTMETER		ELECTRICAL MANHOLE / HANDHOLE AND THE LETTERS INDICATE THE TYPE OF THE HOLE

 LP-10015
 POLE OR STANCHION MOUNTED LIGHTING FIXTURE

 LP-10016
 TWO (2) POLE OR STANCHION MOUNTED LIGHTING FIXTURE

 LP-10015
 POLE OR STANCHION MOUNTED LIGHTING FIXTURE WITH
 RECEPTACLE

 LP-10015
 FUTURE DESIGNATION SYMBOL, SEE LIGHTING FIXTURE SCHEDULE
 FOR DESCRIPTION AND TYPE. ALL FIXTURES SHOWN IN A ROOM WITH
 THIS SYMBOL SHALL BE OF THE TYPE INDICATED BY LETTER, NUMBER IN
 SYMBOL, INDICATES LAMP WATTAGE AND NUMBER OF LAMPS WHERE
 MORE THAN ONE (UNLESS OTHERWISE NOTED). NUMBER BELOW
 SYMBOL, INDICATES MOUNTING HEIGHT ABOVE FINISHED FLOOR OR
 AS NOTED.

 100-W AFF

 a
 S
 b
 c
 10

 a
 b
 c
 10

WIRING DEVICE
 LIGHTING CONTROL SWITCHES
 UPPER LEFT CHARACTER "S" DENOTES SWITCH DESIGNATION
 LOWER RIGHT CHARACTER "4" DENOTES SWITCH CONTROL
 2 TWO POLE
 3 THREE-WAY SWITCH CONTROL
 4 FOUR-WAY SWITCH CONTROL
 5 DIMMER CONTROL
 OS OCCUPANCY SENSOR
 M MOTOR RATED SWITCH
 T 24V DC DIMINUTARY CONTACT SWITCH
 V VARIABLE SPEED FAN SWITCH

 GFCI
WIRING DEVICE, DUPLEX RECEPTACLE
GROUND FAULT CIRCUIT INTERRUPTER / WEATHERPROOF
NEMA 5-20 125V 20A UNLESS OTHERWISE NOTED ON DRAWINGS

 WIRING DEVICE, HEAT-TRACE OR SPECIAL PURPOSE RECEPTACLE
REFERENCE DRAWINGS FOR ADDITIONAL DETAILS

	CLASS 12 DIVISION III CONDUIT SEAL-OFF FITTING		XF1 TRANSFORMER, POWER TYPE AND RATINGS AS NOTED ON THE DRAWINGS
	LOCAL CONTROL STATION WITH THREE OR MORE SELECTOR/PUSH SWITCHES LOWER-RIGHT SYMBOL INDICATES MOUNTING LOCATION		XF2 TRANSFORMER, SHIELDED ISOLATION TYPE AND RATINGS AS NOTED ON THE DRAWINGS
	LOCAL CONTROL STATION WITH TWO SELECTOR/PUSH SWITCHES LOWER-RIGHT SYMBOL INDICATES MOUNTING LOCATION		CT1 TRANSFORMER, CURRENT "CT" TYPE AND RATINGS AS NOTED ON THE DRAWINGS
	LOCAL CONTROL STATION WITH ONE SELECTOR/PUSH SWITCH LOWER-RIGHT SYMBOL INDICATES MOUNTING LOCATION		PT1 TRANSFORMER, POTENTIAL "PT" OR "VT" TYPE AND RATINGS AS NOTED ON THE DRAWINGS
	LOCATED AT FIELD DEVICE		AUTOMATIC OR MANUAL TRANSFER SWITCH TYPE AND RATINGS AS NOTED ON THE DRAWINGS
	LOCATED AT MAIN CONTROL PANEL		SAFETY / DISCONNECT SWITCH TOP NUMBER DENOTES FUSE SIZE (IF NON-FUSED) BOTTOM NUMBER DENOTES FRAME SIZE RIGHT NUMBER DENOTES NEMA ENCLOSURE RATING
	LOCATED AT LOCAL CONTROL PANEL		MOTOR CONTROLLER, STAND-ALONE WITH EXTERNAL DISCONNECT UPPER LEFT NUMBER DENOTES NEMA FRAME SIZE UPPER RIGHT NUMBERS DENOTE AMPERE AND FRAME RATINGS CENTER RIGHT NUMBER DENOTES NEMA ENCLOSURE RATING LETTERS WITHIN THE SYMBOL, DENOTE THE FOLLOWING: FVNR FULL VOLTAGE NON-REVERSIBLE FVR FULL VOLTAGE REVERSIBLE TS1W TWO SPEED - SINGLE WINDING TS2W TWO SPEED - DUAL WINDING RVSS REDUCED VOLTAGE SOFT STARTER RVAT REDUCED VOLTAGE AUTO TRANSFORMER VFD VARIABLE FREQUENCY DRIVE
	MOUNTED ON DOOR		LHE OR LOAD REACTOR CENTER RIGHT NUMBER DENOTES PERCENT IMPEDANCE
	CIRCUIT BREAKER, GENERIC FIXED-MOUNT "TMTU" THERMAL-MAGNETIC TRIP UNIT "ELTU" ELECTRONIC TRIP UNIT		MOTOR PROTECTION FILTER
	CIRCUIT BREAKER, GENERIC		AC MOTOR SINGLE OR THREE PHASE AS NOTED
	FUSE, GENERIC		
	FUSE, GENERIC TOP NUMBER DENOTES TRIP BOTTOM NUMBER DENOTES VOLTAGE CLASS MIDDLE NUMBER DENOTES TYPE		
	PANELBOARD		
	CABLE-TRAY TYPE AS NOTED ON THE DRAWINGS		
	WIRE WAY TYPE AS NOTED ON THE DRAWINGS		
	ENCLOSURE FAN, 120VAC ION		

	E	NEW ELECTRICAL RACEWAY(S)		CONCEALED RACEWAY(S) IN FLOOR SLAB, UNDERGROUND, ETC.
	E	EXISTING ELECTRICAL RACEWAY(S)		EXISTING RACEWAY(S) AND/OR CABLES
	T	NEW COMMUNICATIONS LINE(S)		
	T	EXISTING COMMUNICATIONS LINE(S)		
	OHE	OVERHEAD ELECTRICAL UTILITY		RACEWAY TURNED DOWN
	OHE	OVERHEAD COMMUNICATIONS UTILITY		RACEWAY TURNED UP
	UGE	UNDERGROUND ELECTRICAL UTILITY		RACEWAY TERMINATED / CAPPED OFF
	UGT	UNDERGROUND COMMUNICATIONS UTILITY		RACEWAY REMOVED / ABANDONED
	G	NEW GROUNDING / BONDING		
	G	EXISTING GROUNDING / BONDING		
	L	NEW LIGHTNING PROTECTION CONDUCTOR		
	L	CONDUCTOR/CABLE CALL-OUT WITHIN RACEWAY		

	TO PLC-1		RACEWAY AND/OR CABLE ID NUMBER
	Ø14 #1 @ 0.75"		

PB1	MOMENTARY PUSH BUTTON NORMALLY OPENED		CR	CONTROL RELAY, GENERIC DESIGNATIONS: CR CONTROL RELAY MX AUXILIARY RELAY TR TIMING RELAY RR ALARM RELAY RR READY RELAY
PB2	MOMENTARY PUSH BUTTON NORMALLY CLOSED		CR1	CONTROL RELAY, LATCHING
PB3	MUSHROOM PUSH BUTTON NORMALLY OPENED		L1	
PB4	MUSHROOM PUSH BUTTON NORMALLY CLOSED		CR1	CONTACT, NORMALLY OPENED TOP ID TAG DENOTES PARENT RELAY
TG1	TOGGLE SWITCH NORMALLY OPENED		L1	CONTACT, NORMALLY CLOSED TOP ID TAG DENOTES PARENT RELAY
TG2	TOGGLE SWITCH NORMALLY CLOSED		SOL1	SOLENOID, GENERIC
SS1	TWO-POSITION SWITCH NORMALLY OPENED		R1	HEATING ELEMENT, GENERIC
SS2	THREE-POSITION BUTTON NORMALLY OPENED		BTM	ELAPSED TIME METER, ELECTRONIC
LS1	LIMIT SWITCH NORMALLY OPENED		AH2	HORN, ALARM AV INDICATES AUDIO AND VISUAL ANNUNCIATION
LS2	LIMIT SWITCH NORMALLY CLOSED		XF3	TRANSFORMER, CONTROL POWER RATINGS AS NOTED ON THE DRAWINGS
LS3	LIMIT SWITCH HELD OPENED		BAT1	BATTERY OR DC POWER SOURCE
LS4	LIMIT SWITCH HELD CLOSED		M	MOTOR ACTUATED VALVE M MODULATING O/C OPEN/CLOSE
TS1	TEMPERATURE SWITCH NORMALLY OPENED		S	SOLENOID VALVE O/C OPEN/CLOSE
TS2	TEMPERATURE SWITCH NORMALLY CLOSED		TD2	ON DELAY TIME RELAY NORMALLY CLOSED TIMED OPENED NCTO
FLS1	FLOAT SWITCH NORMALLY OPENED		TD3	OFF DELAY TIME RELAY NORMALLY OPENED TIMED OPENED NOTO
FLS2	FLOAT SWITCH NORMALLY CLOSED		TD4	OFF DELAY TIME RELAY NORMALLY CLOSED TIMED CLOSED NCTO
FS1	FLOW SWITCH NORMALLY OPENED		L11	INDICATION LIGHT W-WHITE G-GREEN A-AMBER R-RED B-BLUE C-CLEAR
FS2	FLOW SWITCH NORMALLY CLOSED		L2	INDICATION LIGHT, PUSH-TO-TEST W-WHITE G-GREEN A-AMBER R-RED B-BLUE C-CLEAR
P81	PRESSURE SWITCH NORMALLY OPENED			
P82	PRESSURE SWITCH NORMALLY CLOSED			
TD1	ON DELAY TIME RELAY NORMALLY OPENED TIMED CLOSED NOTC			

	GROUND ROD TEST WELL
	GROUND ROD
	GROUNDING / BONDING CONNECTION EXOTHERMIC WELD
	GROUNDING / BONDING CONNECTION MECHANICAL
	GROUND, EARTH

NOTES:
ALL SYMBOLS MAY NOT BE UTILIZED FOR THIS PROJECT.
ADDITIONAL SYMBOLS NOT SHOWN ON THIS DRAWING MAY BE SHOWN ELSEWHERE ON THE ELECTRICAL DRAWINGS. IF REQUIRED, IEC RATINGS WILL INCLUDE THE "IEC" AND "IP" PREFIX.

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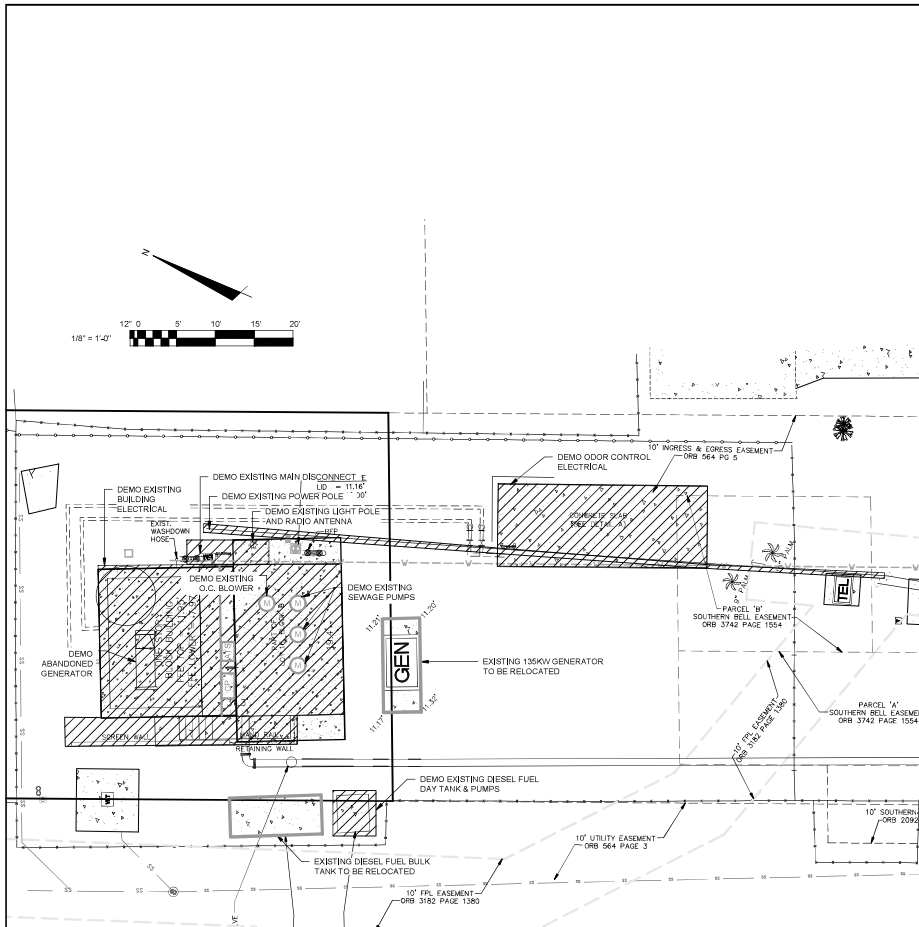
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 139 Executive Circle, Suite 201
 Daytona Beach, FL 32114-7102
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 CA Lic. No. 28688
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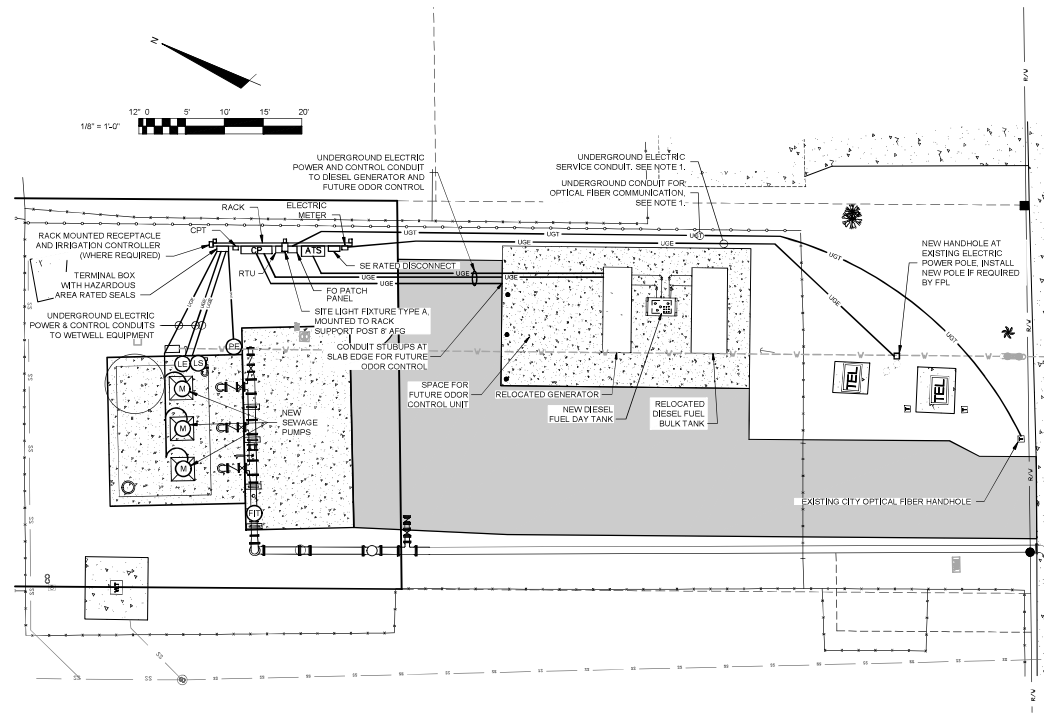
ELECTRICAL SYMBOLS

SCALE	E02
HORIZONTAL: N/A	
VERTICAL: N/A	ORIGIN NUMBER
	A
	REVISION

STATUS: **ISSUED FOR BIDDING**
NOT FOR CONSTRUCTION



EXISTING ELECTRICAL SITE PLAN
SCALE: 1/8" = 1'



PROPOSED ELECTRICAL SITE PLAN
SCALE: 1/8" = 1'

- NOTES:
- COORDINATE WITH ALL UTILITIES, INCLUDING FPL, AT&T, AND CITY STAFF FOR THE UNDERGROUNDING OF ELECTRICAL SERVICE. INSTALLATION OF NEW FPL CONDUIT, AND REPLACEMENT OF THE EXISTING METER, MAIN DISCONNECTS AND SERVICE POLE WHERE REQUIRED. DEMO ALL ABANDONED ELECTRICAL EQUIPMENT AND DEVICES. EXISTING PRESSURE LEVEL TRANSMITTER SHALL BE REMOVED AND RETURNED TO OWNER.
 - COORDINATE ALL ELECTRICAL SHUTDOWNS WITH CITY STAFF. MAINTAIN EXISTING LIFT STATION OPERATIONS, SUCH THAT THE ELECTRICAL SHUTDOWNS COINCIDE WITH PROCESS MECHANICAL SHUTDOWNS WHERE APPROPRIATE.

NO.	DESCRIPTION	DATE
1	ISSUED FOR BIDDING	09/20/2025
2	REVISIONS	

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LAUREL SMITH, P.E.
No. 370341

MCKIM & CREED
139 Executive Circle, Suite 201
Daytona Beach, FL 32114-7102
Phone: (386) 274-2628, Fax: (386) 274-1363
CA Lic. No. 28688
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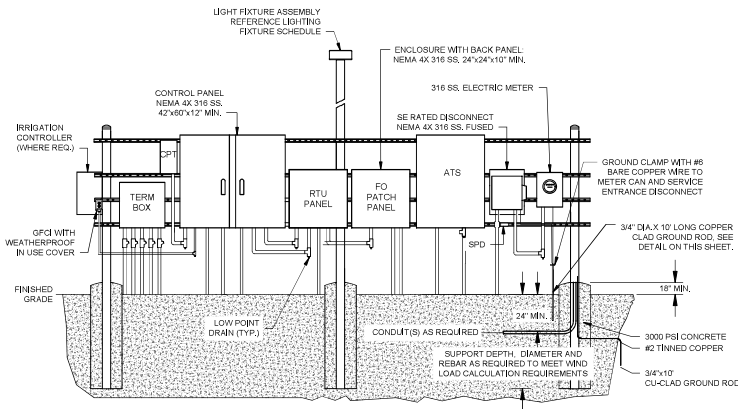
THE CITY OF
ORMOND BEACH

LIFT STATION 4P IMPROVEMENTS

**ELECTRICAL
ELECTRICAL SITE PLAN**

PROJ. START DATE: 2024	DRG. NO. 010260138
DRAWN: RME	CHECKED: LLS
DESIGNED: LLS	PROJ. MGR: SRB

SCALE: HORIZONTAL AS SHOWN	E10
VERTICAL: N/A	
STATUS: ISSUED FOR BIDDING	NOT FOR CONSTRUCTION



SEWAGE PUMP STATION ELECTRICAL DETAILS

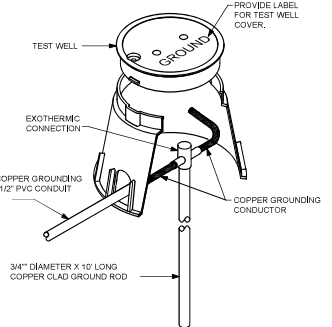
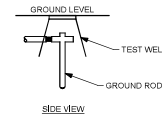
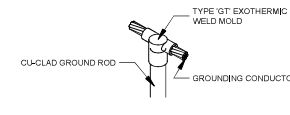
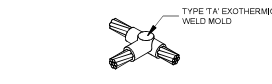
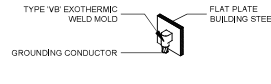
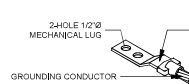
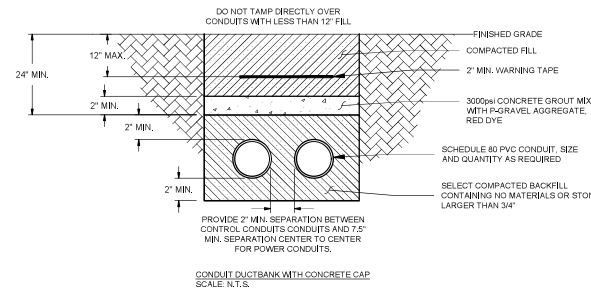
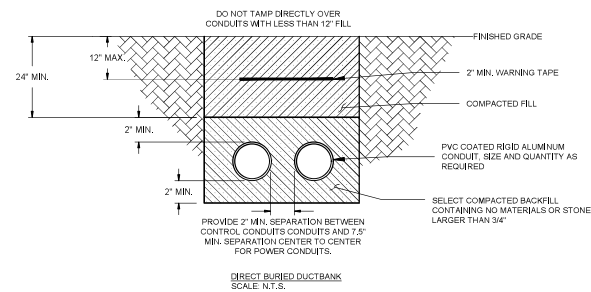
N.T.S.

DETAIL NOTES

1. ALL EQUIPMENT FURNISHED FOR THE PUMP STATION SHALL CONFORM TO ORMOND BEACH UTILITY STANDARDS, NFPA 650, AND NEC REGULATIONS.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COSTS ASSOCIATED WITH PROVIDING TEMPORARY AND PERMANENT ELECTRICAL SERVICE.
3. ALL CONDUIT ENTERING CONTROL AND RTU PANELS SHALL BE SEALED WITH INDUSTRIAL FOAM.
4. CONTROL PANEL WITH RAIN SHIELD, METER CAN, SERVICE DISCONNECT, RTU PANEL, FO PATCH PANEL AND TERMINAL BOX TO BE NEMA 4X 316 STAINLESS STEEL, MOUNTING HARDWARE TO BE 316 STAINLESS STEEL, MOUNTING POSTS TO BE ALUMINUM.
5. CONTRACTOR SHALL PROVIDE AN ENCLOSURE WITH BACK PANEL AND 2" CONDUIT WITH NYLON PULL STRING FOR THE FO PATCH PANEL. FIBER AND SWITCH WILL BE FURNISHED, INSTALLED AND TERMINATED BY OTHERS.
6. LIGHT-POLE CONCRETE ANCHOR BASE SHALL BE PROVIDED AND INSTALLED ON CENTER SUPPORT POST PER LIGHT-POLE FIXTURE MANUFACTURER INSTRUCTIONS.
7. CONTRACTOR SHALL SUBMIT SIGNED AND SEALED DRAWINGS AND DESIGN CALCULATIONS FOR THE CONCRETE ANCHOR BASE IN ACCORDANCE WITH THE LATEST EDITION OF THE FLORIDA BUILDING CODE.
8. DESIGN SUBMITTAL SHALL BE FROM A CURRENTLY LICENSED STRUCTURAL ENGINEER BY THE STATE OF FLORIDA.
9. CONCRETE ANCHOR BASE DESIGN SHALL BE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE PROJECT GEOTECHNICAL REPORT.
10. CONTRACTOR SHALL PROVIDE GEOTECHNICAL REPORT(S) FOR THE PROJECT SITE(S) IF NOT ALREADY REQUIRED BY CONTRACT DOCUMENTS.
11. CONTRACTOR SHALL NOT CONSTRUCT CONCRETE ANCHOR BASE PRIOR TO RECEIVING APPROVED SUBMITTAL, INCLUDING ORDERING AND FABRICATION OF MATERIALS.
12. PROVIDE ANCHORS, HARDWARE, SUPPORTS, ETC., AS NEEDED TO SECURE LIGHT-POLE FIXTURE, APPLY COATING FOR ALUMINUM SUPPORTS ENCASED IN CONCRETE TO STOP GALVANIC DECAY.

DEMOLITION NOTES

1. REMOVE EXISTING SERVICE EQUIPMENT, PANELS, LIGHTING CONDUIT AND WIRING.
1. CUT BACK TO CLEAR CONSTRUCTION AND ABANDON EXISTING SERVICE CONDUIT, REMOVE SERVICE WIRING TO JUNCTION BOX AT BASE OF SERVICE.
2. REMOVE ALL WIRING AND CONDUIT TO METWELL.
3. EXISTING CONTROL PANEL, PUMPS, LEVEL PROBE AND SCADA PANEL SHALL BE RETURNED TO THE CITY.



- NOTES:
1. TEST GROUND PRIOR TO INSTALLATION OF GROUND ROD TO DETERMINE SOIL RESISTIVITY.
 2. REFER TO GROUNDING NOTES FOR REQUIREMENTS.

GROUND ROD INSTALLATION DETAIL

N.T.S.

REV.	DESCRIPTION	DATE
1	ISSUED FOR BIDDING	08/20/2024
2	REVISIONS	

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LAUREL SMITH, P.E.
No. 37034

MCKIM & CREED
139 Executive Circle, Suite 201
Daytona Beach, FL 32114-7102
Phone: (386) 274-2628, Fax: (386) 274-1363
CA Lic. No. 26568
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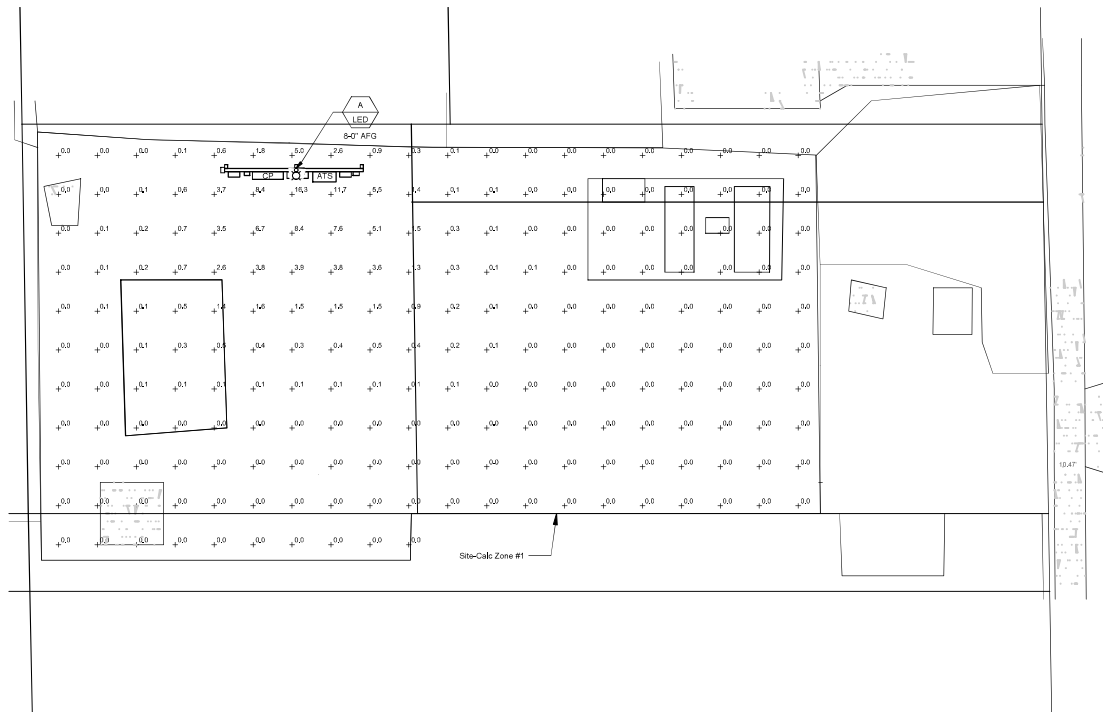
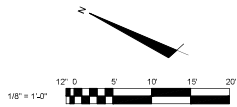
THE CITY OF
ORMOND BEACH

LIFT STATION 4P IMPROVEMENTS

ELECTRICAL
ELECTRICAL DETAILS

PROJ. START DATE: 2024-08-01	SCALE: AS SHOWN
DRAWN: RMB	VERTICAL: A
DESIGNED: LLS	REVISION: 1
CHECKED: MPT	
PROJ. MGR: SRB	

E30
ISSUED FOR BIDDING
NOT FOR CONSTRUCTION



STATISTICS					
DESCRIPTION	SYMBOL	AVG	MAX	MIN	AVG/MIN
Site-Calc Zone #1	+	0.8 fc	16.3 fc	0.0 fc	N/A

LIGHTING FIXTURE SCHEDULE				
LETTER	DESCRIPTION	LAMPS	REMARKS	SYMBOL
A	8 POLE-MOUNT EXTERIOR AREA LIGHT WITH FRONT THROW DISTRIBUTION, PHOTOCELL, MOTION DETECTING NIGHT LIGHT FUNCTION, AND HOUSE SIDE SHIELD.	LED, MVOLT 120V-277V, P1 33W	FIXTURE: LITHONIA LIGHTING - DSXD LED P1 27K 60CRI T1FM HS MOUNTED OFF RACK SUPPORT. SEE DETAIL SHEET E30	

NEW ELECTRICAL SITE LIGHTING PLAN
SCALE: 1/8" = 1'

NO.	DESCRIPTION	DATE
1	ISSUED FOR BIDDING	09/28/2024
2	REVISIONS	

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No. 370341

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Daytona Beach, FL 32114-7102
Phone: (386) 274-2628, Fax: (386) 274-1363
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THE CITY OF ORMOND BEACH

LIFT STATION 4P IMPROVEMENTS
ELECTRICAL
SITE LIGHTING PLAN

PROJ. START DATE: 09/24/2024
DATE PROJ. # 010260138
DRAWN: RMB
DESIGNED: LLS
CHECKED: MP
PROJ. MGR.: SRS
STATUS: **ISSUED FOR BIDDING**
NOT FOR CONSTRUCTION

SCALE: HORIZONTAL: AS SHOWN, VERTICAL: N/A
E40
DRAWING NUMBER: A

	PRIMARY LOCATION NOT NORMALLY ACCESSIBLE TO OPERATOR	FIELD MOUNTED	ADJ. LOC. ON EQUIPMENT ACCESSIBLE TO OPERATOR	NORMALLY ACCESSIBLE BEHIND THE PANEL COVER ON PULPIT
FIELD/PANEL EQUIPMENT				
SHARED DISPLAY SHARED CONTROL				
PROGRAMMABLE LOGIC CONTROLLER				
SUPERVISORY COMPUTER FUNCTION				

YY SOFTWARE LOGIC OR CONTROL MODULE XX AND SUB-MODULE YY
RESIDENT IN DISTRIBUTED CONTROL SYSTEM
(DCS) OR PROGRAMMABLE LOGIC CONTROLLER (PLC)
REFER TO CONTRACT DOCUMENTS FOR CONTROL
AND MODULE DESCRIPTIONS.

AMC - AUTOMATIC/CLOSE	MODA - MANUAL/OFFAUTO
MAN - AUTO-MANUAL	MODA-MANUAL/OFFAUTO
AUTO - AUTOMATIC	OCA - OPEN/CLOSEAUTO
DO - DE/OXYGEN	OFM - OFF/FREIGHTMASTER
EN - ENABLE	POP - MANUAL/OFFAUTO
ET - EMERGENCY STOP	PT - POTENTIOMETER
ELM - ELAPSED TIME METER	REM - REMOTE
FAL - FAILURE	ROF - REVERSE/OFF FORWARD
FLT - FAILURE	RUN/STOP
FAL - FAILED TO CLOSE	RSL - RASERSTOP/LOWER
FAL - FAILED TO OPEN	RST - RESET
FTS - FAILED TO STOP	RUN - RUNNING
HOA - HAND/OFFAUTO	SD - SHUTDOWN
HOR - HAND/OFFREMOTE	SEL - SELECT
LAV - LEVEL ALARM HIGH	SEL - SEQUENCE
LAV - LEVEL ALARM LOW	SEP - SEPT POINT
LSD - LOCKOUT STOP	SR - START/RESET
LR - LOCK/REMOTE	SG - START/STOP
LOR - LOCK/OFF/REMOTE	TURB - TURBIDITY

CONVERT

E - VOLTAGE	H - HYDRAULIC
I - CURRENT	O - ELECTROMAGNETIC, SONIC
P - PNEUMATIC	R - RESISTANCE (ELECT.)
A - ANALOG	D - DIGITAL
B - BINARY	

COMPUTE 	 SUMMING	 EXPONENTIAL
 SUBTRACTOR	 AVERAGING	
 MULTIPLYING	 RATIO	
 DIVIDING	 HIGH SELECTING	
 ROOT	 LOW SELECTING	
 EXTRACTION	 INTEGRAL	
 PROPORTIONAL	 PID	
 DERIVATIVE		

ANALYZER, XXX = TYPE

ALK = ALKALINITY
 CL₂ = CHLORINE CONCENTRATION
 COMB = COMBUSTIBLE GAS
 COND = CONDUCTIVITY
 DO = DISSOLVED OXYGEN
 H₂S = HYDROGEN SULFIDE
 LEL = LOWER EXPLOSIVE LIMIT
 O₃ = OZONE
 ORP = OXIDATION/REDUCTION
 POTENTIAL
 pH = HYDROGEN ION
 CONCENTRATION
 TH = TOTAL HARDNESS
 UV = ULTRAVIOLET

* ASTERISK IDENTIFIES EQUIPMENT FURNISHED BY MBR MEMBRANE EQUIPMENT

* * DOUBLE ASTERISK IDENTIFIES EQUIPMENT FURNISHED BY UV SYSTEM SUP

GENERIC VALVE OR GATE VALVE	PLUG VALVE	GLOBE VALVE	BALL VALVE
BALL VALVE (2WAY)	3WAY VALVE (GENERAL)	FRENCH VALVE	COMBINATION VACUUM PRESSURE RELIEF VALVE
BUTTERFLY VALVE	SWING CHECK VALVE	BALL CHECK VALVE	DIAPHRAGM VALVE
NEEDLE VALVE	ANGLE VALVE	ROTARY VALVE	THROUGH PLUG VALVE
PRESSURE RELIEF OR SAFETY VALVE	VACUUM RELIEF VALVE	PRESSURE REDUCING REGULATOR	BACKPRESSURE REGULATOR
BACKFLOW PREVENTER	SLUICE GATE	STOPFLOW GATE	STRAINER
BACKFLOW PREVENTER	ELECTRIC ACTUATOR	SOLENOID ACTUATOR	PNEUMATIC ACTUATOR
ELECTROPNEUMATIC ACTUATOR	ELECTROHYDRAULIC ACTUATOR	HAND WHEEL	EDITOR

CENTRIFUGAL PUMP	CENTRIFUGAL WET PIT PUMP (SUBMERSIBLE)	BLOWER (CENTRIFUGAL)	GEAR PUMP (POSITIVE DISPLACEMENT)
PROGRESSIVE CAVITY PUMP	CHEMICAL FEED PUMP	MIXER	BLOWER (POSITIVE DISPLACEMENT)
VERTICAL PUMP	HYDROPHOBIC MEMBRANE TANK	CLOSED TOP TANK	EMERGENCY SHOWER/EYEWASH
MEMBRANE FILTER	MECHANICAL SCREEN		

VALVE ELECTRIC ACTUATOR WITH MULTIPLE FUNCTIONS:
 FV: LOCAL/OFF/REMOTE HANDSWITCH,
 OPEN/STOP/CLOSE PUSHBUTTONS, OPEN/CLOSED
 STATUS LIGHTS
 FCV: LOCAL/OFF/REMOTE HANDSWITCH,
 OPEN/STOP/CLOSE PUSHBUTTONS, POSITION
 INDICATOR

SAMPLE LOOP DIAGRAM 85A EXPANDED FORMAT					
FIELD PROCESS AREA TRANSMITTER: MODEL _____ SPEC. No. _____ ELEVATION 5 FT ABOVE GRADE OPTIONAL LOCAL BATTERY ALARM FE 000 NOTE 3 420 mADC 345 PSI PSIG FV 000 AS 150 PSI PSIG NOTE 2 20 PSI PSIG TRANSDUCER: MODEL _____ SPEC. No. _____ FV 000	LC940 CABINET REAR NOTE 4 NOTE 5	LC940 CABINET REAR PLC No. _____ RACK No. _____ SLOT No. _____ PSIG XX Ω 420 mADC	LC940 CABINET FRONT CONTROLLER: MODEL _____ SPEC. No. _____ PSIG	CET PSIG INSTRUMENT RANGE • DIRECT ACTING • INPUT SIGNAL • REVERSE ACTING • OUTPUT SIGNAL	HMI/HISTORIAN SERVER FR 000 HI 000 REPORT FREQUENCY: _____ CONTROL DATA STORAGE: _____
NOTES: FV____001 FULLY OPEN AT 3 PSI&S AND FULLY CLOSED AT 15 PSI&S. 3. STAND MOUNT PER INSTRUMENT STANDARD, BUT NOT ON THE CONTROL VALVE. 3. FE____001 REQUIRES 10 PIPE CHAMBERS UPSTREAM AND 5 PIPE CHAMBERS DOWNSTREAM OF STRAIGHT PIPE. 4. COPPER BUS BAR, DRILLED AND TAPPED FOR GROUND CONNECTIONS 5. LIGHTNING SURGE ARRESTOR					

	MEASURED OR INTERVARIABLE	MODIFIER	READOUT OR PASSIVE FUNCTION	OUTPUT FUNCTION	MODIFIER
A	ANALYSE		SLIDE		
B	BURNER, COMBUSTION			CONTROL	CLOSE/CLOSED
C		DIFFERENTIAL			
D	VOLTAGE		SENSOR (PRIMARY ELEMENT)		
F	FLOW RATE	RATIO (FRACTION)	GLASS MEASURING DEVICE		
G	GASUOUS				
H	HAND				HIGH
I	CURRENT (ELECTRICAL)			INDICATE	
J	POWER	SCAN			
K	TIME, TIME SCHEDULE	TIME RATE OF CHANGE		CONTROL, STATION	LOW
L			LEVEL		MIDDLE, INTERMEDIATE
M		MOMENTARY			
N	TORQUE			OFFICE, RESTRICTION	
O	PRESSURE, VACUUM		POINT (TEST) CONNECTION		OPEN/OPENED
Q	QUANTITY	INTEGRATE, TOTALIZE			
R	HOW			RECORD & STORE	
S	SPEED, FREQUENCY	SAFETY		REPORT	
T	TEMPERATURE			TRANSMIT	
U	UNUSABLE		MULTIFUNCTION	MULTIPLICATION	MULTIFUNCTION
V	MECHANICAL VOLUME			VALUE DAMPER, LOWER	
W	MECHANICAL ANALYSIS				
X	WEIGHT, FORCE		WELL		
Y	FAILURE OR TROUBLE	X AXIS			
Z	EVENT, STATE OR POSITION	X AXIS		COMPUTE, CONVERT, RELAY	
		Z AXIS		DRIVER, ACTUATOR, FINAL CONTROL ELEMENT	

MISCELLANEOUS SYMBOLS				
PLC OR DCB ANALOG INPUT	PLC OR DCB ANALOG OUTPUT	PLC OR DCB DISCRETE INPUT	PLC OR DCB DISCRETE OUTPUT	SILENCE
VENT	DRAIN	FILTER	AIR FILTER	PULSATION DAMPENER
HORN	REDUCER	PIPE MATERIAL CHANGE	QUICK CONNECT	BLIND FLANGE

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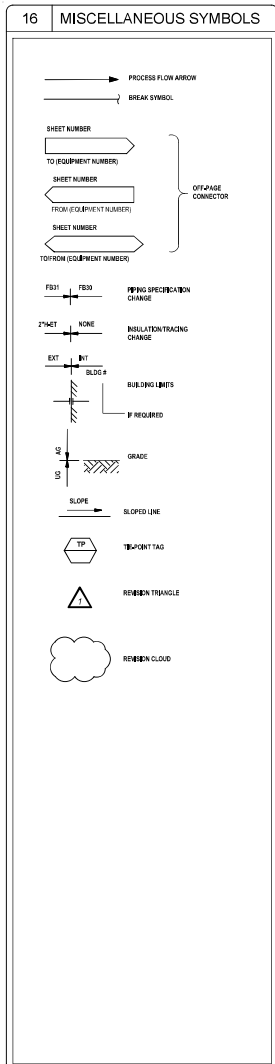
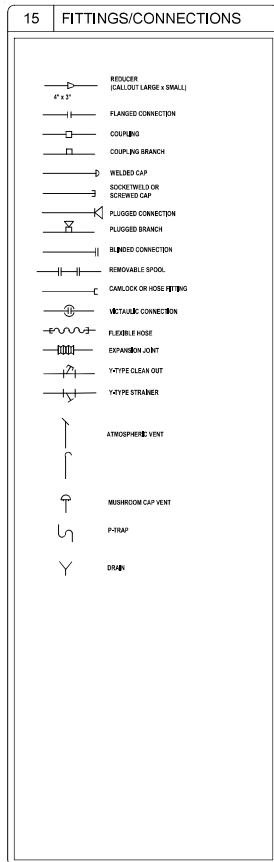
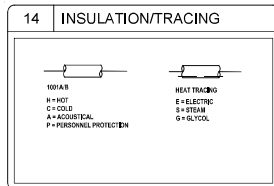
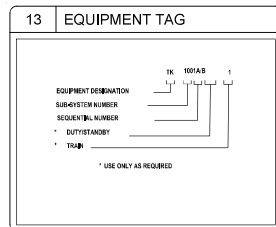
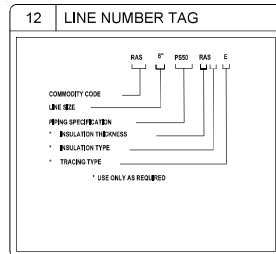
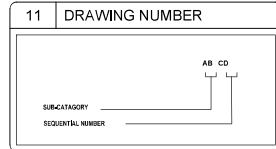
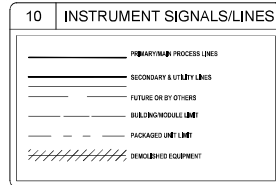
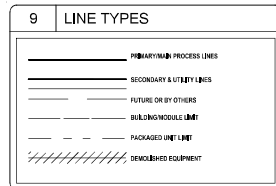


INSTRUMENTATION

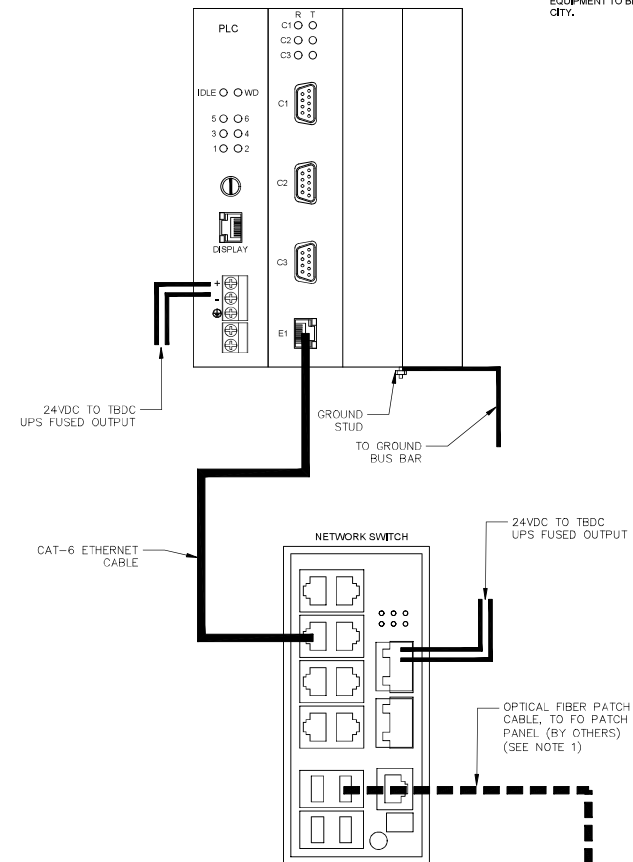
SYMBOLS & ABBREVIATIONS I

STATUS: ISS NOT FOR

**ISSUED FOR BIDDING
NOT FOR CONSTRUCTION**



COMMUNICATIONS DIAGRAM



NOTES:
1. CONTRACTOR TO PROVIDE CONDUIT AND ENCLOSURE WITH BACK PANEL FOR FO PATCH PANEL, FO CABLE AND PATCH PANEL COMMUNICATIONS EQUIPMENT TO BE PROVIDED AND INSTALLED BY THE CITY.

REV	DESCRIPTION	DATE
A	ISSUED FOR BIDDING	DEC 2023

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No. 370341

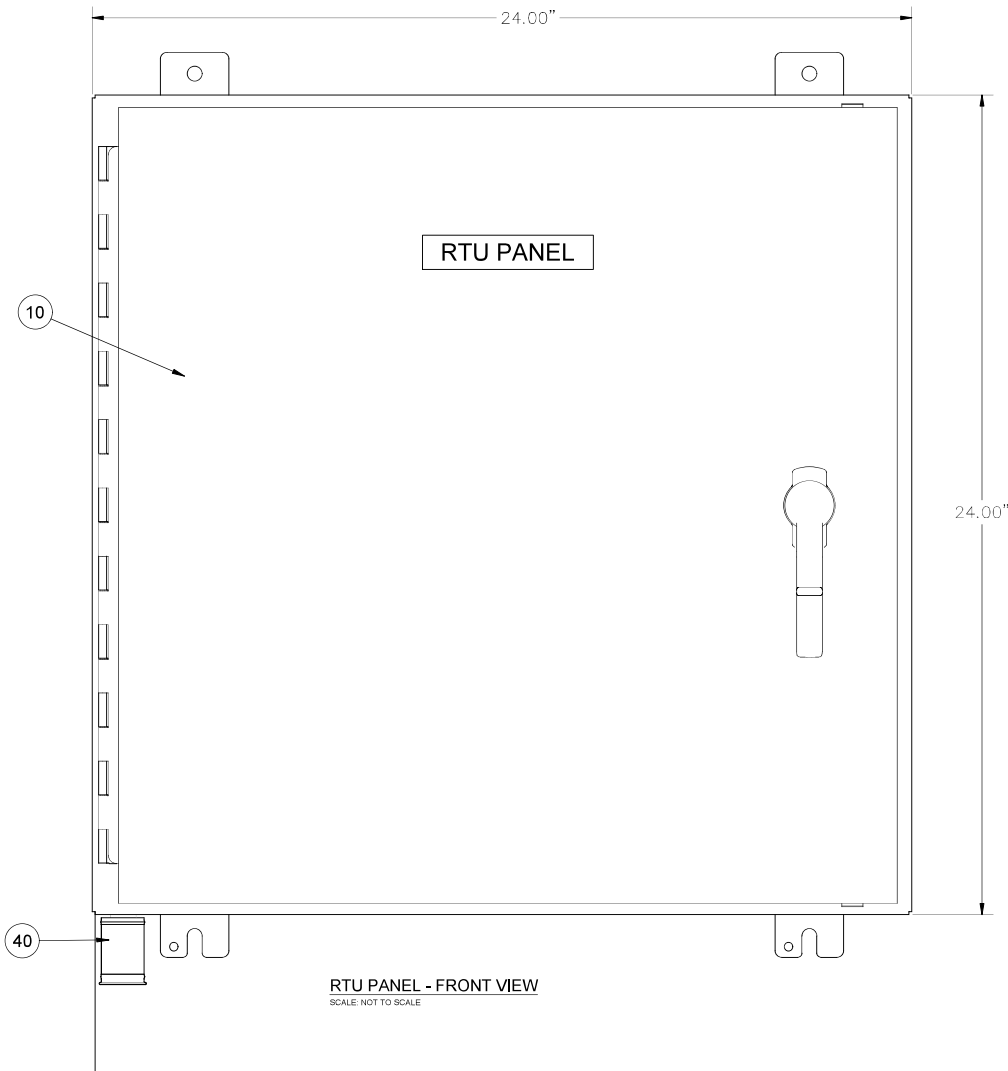
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Phone: (386) 274-2628, Fax: (386) 274-1363
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THE CITY OF
ORMOND BEACH

LIFT STATION 4P IMPROVEMENTS
INSTRUMENTATION
SYMBOLS II AND COMMUNICATIONS

PROJ. START DATE: 2024 DEC	SCALE: HORIZONTAL	I02 DRAWING NUMBER A REVISION
DRAWN: RMB	VERTICAL: N/A	
CHECKED: LLS		
PROJ. MGR: MPT		
STATUS: ISSUED FOR BIDDING NOT FOR CONSTRUCTION		



NOTE:

1. CONTROL PANEL TO BE UL LISTED TYPE 4X, 316 STAINLESS STEEL.

NO.	DESCRIPTION	DATE
1	ISSUED FOR BIDDING	07/20/20
2	REVISIONS	
3		
4		
5		
6		
7		
8		
9		
10		

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No. 370541

MCKIM & CREED
139 Executive Circle, Suite 201
Daytona Beach, FL 32114-7102
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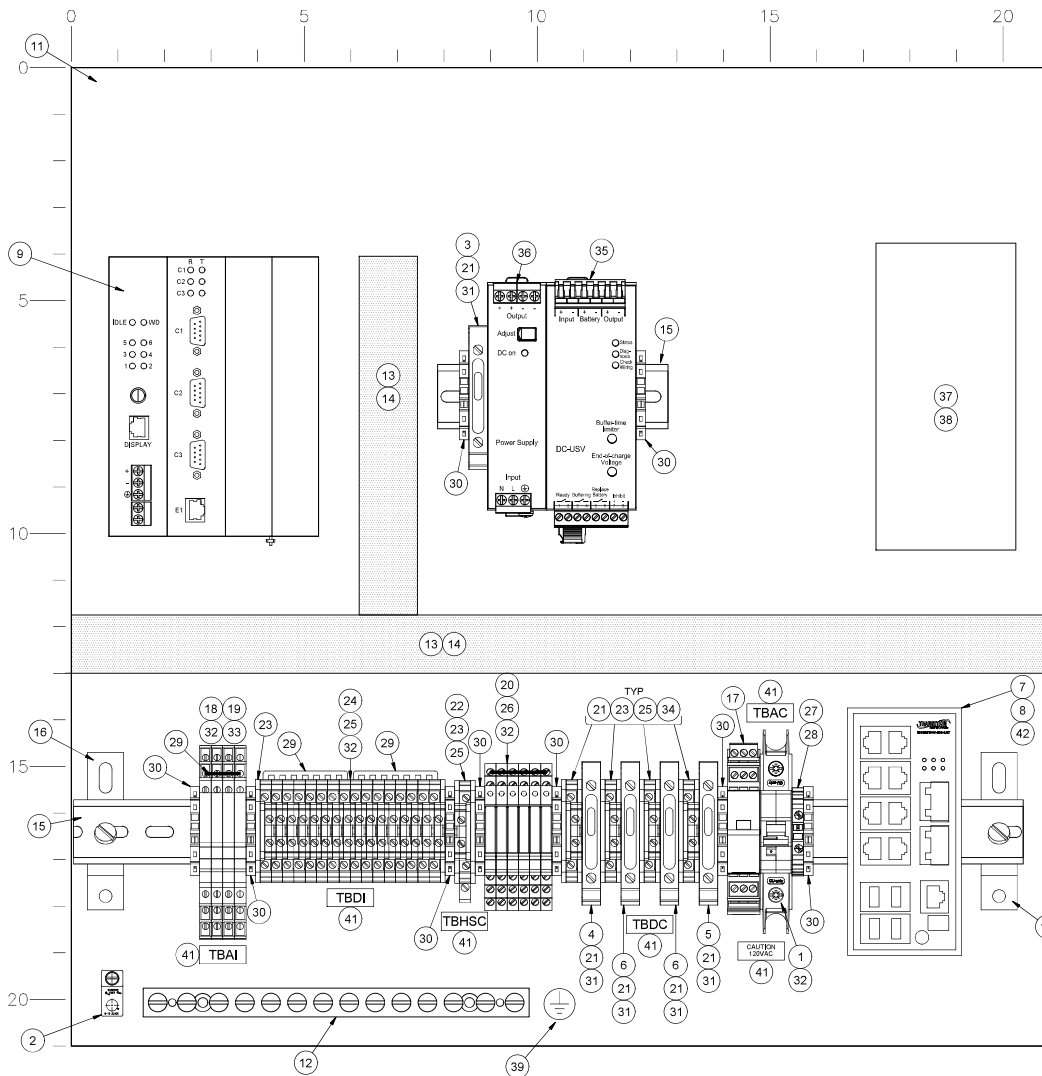
THE CITY OF
ORMOND BEACH

LIFT STATION 4P IMPROVEMENTS

INSTRUMENTATION
ENCLOSURE LAYOUT

PROJ. START DATE:	09/24/2020
DATE PROJ. #	01026-0138
DRAWN	RMS
DESIGNED	LLS
CHECKED	MP
PROJ. MGR.	SRS

SCALE	110
HORIZONTAL	AS SHOWN
VERTICAL	AS SHOWN
ISSUED FOR BIDDING	A
NOT FOR CONSTRUCTION	



RTU PANEL - SUB-PANEL VIEW
SCALE: NOT TO SCALE

NOTES:
1. PROPOSED MATERIAL PRODUCT SUBSTITUTIONS SHALL BE SUBMITTED FOR REVIEW IN ACCORDANCE WITH PROJECT SPECIFICATIONS.

LD.	QTY	CATALOG NUMBER	DESCRIPTION
1	1	1489-M1C050	ALLEN BRADLEY THERMAL-MAGNETIC CIRCUIT BREAKER, UL489, 5A
2	1	KAZU	BURNDY, GROUND LUG, BOX TYPE, 14AWG to 2AWG, SINGLE
3	1	MDL-10	BUSSMAN, 10A TIME DELAY FUSE
4	1	AGC-4	BUSSMAN, 4A FAST ACTING FUSE
5	1	MDL-3	BUSSMAN, 3A TIME DELAY FUSE
6	2	MDL-1	BUSSMAN, 1A TIME DELAY FUSE
7	1	SISGM1040-284-LRT	LANTRONICS MANAGED HARDENED ETHERNET SWITCH
8	1	DRBH-01	DIN RAIL MOUNTING BRACKET FOR SISGM1040-284-LRT
9	1	CWM-2-0-01-00-2-0-2-00-21-24	EMERSON CONTROLWAVE MICRO PLC, 4-SLOT RACK, SLOT #1 - PSSM (POWER SUPPLY SYSTEM CONTROLLER) 24VDC, w/DISPLAY INTERFACE, w/KEY LOCK, SLOT #2 - CPU: MICRO 150, 2Mb SR, 64Mb SDR, 10Mb FLASH, (1) ENET, (2) RS-232, (1) RS-485, SLOT #3 - I/O MODULE: (6) DISCRETE CONFIGURABLE IO, (4) ANALOG INPUTS, (2) HSC, SLOT #4 - I/O MODULE: (16) DISCRETE INPUTS
10	1	A24H0412S6SLP3PT	HOFFMAN, ENCLOSURE, 24" H x 24" W x 12" D, NEMA 4X 316SS, 3PT LATCH
11	1	A24P24	HOFFMAN, BACK-PANEL, 21" X 21"
12	1	UG820-GA14-12	PANDUIT, UNIVERSAL GROUND BAR, UL LISTED
13	1	F1X3LG6	SLOTTED WIREWAY, GRAY, 1" X 3", 6' STICK
14	1	C1LG6	1" WIREWAY COVER, GRAY, 6' STICK
15	1	0801733	PHOENIX CONTACT, STANDARD DIN RAIL, NS 35/7.5 PERF, 2M
16	2	1201086	PHOENIX CONTACT, DIN RAIL, ANGLE BRACKET
17	1	2907918	PHOENIX CONTACT, SURGE PROTECTION, PLUG AND BASE ELEMENT FOR 120VAC POWER
18	4	2906798	PHOENIX CONTACT, SURGE PROTECTOR, 2-WIRE FLOATING SIGNAL, 4-20mA CURRENT LOOP
19	1	2716949	PHOENIX CONTACT, END COVER, D-DEK 1.5, GN
20	6	2996171	PHOENIX CONTACT, 24VDC RELAY MODULE, PLC-RSC-24DC/21, SPDT
21	5	3004171	PHOENIX CONTACT, FUSE HOLDER, UK6.3-HESI (for 0.25 x 1.25 FUSES)
22	1	0461016	PHOENIX CONTACT, TERMINAL BLOCK, 2 TIER, SLUG-K5
23	6	2770024	PHOENIX CONTACT, TERMINAL BLOCK, END BARRIER
24	20	2774017	PHOENIX CONTACT, TERMINAL BLOCK, 2 TIER
25	6	2770794	PHOENIX CONTACT, TERMINAL BLOCK, SPACER PLATE
26	5	2966786	PHOENIX CONTACT, TERMINAL BLOCK, 2 TIER, JUMPERS
27	1	3044128	PHOENIX CONTACT, GROUND TERMINAL BLOCK, UT 4-PE
28	2	5060935	PHOENIX CONTACT, TERMINAL MARKER, VERT, 2B6, SOICMS
29	3	0201139	PHOENIX CONTACT, INSERTION BRIDGE, EB10-6
30	9	3022276	PHOENIX CONTACT, END CLAMP, CLIP-FIX 35-5
31	10	1050525	PHOENIX CONTACT, TERMINAL MARKER, VERT, ZB10 SOICSM, USED ON FUSES
32	44	1050499	PHOENIX CONTACT, TERMINAL MARKER, ZB6 SOICSM
33	1	0604374	PHOENIX CONTACT, TERMINAL MARKER, HORIZ, SK5.2/3.8, USED ON SP1-SP4
34	8	1051029	PHOENIX CONTACT, TERMINAL MARKER, VERT, 2B6, SOICMS
35	1	UB10.245	PULS, 24VDC INPUT/ 24VDC 10A OUTPUT UNINTERRUPTIBLE POWER SUPPLY
36	1	C895-243	PULS, 120VAC INPUT/ 24VDC 5A OUTPUT POWER SUPPLY
37	1	PS-12180	POWERSONIC, 12VDC, 18AH RECHARGEABLE BATTERY, QUICK DISCONNECT TABS
38	1	N/A	CUSTOM SHELF (FOR BATTERY)
39	1	59443	SEATON, 1/2" GROUNDING SYMBOL STICKER
40	1	DA284	STEGO, VENT PLUG, UL TYPE 4X
41	6	-	LABEL, PHENOLIC, BLK ON WHI, 1" X 0.375" (AS REQUIRED)
42	-	CAT5EXXFTBBLU	CAT5E ETHERNET CABLE BLUE (LENGTH AND QTY AS REQUIRED)
43	-	MTL7700	INTRINSICALLY SAFE BARRIER, DIN-RAIL MOUNTED (AS REQUIRED)

RTU PANEL - BILL OF MATERIALS

REV	DESCRIPTION	DATE
1	ISSUED FOR BIDDING	06/20/2025
2	REVISIONS	06/20/2025

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No. 370541

MCKIM & CREED
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Daytona Beach, FL 32114-7102
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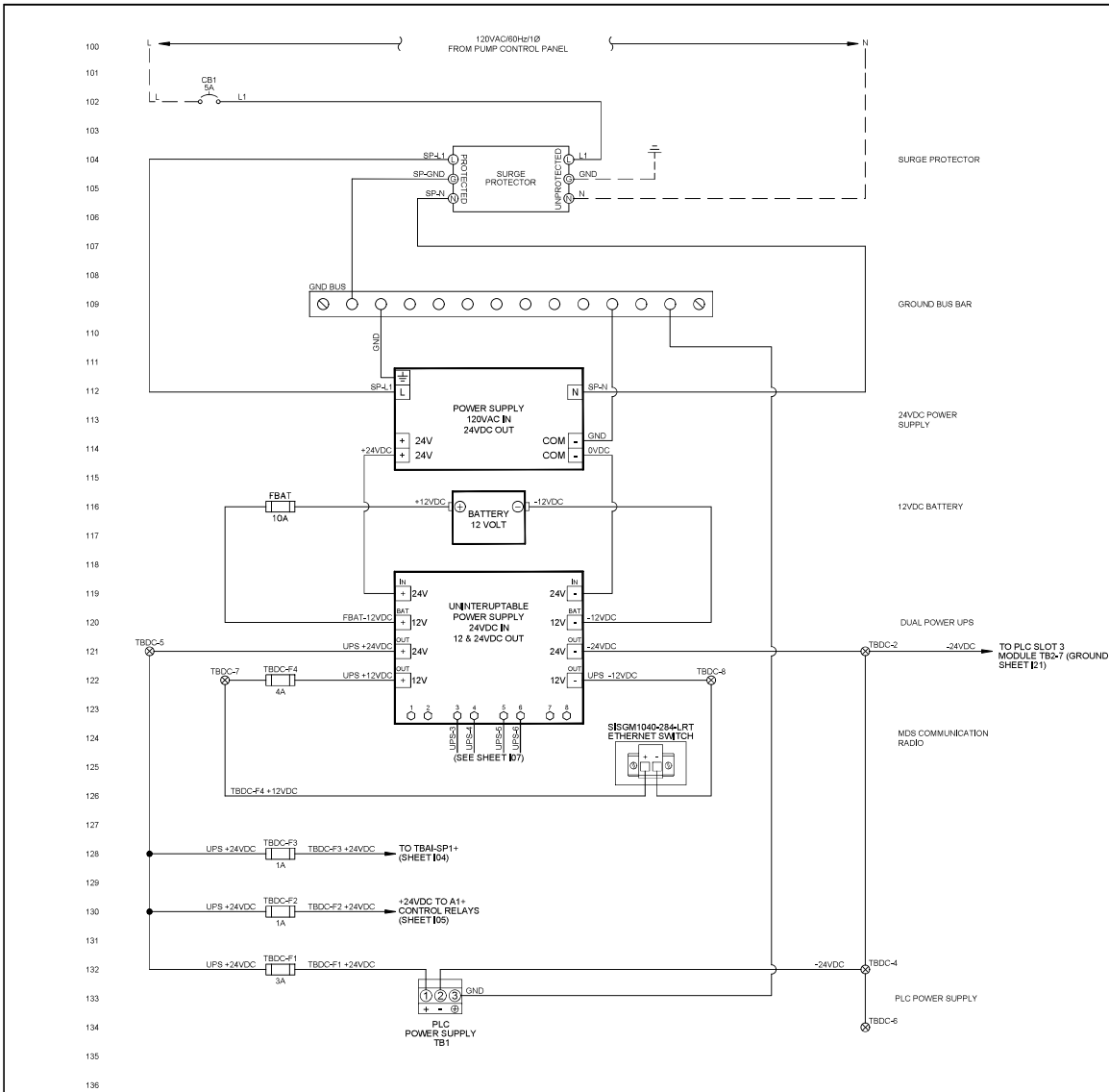
THE CITY OF
ORMOND BEACH

LIFT STATION 4P IMPROVEMENTS

INSTRUMENTATION PANEL LAYOUT & BOM

PROJ. START DATE: 2024-08-01	SCALE: HORIZONTAL
DRAWN: RMB	AS SHOWN
DESIGNED: LLS	VERTICAL
CHECKED: MFL	AS SHOWN
PROJ. MGR: SRS	

I11
ISSUED FOR BIDDING
NOT FOR CONSTRUCTION



REV	DESCRIPTION	DATE
1	ISSUED FOR BIDDING	08/28/2024
2	REVISIONS	08/28/2024

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THE CITY OF
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LIFT STATION 4P IMPROVEMENTS

INSTRUMENTATION
CONTROL POWER WIRING

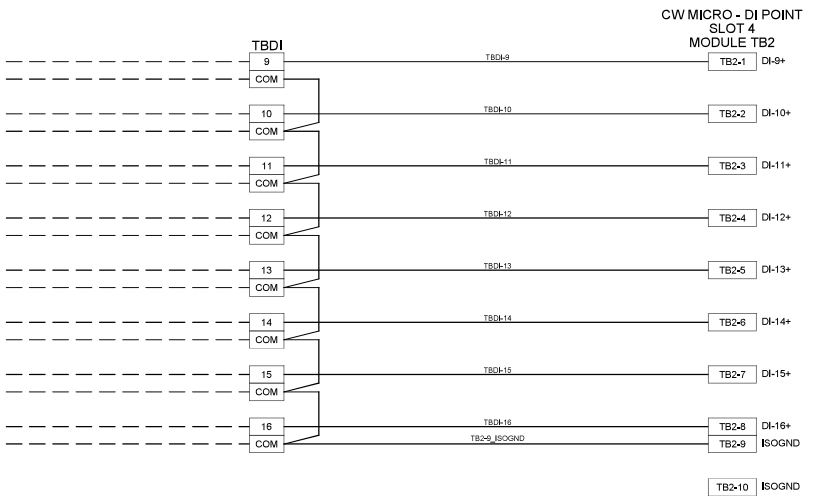
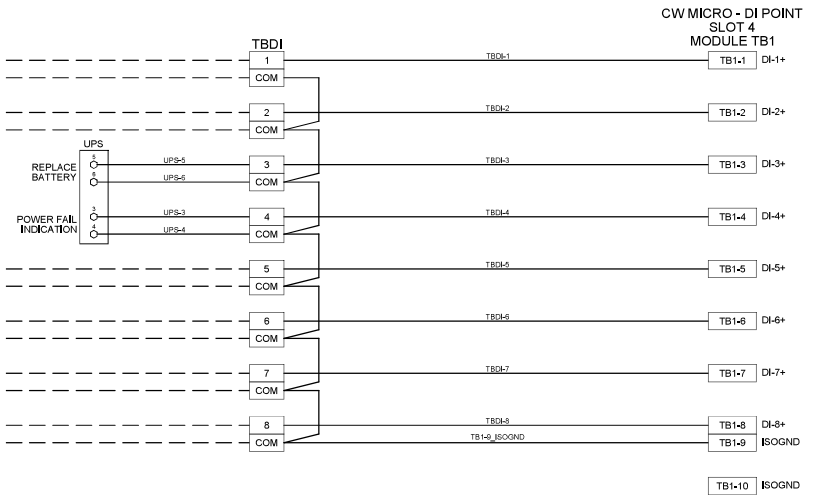
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DRAWN: RMB	VERTICAL: N/A	
CHECKED: LLS	VERTICAL: N/A	
PROJ. MGR: SRS	VERTICAL: N/A	
STATUS: ISSUED FOR BIDDING NOT FOR CONSTRUCTION		

FIELD

TBD
13(+)
14(-)
PUMP 1 RUN
TBD
15(+)
16(-)
PUMP 2 RUN
TBD
17(+)
18(-)
PUMP 3 RUN
TBD
19(+)
20(-)
SPARE
TBD
21(+)
22(-)
TRANSFER SWITCH
POSITION
TBD
23(+)
24(-)
GENERATOR
RUN STATUS

TBD
25(+)
26(-)
HIGH LEVEL
TBD
27(+)
28(-)
PMR PHASE
FAILURE
TBD
29(+)
30(-)
PUMP 1 FAULT
TBD
31(+)
32(-)
PUMP 2 FAULT
TBD
33(+)
34(-)
PUMP 3 FAULT
TBD
35(+)
36(-)
PUMP 1 IN AUTO
TBD
37(+)
38(-)
PUMP 2 IN AUTO
TBD
39(+)
40(-)
PUMP 3 IN AUTO

ENCLOSURE - DIGITAL INPUTS



REV	DESCRIPTION	DATE
1	ISSUED FOR BIDDING	09/28/2024
2	REVISIONS	

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THE CITY OF
ORMOND BEACH

LIFT STATION 4P IMPROVEMENTS

INSTRUMENTATION
DIGITAL INPUTS - PLC IO WIRING

PROJECT START DATE: 2024-09-01	SCALE
DATE PROJECT: 01/02/2025	HORIZONTAL
DRAWN: RMB	VERTICAL
DESIGNED: LLS	N/A
CHECKED: MP	N/A
PROJECT MGR: SRS	N/A

I22
ISSUED FOR BIDDING
NOT FOR CONSTRUCTION



City of Ormond Beach
City Commission Agenda
Staff Report

Agenda Date	November 4, 2025	Item No	7.Q.
Section	CONSENT AGENDA	Category	Consent - Disposition Item
Subject	Orchard Lane Drainage Improvements		
Recommended Action	The City intends to publicly advertise this project for competitive bidding, unless otherwise directed.		
Strategic Goal	Water Quality & The Environment - Protect and enhance our environment and invest in infrastructure projects and assets that build resilience benefits to reduce flooding risk and increase sustainability.		
Department Staff Contact	Public Works - Engineering Alex Schumann, City Engineer		

Summary

The purpose of this item is to give notice of the City's intent to bid the Orchard Lane Stormwater Drainage Improvements project.

The City received complaints regarding the poor drainage in the northeast area of Orchard Lane. According to topographic maps, this area is of a lower elevation compared to surrounding areas, causing water retainage in residents' properties.

The proposed design implements a gravity stormwater drainage system at the lowest elevation of the existing right of way project area and connects to the existing stormwater drainage system, thus improving drainage for affected residents.

Financial Impact

This project was included in the budget for FY 2025-26 in the amount of \$325,000, within Fund 107 - Stormwater.

Citizen Impact

Citizens will experience slight inconvenience from the surrounding construction but will see a great benefit from the improved drainage.

Attachments

1. Orchard Lane Bid Manual
2. Orchard Lane Stormwater Improvement Plan Set

Orchard Lane Stormwater Drainage Improvements

Bid No. 2026-06



City of Ormond Beach

Project Manual

PREPARED BY:

ENGINEERING DIVISION OF PUBLIC WORKS

22 South Beach Street
Ormond Beach, Florida 32174

Orchard Lane Stormwater Drainage Improvements
Ormond Beach, Florida

TABLE OF CONTENTS

<u>Section No.</u>	<u>Title</u>	<u>Pages</u>
BIDDING REQUIREMENTS		
00030	Advertisement for Bid	
00100	Instructions to Bidders	
00300	Bid	
00410	Bid Bond	
CONTRACT FORMS		
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Orchard Lane Stormwater Drainage Improvements
Ormond Beach, Florida

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SECTION 00030
ADVERTISEMENT FOR BIDS

Sealed bids for furnishing all labor, materials and equipment necessary for constructing the **Orchard Lane Stormwater Drainage Improvements, Bid No. 2026-06** for the City of Ormond Beach, Florida, will be received at the Office of the Purchasing Coordinator, City Hall, Ormond Beach, Florida, until **December 4th 2025, at 2:00 PM**, at which time bids will be opened and publicly read aloud in the Training Room located in the breezeway between City Hall and the Public Library. Bids received after the above time and date will be returned unopened.

The work consists of: Installation of approximately 400 LF of stormwater RCP and associated structures. The work is shown on the Drawings and specified in the Project Manual. The project Drawings, Specifications and related Bidding documents are available on-line at **www.demandstar.com**, or by calling DemandStar at (206) 940-0305. If you have difficulty obtaining these documents, please contact the City's purchasing office at (386) 610-0470.

A **pre-bid conference** to discuss the details and requirements of the contract will be held on **November 14th, 2025, at 2:00 PM**, in the Training Room at City Hall. All prospective bidders are strongly encouraged to attend. The deadline for submitting questions is **November 21st at 5:00pm**.

END OF SECTION

SECTION 00100 INSTRUCTION TO BIDDERS

00101. Defined Terms

Terms used in these Instructions to Bidders are defined in the General Conditions of the Construction Contract and have the meanings assigned to them in the General Conditions. The term "Successful Bidder" means the lowest, qualified, responsible Bidder to whom OWNER (on the basis of OWNER's evaluation as hereinafter provided) makes an award.

The OWNER for this project is:

The City of Ormond Beach
22 South Beach Street
Ormond Beach, Florida 32174

The ENGINEER for this project is:

The City of Ormond Beach
22 South Beach Street
Ormond Beach, Florida 32174

00102. Copies of Bidding Documents

2.1 The City uses the services of DemandStar (www.demandstar.com) to advertise/distribute its bids and RFP's via the internet.

2.2 Complete sets of the Bidding Documents may be obtained from the issuing office designated in the Advertisement for Bids.

2.3 Complete sets of Bidding Documents shall be used in preparing Bids; neither OWNER nor ENGINEER assume any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.

2.4 OWNER and ENGINEER in making copies of Bidding Documents available, on the above terms, do so only for the purpose of obtaining Bids on the Work and do not confer a license or grant for any other use.

00102.1 COMPLIANCE WITH FLORIDA PUBLIC RECORDS LAW

Contractor expressly agrees that it shall comply with the public records law provided in Florida Statutes, Chapter 119, and specifically to:

(a) Keep and maintain public records required by the City to perform the contracted service.

(b) Upon request from the City Clerk, provide the City with a copy of the requested records or allow the records to be inspected or copied within a reasonable time at a cost that does not exceed the cost provided in Chapter 119, Florida Statutes, or as otherwise provided by law.

(c) Ensure that public records that are exempt or confidential and exempt from public records disclosure requirements are not disclosed except as authorized by law for the duration of the contract term and following completion of the contract if the contractor does not transfer the records to the City.

(d) Upon completion of the contract, transfer at no cost, to the City all public records in possession of the contractor or keep and maintain public records required by the City to perform the service. If the contractor transfers all public records to the City upon completion of the contract, the contractor shall destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. If the contractor keeps and maintains public records upon the completion of the contract, the contractor shall meet all applicable requirements for retaining public records. All records stored electronically must be provided to the City, upon request from the City Clerk, in a format that is compatible with the information technology systems of the City.

(e) Failure of the Contractor to comply with Public Records Law as provided by Florida Statutes, Chapter 119, shall subject the Contractor to penalties under Chapter 119.10 and subject this Agreement to termination for cause by the City.

IF THE CONTRACTOR HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO THE CONTRACTOR'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS CONTRACT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT:

**CITY CLERK
22 SOUTH BEACH STREET
ORMOND BEACH, FLORIDA 32174 (386) 610-0400
CITYCLERK@ORMONDBEACH.ORG**

Ref: Fla. Stat. §119.0701(2016)

00102.2 Public Records/Non-Confidentiality of Bids

The City of Ormond Beach cannot and does not warrant the confidentiality of any information submitted in response to this bid solicitation. Florida law provides that municipal records shall at all times be open for personal inspection by any person, Section 119, F.S., the Public Records Act. Information and materials received by the City of Ormond Beach in connection with responsive bids shall be deemed to be public records subject to public inspection upon award, recommendation of award, or 30 days after bid opening, whichever occurs first.

00103. Qualifications of Bidders

To demonstrate qualifications to perform the Work, each Bidder must be prepared to submit, within seven days after the OWNER's request, written evidence of his ability to perform the work, such as financial data, previous experience, and evidence of authority to conduct business in the jurisdiction where the Project is located. Each Bid must contain evidence of Bidder's qualification to do business in the state where the Project is located or covenant to obtain such qualification prior to award of the contract.

00104. Public Entity Crimes:

A person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a Proposal on a contract to provide any goods or services to a public entity, may not submit a Proposal on a contract with a public entity for the construction or repair of a public building or public work, may not submit Proposals on leases or real property to a public entity, may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity, and may not transact business with any public entity in excess of the threshold amount provided in Section 287.017, for CATEGORY TWO for a period of 36 months from the date of being placed on the convicted vendor list.

4.1 Discrimination Pursuant to Section 287.134(2)(a), Florida Statutes, an entity or affiliate who has been placed on the discriminatory vendor list may not submit a bid on a contract to provide any goods or services to a public entity, may not submit a bid on a contract with a public entity for the construction or repair of a public building or public work, may not submit bids on leases of real property to a public entity, may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity, and may not transact business with any public entity.

00105. Examination of Contract Documents and Site

5.1 Before submitting a Bid, each Bidder must (a) examine the Contract Documents thoroughly, (b) visit the site to familiarize himself with local conditions that may in any manner affect cost, progress or performance of the Work, (c) familiarize himself with federal, state and local laws, ordinances, rules and regulations that may in any manner affect cost, progress or performance of the Work; and (d) study and carefully correlate Bidder's observations with the Contract Documents.

5.2 Reference is made to the Supplementary Conditions for the identification of those reports of investigations and tests for subsurface and latent physical conditions at the site or otherwise affecting cost, progress or performance of the Work which have been relied upon by ENGINEER in preparing the Drawings and Specifications. OWNER will make such reports available for inspection to any Bidder or copies may be obtained from the ENGINEER by the Bidder at reproduction cost. These reports are not guaranteed as to accuracy or completeness, nor are they part of the Contract Documents. Before submitting his Bid each Bidder will, at his own expense, make such additional investigations and tests as the Bidder may deem necessary to determine his Bid for performance of

the Work in accordance with the time, price and other terms and conditions of the Contract Documents.

5.3 On request OWNER will provide each Bidder access to the site to conduct such investigations and tests as each Bidder deems necessary for submission of his Bid. Bidders making such investigations shall return site to original condition and shall pay for any damages resulting therefrom.

5.4 The lands upon which the Work is to be performed, rights-of-way for access thereto and other lands designated for use by CONTRACTOR in performing the Work are identified in the Supplementary Conditions, General Requirements, or Drawings.

5.5 The submission of a Bid will constitute an incontrovertible representation by the Bidder that he has complied with every requirement of this Article 4 and that the Contract Documents are sufficient in Scope and detail to indicate and convey understanding of all terms and conditions for performance of the Work.

00106. Clarification/Correction of Proposal

The City of Ormond Beach reserves the right to allow for the clarification of questionable entries and for the correction of obvious mistakes.

00107. Interpretations

7.1 All questions about the meaning or intent of the Contract Documents shall be submitted in writing to the Purchasing Coordinator via email to procurement@ormondbeach.org. Replies will be issued by Addenda mailed or delivered to all parties recorded by ENGINEER as having received the Bidding Documents. Only questions answered by formal written Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.

7.2 To protect the integrity of the procurement process, respondents, suppliers, contractors, sub-contractors or persons acting on behalf of any of the above, are prohibited from all communications regarding the solicitation with City staff, City consultants, City legal counsel, City agents, or elected officials, unless such communication is specifically authorized in the City's solicitation or addenda. Violation of this provision may be grounds for rejecting a response.

00108. Minority Policies

The City of Ormond Beach, Florida, encourages the full participation of Disadvantaged and Women Business Enterprises (D&WBE) in the provision of goods and services.

00109. Bid Security

9.1 Bids shall be accompanied by a Bid Security. The Security shall be made payable to OWNER, in the amount of five percent (5%) of the total bid, and in the form of a certified or cashier's check or a Bid Bond issued by a Surety meeting the requirements of paragraph 5.1 of the General

Conditions. The Bid Security shall be irrevocable after the time and date set for the opening of bids, and for a period of ninety (90) days thereafter.

9.2 The Bid Security of the Successful Bidder will be retained until such Bidder has executed the Agreement and furnished the required Contract Security, whereupon it will be returned; if the successful Bidder fails to execute and deliver the Agreement and furnish the required Contract Security within fifteen (15) days of the Notice of Award, OWNER may annul the Notice of Award and the Bid Security of that Bidder will be forfeited. The Bid Security of any Bidder whom OWNER believes to have a reasonable chance of receiving the award may be retained by OWNER until the seventh day after the "effective date of the Agreement" or the first day after the expiration of the period that Bids are specified to remain open in the Advertisement for Bids. Bid Security of other Bidders will be returned within seven (7) days of the Bid opening.

00110. Contract Time

The number of days within which, or the date by which, the Work is to be completed (the Contract Time) is set forth in the Bid Form and will be included in the Agreement.

00111. Liquidated Damages

Provisions for liquidated damages, if any, are set forth in the Bid Form and Agreement.

00112. Subcontractors

12.1 If the Supplementary Conditions, Bid Form and/or Specifications require the identity of certain subcontractors to be submitted to the OWNER with the bid, the bidder will list in his bid all subcontractors proposed for those portions of the work for which such identification is so required. When requested, an experience statement, pertinent information as to similar projects satisfactorily completed and other evidence of qualifications for each listed subcontractor shall be submitted within seven (7) days after the bid. If the OWNER after due investigation has reasonable objection to any proposed subcontractor, OWNER may before giving the Notice of Award request the apparent low bidder to submit an acceptable substitute without an increase in his bid price. If the apparent Successful Bidder declines to make any such substitution, the contract shall not be awarded to such Bidder, but his declining to make any such substitution will not constitute grounds for sacrificing his Bid Security. Any Subcontractor so listed and to whom OWNER does not make written objection prior to the giving of the Notice of Award will be deemed acceptable to OWNER.

12.2 In contracts where the Contract Price is on the basis of Cost-of-the-Work Plus a Fee, the apparent Successful Bidder, prior to the Notice of Award, shall identify in writing to OWNER those portions of the Work that such Bidder proposes to subcontract and after the Notice of Award may only subcontract other portions of the Work with OWNER's written consent.

00113. Material and Equipment List (Manufacturers)

If the Supplementary Conditions, Bid Form and/or Specifications require the identity of certain material and equipment manufacturers be submitted to the OWNER with the bid, the bidder will list

in his bid all material and equipment manufacturers proposed for those portions of the work for which such identification is so required. Such list shall be supplemented by product descriptions for each listed material and equipment item. Supplemental information will be submitted with the bid unless it has been prefiled with the ENGINEER. In this latter case, the bid shall state that the information has been prefiled. Equipment manufacturers/suppliers must agree to OWNER'S terms of purchase. In no event will OWNER accept terms of sale that limit OWNER'S ability to reasonably recover in the event of equipment failure/defect such as, but not limited to; mandatory arbitration clauses, venue of court proceedings and applicable law outside of Volusia County, Florida, or damage limitations that preclude recovery for failed or defective equipment that would be less than full compensation for OWNER's loss. If the OWNER after due investigation has reasonable objection to any proposed material or equipment item, OWNER may before giving the Notice of Award request the apparent low bidder to submit an acceptable substitute without an increase in his bid price. If the apparent Successful Bidder declines to make any such substitution, the contract may not be awarded to such Bidder, but his declining to make any such substitution will not constitute grounds for sacrificing his Bid Security. Any material or equipment manufacturer so listed and to whom OWNER does not make written objection prior to the giving of the Notice of Award will be deemed acceptable to OWNER. This acceptance of a material or equipment manufacturer does not relieve the CONTRACTOR from the responsibility of submitting shop drawings in accordance with Section 01300 before incorporating said material and/or equipment into the Work.

00114. Material and Equipment Substitutions

Excluding items called for in the bidders Equipment and Subcontractors List in the Bid, Section 00300, whenever it is indicated on the Drawings or specified in the Specifications that a substitute or "or equivalent" item of material or equipment may be furnished or used by CONTRACTOR if acceptable to ENGINEER, application for such acceptance will not be considered by ENGINEER until after the "effective date of the Agreement". The procedure for submittal of any such application by CONTRACTOR and consideration by ENGINEER is set forth in Section 01630 - Substitutions and Product Options.

00115. Bid Form

15.1 Bids shall be submitted on standard forms which are furnished in this Project Manual.

15.2 Bid Forms must be completed in ink or by typewriter. All blank spaces must be filled. Where indicated on the Bid Form, the Bid price of each item on the form must be stated in words and numerals; in case of a conflict, words will take precedence.

15.3 The estimate of the various quantities of work applicable to unit price items as shown on the Bid Form is approximate and is intended solely to provide the basis of comparison upon which the award of contract is made. Final payment will be made on the basis of the actual completed quantities of each item.

15.4 Bids by corporations must be executed in the corporate name by the president or a vice president (or other corporate officer accompanied by evidence of authority to sign) and the corporate

seal must be affixed and attested by the secretary or an assistant secretary. The corporate address and state of incorporation shall be shown below the signature.

15.5 Bids by partnerships must be executed in the partnership name and signed by a partner, whose title must appear under the signature and the official address of the partnership must be shown below the signature.

15.6 Bids by a Joint Venture must be executed by all individuals, Partners, or Corporations interested in the Joint Venture in the same manner that bids by these separate entities are required to be executed.

15.7 All names must be typed or printed below the signature.

15.8 The Bid shall contain an acknowledgment of receipt of all Addenda (the numbers of which shall be filled in on the Bid Form).

15.9 The address to which communications regarding the Bid are to be directed must be shown.

15.10 Only one bid from any individual, firm, partnership or corporation under the same or different names, will be considered. Should it appear to the OWNER that any Bidder is interested in more than one bid, all bids in which such Bidder is interested will be rejected.

00116. Submission of Bids

Bids shall be submitted at the time and place indicated in the Advertisement for Bids and shall be included in an opaque sealed envelope, marked with the Bid Number, Project Title, and Bidder's Name and Address, accompanied by the Bid Security and other required documents. Include one (1) original bid form and (1) electronic file (thumb/flash drive or CD). If the Bid is sent through the mail or other delivery system, the sealed Bid shall be sent in a separate envelope with the notation "BID ENCLOSED" as well as the Bid Number, Project Title, and Bid Opening Date clearly displayed on the shipping envelope/package.

Submit bids to:

City of Ormond Beach
Purchasing Coordinator
22 South Beach Street, Room 102
Ormond Beach, FL 32174

00117. Modification and Withdrawal of Bids

Bids may be modified or withdrawn by an appropriate document duly executed (in the manner that a Bid must be executed) and delivered to the place where Bids are to be submitted at any time prior to the opening of Bids.

00118. Opening of Bids

Bids will be opened publicly and read aloud and an abstract of the amounts of the base Bids and major alternates (if any) will be made available after the opening of Bids.

00119. Bids to Remain Open

All Bids shall remain open for ninety (90) days after the day of the Bid opening, but OWNER may, in his sole discretion, release any Bid and return the Bid Security prior to that date.

00120. Award of Contract

20.1 OWNER reserves the right to reject any and all Bids, to waive any and all informalities and to negotiate contract terms with the Successful Bidder, and the right to disregard all nonconforming, nonresponsive or conditional Bids. Discrepancies between words and figures will be resolved in favor of words. Discrepancies between the indicated product of quantities and unit prices and the correct product thereof will be resolved in favor of the correct product. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum.

20.2 In evaluating Bids, OWNER shall consider the qualifications of the Bidders, whether or not the Bids comply with the prescribed requirements, and alternates and unit prices if requested in the Bid forms. It is OWNER's intent to accept alternates (if any are accepted) in the order in which they are listed in the Bid form but OWNER may accept them in any order or combination.

20.3 OWNER may consider the qualifications and experience of Subcontractors and other persons and organizations (including those who are to furnish the principal items or material or equipment) proposed for those portions of the Work as to which the identity of Subcontractors and other persons and organizations must be submitted as provided in the Supplementary Conditions. Operating costs, maintenance considerations, performance data and guarantees of materials and equipment may also be considered by OWNER.

20.4 Irregular bids may be rejected. Irregular bids are defined as those containing serious omissions, unauthorized alternative bids, incomplete bids or unbalanced bids. Failure to provide all of the information required to accompany the bid will be considered to be a serious omission.

20.5 OWNER may conduct such investigations as he deems necessary to assist in the evaluation of any Bid.

20.6 OWNER reserves the right to reject the Bid of any Bidder who does not pass any such evaluation to OWNER's satisfaction.

20.7 If the contract is to be awarded it will be awarded to the lowest responsible Bidder whose evaluation by OWNER indicates that the award will be in the best interests of the Project. Pursuant to the provisions of Florida Statutes Chapter 287.05701, the City does not request, or consider, a Vendor's social, political, or ideological interests in making a responsibility determination. The low

bid will be based on the total cost of the Base Bid and, when applicable, any Additive or Deductive Alternates that are to be included in the Contract, as decided by the OWNER.

20.8 If the contract is to be awarded, OWNER will give the Successful Bidder a Notice of Award within the number of days after the day of the Bid opening specified in the Advertisement for Bids to remain open.

00121. Performance and Other Bonds

Paragraph 5.1 of the General Conditions and the Supplementary Conditions set forth OWNER's requirements as to performance and other Bonds. When the Successful Bidder delivers the executed Agreement to OWNER it shall be accompanied by the required Contract Security.

00122. Signing of Agreement

When OWNER gives a Notice of Award to the Successful Bidder, it will be accompanied by at least two (2) unsigned counterparts of the Agreement and all other Contract Documents. Within fifteen (15) days thereafter CONTRACTOR shall sign all and deliver at least two (2) counterparts of the Agreement to OWNER with other Contract Documents attached. Within fifteen (15) days thereafter OWNER will deliver fully signed counterparts to CONTRACTOR.

00123. Special Requirements

23.1 Financing. Funds will be available for payment of estimate draws as they become due.

23.2 Prohibited Interests. No official of the OWNER who is authorized in such capacity, and on behalf of the OWNER to negotiate, make, accept or approve, or to take part in negotiating, making, accepting, or approving any architectural, engineering, inspection, construction or material supply contract or any subcontract in connection with the construction of the project shall become directly or indirectly interested, personally, in this Contract or in any part thereof. No officer, employee, architect, attorney, engineer, or inspector of or for the OWNER who is authorized in such capacity and on behalf of the OWNER to exercise legislative, executive, supervisory, or other similar functions in connection with the construction of the project, shall become directly or indirectly interested personally, in this Contract or in any part thereof, any material supply contract, subcontract, insurance contract, or any other contract pertaining to the project.

23.3 Performance of Work by CONTRACTOR:

Contract Assignment. The successful Bidder (or Bidders) will be required to perform the work as a prime contractor.

The CONTRACTOR shall not sublet, sell, transfer, assign or otherwise dispose of the contract or any portion thereof, or of his right, title or interest therein, without written consent of the OWNER.

END OF INSTRUCTION TO BIDDERS

**SECTION 00300
BID**

CONTRACTORS NAME _____ LICENSE NO. _____

PROJECT IDENTIFICATION: **Orchard Lane Stormwater Drainage Improvements**

CONTRACT IDENTIFICATION AND NUMBER: Bid No. 2026-06

THIS BID IS SUBMITTED TO:

(Name and Address of Owner)

City of Ormond Beach
22 South Beach Street
Ormond Beach, Florida 32174

1. The undersigned BIDDER proposes and agrees, if this Bid is accepted, to enter into an Agreement with OWNER in the form included in the Contract Documents to complete all Work as specified or indicated in the Contract Documents for the Contract Price and within the Contract Time indicated in this Bid and in accordance with the Contract Documents.

2. BIDDER certifies that he has investigated the requirements to do business in the jurisdiction where the project is located, and that he is either qualified to do business or will obtain such prequalification prior to award of the contract.

3. BIDDER accepts all of the terms and conditions of the Instructions to Bidders (Section 00100) including, without limitation, those dealing with the disposition of Bid Security, Public Entity Crimes, and Minority Policies. This Bid will remain open for 90 days after the day of Bid opening. BIDDER will sign the Agreement and submit the Contract security and other documents required by the Contract Documents within ten (10) days after the date of OWNER'S Notice of Award.

4. In submitting this Bid, BIDDER represents, as more fully set forth in the Agreement, that:

(a) BIDDER has examined copies of all the Contract Documents and of the following addenda:

<u>Date</u>	<u>Number</u>
_____	_____
_____	_____
_____	_____
_____	_____

(receipt of all of which is hereby acknowledged) and also copies of the Advertisement to Bid and the Instructions to Bidders;

BID (Cont'd.)
Orchard Lane Stormwater Drainage Improvements
ORMOND BEACH, FLORIDA

(b) BIDDER has examined the site and locality where the Work is to be performed, the legal requirements (federal, state and local laws, ordinances, rules and regulations) and the conditions affecting cost, progress or performance of the Work and has made such independent investigations as BIDDER deems necessary.

(c) This Bid is genuine and not made in the interest of or on behalf of any undisclosed person, firm or corporation and is not submitted in conformity with any agreement or rules of any group, association, organization or corporation; BIDDER has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid; BIDDER has not solicited or induced any person, firm or a corporation to refrain from bidding; and BIDDER has not sought by collusion to obtain for himself any advantage over any other Bidder or over OWNER; and

5. BIDDER will complete the Work for the following price(s):

BID SCHEDULE

Item No.	Description	Estimated Quantity	Unit	Unit Price	Total Price
1	Mobilization	1	LS		
2	Install Catch Basin	2	EA		
3	Install 15" RCP Stormwater Drainage Pipe	450	LF		
4	Deflect 4" Reclaim Line	1	LS		
5	Roadway Mill & Resurface	450	SY		
6	Restoration	1	LS		
7	Hold FPL Utility Pole	1	LS	\$2,400.00	\$2,400.00

TOTAL BID \$ _____
(Figures)

(Words)

BID (Cont'd.)
Orchard Lane Stormwater Drainage Improvements
ORMOND BEACH, FLORIDA

BIDDER acknowledges that the quantities are not guaranteed and final payment will be based on actual quantities determined as provided in the Contract Documents.

BIDDER agrees that the Work will be substantially completed within 60 calendar days after the date when the Contract Time commences to run, and completed within 90 calendar days after the date when the Contract Time commences to run.

BIDDER recognizes that time is of the essence to complete this Project and that OWNER will suffer financial loss if the Work is not substantially complete within the time specified above, plus any extensions thereof allowed in accordance with Article 12 of the General Conditions. The BIDDER also recognize the delays, expense and difficulties involved in proving, in a legal or arbitration proceeding, the actual loss suffered by OWNER if the Work is not substantially complete on time. Accordingly, instead of requiring any such proof, OWNER has determined and BIDDER agrees to accept that as liquidated damages for delay (but not as a penalty) CONTRACTOR shall pay OWNER Five Hundred Dollars (\$ 500) for each calendar day that expires after the time specified above for substantial completion until the Work is substantially complete. After substantial completion, if CONTRACTOR shall neglect, refuse or fail to complete the remaining Work within the time specified above for completion and readiness for final payment or any proper extension thereof granted by OWNER, CONTRACTOR shall pay the OWNER an amount equal to all actual expenses incurred by the OWNER as a direct result of the CONTRACTOR'S negligence, refusal, or failure to so complete the remaining work. In the event the CONTRACTOR is terminated or abandons the work prior to the scheduled date for final completion, the CONTRACTOR may be liable for both liquidated damages attributable to delay and for excess completion costs.

6. The following documents are attached to and made a condition of this Bid:

- (a) Required Bid Security in the form of
 - (1) a certified check drawn in favor of the City of Ormond Beach in the amount of 5 percent of the total bid; or
 - (2) a Bid Bond in the amount of 5 percent of the total bid.
- (b) Equipment, Material, and Subcontractors List
- (c) All information required by the Trench Safety Act (Part VI, Chapter 553, Florida Statutes).
- (d) Drug Free Workplace Certificate
- (e) Conflict, Non-Conflict of Interest, Litigation Statement
- (f) Local Vendor Preference
- (g) Verification of Employment Status Using E-Verify System
- (h) Affidavit of Compliance F.S. 287.138 Contracting With Foreign Entities of Concern

BID (Cont'd.)
Orchard Lane Stormwater Drainage Improvements
ORMOND BEACH, FLORIDA

(i) Human Trafficking Affidavit, Section 787.06, Florida Statutes

7. Communications to the BIDDER concerning this Bid shall be addressed to:

Mailing Address: _____
Street Address: _____
City, State, Zip Code: _____
Email: _____
Telephone No.: _____ Fax No.: _____

8. The terms used in this Bid which are defined in the General Conditions of the Construction Contract included as part of the Contract DOCUMENTS have the meanings assigned to them in the General Conditions.

SUBMITTED on _____, 20__.

If BIDDER is:

An Individual

By _____
(Individual's Name - Signature)

(Individual's Name - Typed or Printed) (SEAL)

doing business as _____

Business address: _____

Phone No.: _____

Fax No.: _____

BID (Cont'd.)
Orchard Lane Stormwater Drainage Improvements
ORMOND BEACH, FLORIDA

If BIDDER is:

A Corporation

By _____
(Corporation Name)

(State of Incorporation)

By _____
(Name of Person Authorized to Sign - Signature)

(Name of Person Authorized to Sign - Typed or Printed)

(Title)

(Corporate Seal)

Attest _____

Business address: _____

Phone No.: _____

Fax No.: _____

BID (Cont'd.)
Orchard Lane Stormwater Drainage Improvements
ORMOND BEACH, FLORIDA

If BIDDER is:

A Joint Venture

By _____
(Name - Signature)

(Name - Typed or Printed)

Address: _____

Phone No.: _____

Fax No.: _____

By _____
(Name - Signature)

(Name - Typed or Printed)

Address: _____

Phone No.: _____

Fax No.: _____

(Each joint venturer must sign. The manner of signing for each individual, partnership and corporation that is a party to the joint venture should be in the manner indicated above.)

BID (Cont'd.)
Orchard Lane Stormwater Drainage Improvements
ORMOND BEACH, FLORIDA

EQUIPMENT AND SUBCONTRACTORS LIST

List the names of the manufacturers whose product is proposed for use. No more than one manufacturer's name shall be inserted for each item of material and/or equipment listed. Failure to list materials and equipment supplier may result in the Bid being rejected as incomplete and nonresponsive. If any Subcontractors are proposed to be used for any portions of the Work, the names, addresses, phone numbers and work classifications of each such Subcontractor must be listed. The failure to list all Subcontractors proposed for the work may result in the Bid being rejected as incomplete and nonresponsive. If more than one manufacturer or subcontractor is listed, selection will be made by the OWNER. If none is listed, those listed as the "Basis for Design" will be used.

Materials and Equipment:

<u>Item</u>	<u>Supplier</u>
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Subcontractors:

Work Classification: _____

Name: _____

Address: _____

Phone Number: _____ Fax Number: _____

BID (Cont'd.)
Orchard Lane Stormwater Drainage Improvements
ORMOND BEACH, FLORIDA

Subcontractors:

Work Classification: _____

Name: _____

Address: _____

Phone Number: _____ Fax Number: _____

Work Classification: _____

Name: _____

Address: _____

Phone Number: _____ Fax Number: _____

Work Classification: _____

Name: _____

Address: _____

Phone Number: _____ Fax Number: _____

Work Classification: _____

Name: _____

Address: _____

Phone Number: _____ Fax Number: _____

Work Classification: _____

Name: _____

Address: _____

Phone Number: _____ Fax Number: _____

BID (Cont'd.)
Orchard Lane Stormwater Drainage Improvements
ORMOND BEACH, FLORIDA

TRENCH SAFETY STANDARDS

If this project includes trench excavation in excess of five (5) feet in depth, the following trench safety standards will be in effect during the period of construction of the project:

The Occupational Safety and Health Administration's excavation safety standards, 29 C.F.R.s. 1926.650 Subpart P, and any regulation promulgated there under are hereby incorporated as the standard for this project.

The Bidder hereby certifies that the Contractor performing the trench excavation will comply with the applicable trench safety standards.

The Bidder further certifies that the cost (which is included in his unit cost) of compliance with applicable trench safety standards is:

	<u>Estimated Quantity</u>	<u>Units</u>	<u>Unit Price</u>	<u>Total Estimated Price</u>
<u>ITEM</u>				
1. Trench Excavation	_____	L.F.	_____	_____
2. Sheeting/Shoring	_____	S.F.	_____	_____

Name (signature) Date

Name (typed or printed)

Title

BID (Cont'd.)
Orchard Lane Stormwater Drainage Improvements
ORMOND BEACH, FLORIDA

DRUG-FREE WORKPLACE CERTIFICATION

Identical Or “Tie” Bids: Preference shall be given to businesses with drug-free workplace programs. Whenever two or more proposals which are equal in respect to price, quality, and service are received by the State or by any political subdivision for the procurement of commodities or contractual services, a bid received from a business that certifies that it has implemented a drug-free workplace program shall be given preference in the award process. Established procedures for processing tie bids will be followed if none of the tied vendors have a drug-free workplace program. In order to have a drug-free workplace program, a business shall:

- 1) Publish a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the workplace and specifying the actions that will be taken against employees for violations of such prohibition.
- 2) Inform employees about the dangers of drug abuse in the workplace, the business’s policy of maintaining a drug-free workplace, any available drug counseling, rehabilitation, and employee assistance programs, and the penalties that may be imposed upon employees for drug abuse violation.
- 3) Give each employee that engages in providing the commodities or contractual services that are under bid a copy of the statement specified in subsection (1).
- 4) In the statement specified in subsection (1), notify the employees that, as a condition of working on the commodities or contractual services that are under bid, the employee will abide by the terms of the statement and will notify the employer of any conviction of, or plea of guilty or nolo contendere to, any violation of Chapter 893 or of any controlled substance law of the United States or any state, for a violation occurring in the workplace no later than five (5) calendar days after such conviction.
- 5) Impose sanctions on, or require the satisfactory participation in a drug abuse assistance or rehabilitation program if such is available in the employee’s community, by any employee who is so convicted.
- 6) Make a good faith effort to continue to maintain a drug-free workplace through implementation of this section.

Name (signature)

Date

Name (typed or printed)

Title

BID (Cont'd.)
Orchard Lane Stormwater Drainage Improvements
ORMOND BEACH, FLORIDA

CONFLICT, NON-CONFLICT OF INTEREST STATEMENT
LITIGATION STATEMENT

1.

- [] To the best of our knowledge, the undersigned firm has no potential conflicts of interest due to any other clients or contracts for this project.
- [] The undersigned firm, by attachment to this form, submits information which may be a potential conflict of interest due to other clients or contracts for this project.

2.

- [] The undersigned firm has had no litigation on any project in the last five (5) years.
- [] The undersigned firm, by attachment to this form, submits a summary and disposition of individual cases of litigation during the past five (5) years.

COMPANY NAME

AUTHORIZED SIGNATURE

NAME (PRINT OR TYPE)

TITLE

DATE

BID (Cont'd.)
Orchard Lane Stormwater Drainage Improvements
ORMOND BEACH, FLORIDA

LOCAL VENDOR PREFERENCE

The following is taken from the Code of Ordinances, City of Ormond Beach, Chapter 2, Financial Matters, Division 3, Purchasing, Article IX, Section 2-304:

Except where otherwise provided by federal or state law or other funding source restrictions, purchases of goods and services under the Purchasing Code shall give preference to local businesses as follows:

- (a) Under a competitive bid solicitation, the City *may* give a local preference in the amount of three percent (3%) of the bid price or \$25,000, whichever is less. The bid price shall include not only the base bid price but all alternatives which are part of the bid and actually purchased or awarded.
- (b) A *local business* shall mean a vendor that has a valid occupational license issued by the City of Ormond Beach at least one year prior to bid opening, with a physical business address located within the municipal boundaries of the City of Ormond Beach from which the vendor operates or performs business on a day-to-day basis that is a substantial component of the goods or services being offered and has provided a Local Vendor Affidavit of Eligibility at the time the bid is submitted.
- (c) A *Local Vendor Affidavit of Eligibility* shall accompany the bid submittal to be considered valid and shall include, but not be limited to, the following information:
 - (1) A physical business and location address;
 - (2) A copy of current City of Ormond Beach Local Business Tax Receipt (occupational license) to verify the business location;
 - (3) Proof of payment of business tax and real property tax due to the City of Ormond Beach;
 - (4) A copy of the firm's most recent annual corporation report to the Florida Division of Corporations;
 - (5) Any additional information necessary to verify local status.
- (d) *Exemptions:* Goods or services provided under a cooperative purchasing agreement, contracts for professional services subject to Consultants' Competitive Negotiation Act, purchases or contracts funded in whole or part by a governmental entity that does not allow local preferences, purchases made under another agency's agreements or contracts (piggybacking), purchases under emergency or sole source situations and procurements subject to formal proposals including but not limited to request for proposals (RFP) or continuing contract, and request for quotes (RFQ) versus straight competitive bids.
- (e) This section shall not be deemed to require the granting of a local preference, and nothing herein prohibits the award of a contract to a non-local vendor where such award is in the public interest.

BID (Cont'd.)
Orchard Lane Stormwater Drainage Improvements
ORMOND BEACH, FLORIDA

LOCAL VENDOR AFFIDAVIT OF ELIGIBILITY

I certify that my company meets all of the following qualifications to be eligible for the local vendor preference:

- a. My company has a physical business address located within the municipal boundaries of the City of Ormond Beach which is used to perform business on a day-to-day basis.
- b. My company holds any business (occupational) or contractor license required by the City of Ormond Beach at least one year prior to bid opening.
- c. Payment of business tax and real property tax due to the City of Ormond Beach is current
- d. My company is in compliance with annual reporting to the Florida Division of Corporations

Company Name: _____

Address: _____

Business or Contractor License Number: _____

Phone Number: _____ Fax Number: _____

Owner's Name: _____ Signature: _____

Sworn to before me this _____ day of _____

Notary Public for the State of _____ My Commission Expires _____

Notary Public Signature: _____

Printed Name: _____

To be approved as a local bidder and receive bid preference on an eligible local project, this affidavit of eligibility, a copy of your local business or contractor license, copy of business tax/real property tax and a copy of the firm's most recent annual corporation report must be submitted with your bonafide BID package. Bid preference is provided at the City's sole discretion.

VENDOR DO NOT COMPLETE BELOW

To be verified and completed by an authorized representative of the City of Ormond Beach's Purchasing Department:

Vendor Certified by: _____ Date: _____

BID (Cont'd.)
Orchard Lane Stormwater Drainage Improvements
ORMOND BEACH, FLORIDA

VERIFICATION OF EMPLOYMENT STATUS USING E-VERIFY SYSTEM

1. Undersigned firm warrants it **IS** currently registered with the U.S. Department of Homeland Security's E-Verify system, **and** is compliant with the requirements of Sections 448.09 and 448.095, *Florida Statutes*.
2. Undersigned firm warrants it **has not** had any contracts terminated as a result of violations of Sections 448.09 or 448.095, *Florida Statutes*, that prohibit it from contracting with a public agency.
3. Undersigned firm warrants that if it enters into an agreement with a subcontractor, an express provision shall be included in all of its subcontracts requiring subcontractors, who perform work or provide services pursuant to the contract, to use the E-Verify system to verify employment eligibility of all new employees hired by the subcontractor during the contract term.
4. Undersigned firm understands that any subcontractor must provide the contractor with an affidavit stating that the subcontractor does not employ, contract with, or subcontract with an unauthorized alien, and the contractor understands it shall maintain any such affidavits for the duration of the contract, and the contract with the subcontractor must be immediately terminated if the City has a good faith belief that the subcontractor knowingly violated Section 448.09 (1), *Florida Statutes*.
5. Undersigned firm understands that in the event the City has a good faith belief that the contractor has knowingly violated Section 448.09 (1), *Florida Statutes*, the City shall terminate the contract, and the contractor may not be awarded a public contract for a period of at least one (1) year after the date of termination. The contractor may be held liable for any additional costs incurred by the City as a result of termination of the contract.

COMPANY NAME

AUTHORIZED SIGNATURE

NAME (PRINT OR TYPE)

TITLE

DATE

BID (Cont'd.)
Orchard Lane Stormwater Drainage Improvements
ORMOND BEACH, FLORIDA

**AFFIDAVIT OF COMPLIANCE WITH SECTION 287.138, FLORIDA STATUTES
CONTRACTING WITH FOREIGN ENTITIES OF CONCERN**

The undersigned ("Affiant"), on behalf of the entity listed below ("Entity"), hereby attests under penalty of perjury as follows:

1. Affiant is the _____ of _____
(Title) (Business Name)
which does business in the State of Florida, hereinafter called the "Entity".
2. Entity is not owned by the government of a foreign country of concern, as defined in Section 287.138 (1) (c), Florida Statutes.
3. The government of a foreign country of concern does not have a controlling interest in Entity, as defined in Section 287.138 (1)(a), Florida Statutes.
4. Entity is not organized under the laws of, and does not have a principal place of business in, a foreign country of concern.
5. Entity is not owned or controlled by the government of a foreign country of concern.
6. For purposes of this affidavit, a foreign country of concern means the People's Republic of China, the Russian Federation, the Islamic Republic of Iran, the Democratic People's Republic of Korea, the Republic of Cuba, the Venezuelan regime of Nicolas Maduro, or the Syrian Arab Republic, including any agency of or any other entity of significant control of such foreign country of concern, as defined in Section 287.138(1)(c), Florida Statutes.

The undersigned is authorized to execute this affidavit on behalf of the Entity.

Date: _____, 20____ Signed: _____

Title: _____ Print Name: _____

Entity: _____

STATE OF: _____ COUNTY OF: _____

The foregoing instrument was acknowledged before me by means of ☐physical presence or

☐online notarization, this _____ day of _____, 20____,
by _____ and who:

☐Is personally known to me; or ☐ has produced _____
as identification.

Notary Public, State of Florida at Large:
Printed Name/Seal of Notary, Commission

(seal)

My commission expires: _____

This page must be completed & notarized.

HUMAN TRAFFICKING AFFIDAVIT **(SECTION 787.06, FLORIDA STATUTES)**

COUNTY OF _____

Title: _____

My commission expires: _____

**SECTION 00410
BID BOND**

KNOW ALL MEN BY THESE PRESENTS, that we

(hereinafter called *Principal*) and

(hereinafter called the *Surety*) a corporation chartered and existing under the Laws of the State of _____ with its principal offices in the County of _____, and authorized to do business in the State of Florida, in the full and just sum of _____ Dollars (\$_____) good and lawful money of the United States of America, to be paid upon demand of the City of Ormond Beach, Florida, to which payment well and truly to be made we bind ourselves, our heirs, executors, administrators, and assigns, jointly and severally and firmly by these presents,

WHEREAS, the Principal is about to submit, or has submitted to the City of Ormond Beach, Florida, a bid for work to be done on the **Orchard Lane Stormwater Drainage Improvements (Bid No. 2026-06)** in, and for the City and,

WHEREAS, the Principal desires to file this bond in accordance with law, in lieu of a certified or cashier's check otherwise required to accompany this Bid.

NOW, THEREFORE: the conditions of this obligation are such that if the Bid be accepted the Principal shall within ten (10) days after the receipt of notification of the acceptance thereof execute a contract in accordance with the Bid and upon the terms, conditions and unit or lump sum prices set forth therein, in the form and manner required by the Owner, and execute a sufficient and satisfactory Contract Bond payable to the Owner, in an amount not less than the total contract price, as indicated by the approximate quantities shown in the Bid, in form and with security satisfactory to the said City, then this obligation to be void; otherwise to be and remain in full force and virtue in law; and the Surety shall upon the failure of the Principal to comply with any or all of the foregoing requirements within the time specified above, immediately pay to the aforesaid City upon demand the amount hereof in good and lawful money of the United States of America, not as a penalty, but as liquidated damages.

IN TESTIMONY WHEREOF, the Principal and Surety have caused these presents to be duly signed and sealed this _____ day _____, 20_____.

(Principal)

By: _____

ATTEST:

(Surety)

By: _____

(SEAL)

**END OF SECTION
00410 - 1**

SECTION 00500
FORM OF AGREEMENT

THIS AGREEMENT is by and between City of Ormond Beach, a Municipal Corporation in the State of Florida (hereinafter called OWNER) and

(hereinafter called CONTRACTOR)

The bid for this contract was approved by the City Commission on _____, 2025.

Article 1. WORK

CONTRACTOR shall complete all Work as specified or indicated in the Contract Documents. The Work is generally described as follows:

Installation of approximately 400 LF of stormwater RCP and associated structures.

The Project for which the Work under the Contract Documents may be the whole or only a part is generally described as follows:

Orchard Lane Stormwater Drainage Improvements
2026-06

Article 2. ENGINEER

The Project has been designed by City Engineer, 22 South Beach Street, Ormond Beach, FL 32174, who is hereinafter called ENGINEER and who will assume all duties and responsibilities and will have the rights and authority assigned to ENGINEER in the Contract Documents in connection with completion of the Work in accordance with the Contract Documents.

Article 3. CONTRACT TIME

3.1 The Work will be substantially completed within **60** calendar days after the date when the Contract Time commences to run as provided in paragraph 2.3 of the General Conditions, and completed and ready for final payment in accordance with paragraph 14.10 of the General Conditions within **90** calendar days after the date when the Contract Time commences to run.

3.2 Liquidated Damages. OWNER and CONTRACTOR recognize that time is of the essence of this Agreement and that OWNER will suffer financial loss if the Work is not substantially complete within the time specified in paragraph 3.1 above, plus any extensions thereof allowed in accordance with Article 12 of the General Conditions. They also recognize the delays, expense and difficulties involved in proving in a legal or arbitration proceeding the actual loss suffered by OWNER if the Work is not substantially complete on time. Accordingly, instead of requiring any such proof, OWNER and CONTRACTOR agree that as liquidated damages for delay (but not as a penalty) CONTRACTOR shall pay OWNER Five Hundred Dollars (\$500) for each calendar day that expires after the time specified in paragraph 3.1 for Substantial Completion until the Work is substantially complete. After Substantial Completion, if CONTRACTOR shall neglect, refuse or fail to complete the remaining Work within the time

specified in paragraph 3.1 for completion and readiness for final payment or any proper extension thereof granted by OWNER, CONTRACTOR shall pay the OWNER an amount equal to all actual expenses incurred by the OWNER as a direct result of the CONTRACTOR'S negligence, refusal, or failure to so complete the remaining work. In the event the Contractor is terminated or abandons the Work prior to the scheduled date for final completion, the Contractor may be liable for both liquidated damages attributable to delay and for excess completion costs.

Article 4. CONTRACT PRICE

OWNER shall pay CONTRACTOR for completion of the Work, in accordance with the Contract Documents, an amount in current funds equal to the unit price TOTAL BID of \$ _____, as listed in the Bid Form. Payment shall be for the actual completed work, as specified in the Measurement and Payment section of the project Manual and in accordance with Article 14 of the General Conditions.

Article 5. PAYMENT PROCEDURES

CONTRACTOR shall submit Applications for Payment in accordance with Article 14 of the General Conditions. Applications for Payment will be processed by ENGINEER as provided in the General Conditions.

5.1 Progress Payments. OWNER shall make progress payments on account of the Contract Price on the basis of CONTRACTOR'S Applications for Payment as recommended by ENGINEER, on or about the 15th day of each month during construction as provided below, provided Applications for Payment are timely delivered pursuant to Article 14.1 of the General Conditions. All progress payments will be on the basis of the progress of the Work measured by the schedule of values provided for in paragraph 14.1 of the General Conditions.

5.1.1 When applicable, all progress payments shall be in an amount equal to:

Ninety-Five percent (95%) of the Work completed.

Ninety-Five percent (95%) of materials and equipment not incorporated in the Work but delivered and suitably stored, less in each case the aggregate of payments previously made and less such amounts as ENGINEER shall determine in accordance with paragraph 14.4 of the General Conditions.

5.2 Final Payment. Upon final completion and acceptance of the Work in accordance with paragraph 14.10 of the General Conditions, OWNER shall pay the remainder of the Contract Price as recommended by ENGINEER as provided in said paragraph 14.10.

Article 6. CONTRACTOR'S REPRESENTATIONS

In order to induce OWNER to enter into this Agreement CONTRACTOR makes the following representations:

6.1 CONTRACTOR has familiarized himself with the nature and extent of the Contract Documents, Work, locality, and with all local conditions and federal, state and local laws, ordinances, rules and regulations that in any manner may affect cost, progress or performance of the Work.

6.2 CONTRACTOR has studied carefully all reports of investigations and tests of subsurface and latent physical conditions at the site or otherwise affecting cost, progress or performance of the Work which were relied upon by ENGINEER in the preparation of the Drawings and Specifications and which have been identified in the Supplementary Conditions.

6.3 CONTRACTOR has made or caused to be made examinations, investigations and tests and studies of such reports and related data in addition to those referred to in paragraph 6.2 as he deems necessary for the performance of the Work at the Contract Price, within the Contract Time and in accordance with the other terms and conditions of the Contract Documents, and no additional examinations, investigations, tests, reports or similar data are or will be required by CONTRACTOR for such purposes.

6.4 CONTRACTOR has correlated the results of all such observations, examinations, investigations, tests, reports and data with the terms and conditions of the Contract Documents.

6.5 CONTRACTOR has given ENGINEER written notice of all conflicts, errors or discrepancies that he has discovered in the Contract Documents and the written resolution thereof by ENGINEER is acceptable to CONTRACTOR.

Article 7. CONTRACT DOCUMENTS

The Contract Documents which comprise the entire agreement between OWNER and CONTRACTOR are attached to this Agreement, made a part hereof and consists of the following:

7.1 This Agreement (pages 1 to 5 , inclusive).

7.2 Exhibits to this Agreement (pages ____ to ____ , inclusive).

7.3 Performance and other Bonds, identified as exhibits 00610 AND 00615 and consisting of 4 pages.

7.4 Notice of Award.

7.5 General Conditions (pages 1 to 35 , inclusive).

7.6 Supplementary Conditions (pages 1 to 7 , inclusive).

7.7 Specifications bearing the title:

Orchard Lane Stormwater Drainage Improvements

and consisting of 16 divisions, as listed in table of contents thereof.

7.8 Drawings, consisting of 6 sheets numbered 1 through 6 inclusive and bearing the following general title:

Orchard Lane Stormwater Drainage Improvements

7.9 Addenda numbers ___ to ___, inclusive.

7.10 CONTRACTOR'S Bid (pages 1 to ___, inclusive) marked exhibit _____ (Attach Bid Form only in special circumstances).

7.11 Documentation submitted by CONTRACTOR prior to Notice of Award (pages ___ to ___, inclusive).

7.12 Any Modification, including Change Orders, duly delivered after execution of Agreement.

There are no Contract Documents other than those listed above in this Article 7. The Contract Documents may only be altered, amended or repealed by a Modification (as defined in Section 1 of the General Conditions).

Article 8. MISCELLANEOUS

8.1 Terms used in this Agreement which are defined in Article 1 of the General Conditions shall have the meanings indicated in the General Conditions.

8.2 No assignment by a party hereto of any rights under or interests in the Contract Documents will be binding on another party hereto without the written consent of the party sought to be bound; and specifically but without limitation, moneys that may become due and moneys that are due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.

8.3 OWNER and CONTRACTOR each binds himself, his partners, successors, assigns and legal representatives to the other party hereto, his partners, successors, assigns and legal representatives in respect to all covenants, agreements and obligations contained in the Contract Documents.

IN WITNESS WHEREOF, the parties hereto have signed this Agreement. One counterpart each has been delivered to OWNER and CONTRACTOR, and to ENGINEER as applicable. All portions of the Contract Documents have been signed by OWNER and CONTRACTOR or identified by ENGINEER on their behalf.

This Agreement will be effective on _____, 2025.

OWNER City of Ormond Beach

CONTRACTOR _____

By _____

Jason Leslie
Mayor

By _____

(Title)

[CITY SEAL]

[SEAL]

Attest _____

Joyce A. Shanahan
City Manager

Attest _____

(Title)

Address for giving notices:

City of Ormond Beach

PO Box 277

Ormond Beach, FL 32175-0277

Address for giving notices:

License No. _____

Registered Agent for service process:

(Name)

(Title)

END OF AGREEMENT

**SECTION 00610
PERFORMANCE BOND**

KNOW ALL MEN BY THESE PRESENTS: that

(Name of Contractor)

(Address of Contractor)

a(n) _____, hereinafter called Principal, and
(Corporation, Partnership or Individual)

(Name of Surety)

(Address of Surety)

hereinafter called Surety, are held and firmly bound unto

(Name of Owner)

(Address of Owner)

hereinafter called OWNER, in the penal sum of _____

_____ Dollars, (\$ _____) in lawful money of the United States, for the payment of which sum will and truly to be made, we bind ourselves, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the Principal entered into a certain contract with OWNER, dated ____ day of _____, 20____, for the construction of:

**Orchard Lane Stormwater Drainage Improvements
Bid No. 2026-06**

NOW, THEREFORE, if the Principal shall well, truly and faithfully perform its duties, all the undertakings, covenants, terms, conditions, and agreements of said contract during the original term thereof, and any extensions thereof which may be granted by the OWNER, with or without notice to the Surety and during the one-year guaranty period, and if he shall satisfy all claims and demands incurred under such contract, and shall fully indemnify and save harmless the OWNER from all costs and damages which it may suffer by reason of failure to do so, and shall reimburse and repay the OWNER all outlay and expense which the OWNER may incur in making good any default, then this obligation shall be void; otherwise to remain in full force and effect.

PROVIDED, FURTHER, that the said Surety, for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to WORK to be performed thereunder or the SPECIFICATIONS accompanying the same shall in any wise affect its obligation on this BOND, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the WORK or to the SPECIFICATIONS The Surety agrees that modifications and changes to the terms and conditions of the Contract that increase the total amount to be paid the Principal shall automatically increase the obligation of the Surety on this bond and notice to Surety is not required for such increased obligation.

PROVIDED, FURTHER, that no final settlement between the OWNER and the CONTRACTOR shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in _____ counterparts, each one of which shall be
(number)
deemed an original, this _____ day of _____, 20_____.

ATTEST:

Principal

(Principal) Secretary

By _____ (s)

(SEAL)

(Witness to Principal)

(Address)

(Address)

(Surety)

ATTEST:

(Surety) Secretary

(SEAL)

Witness to Surety

Attorney-In-Fact

(Address)

(Address)

NOTE: Date of BOND must not be prior to date of Contract. If CONTRACTOR is Partnership, all partners should execute BOND. All BONDS signed by an agent must be accompanied by a certified copy of the authority to act.

IMPORTANT: Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the state where the PROJECT is located.

END OF SECTION

**SECTION 00615
PAYMENT BOND**

KNOW ALL MEN BY THESE PRESENTS: that

(Name of Contractor)

(Address of Contractor)

a(n) _____, hereinafter called Principal, and
(Corporation, Partnership or Individual)

(Name of Surety)

(Address of Surety)

hereinafter called Surety, are held and firmly bound unto

(Name of Owner)

(Address of Owner)

hereinafter called OWNER, in the penal sum of _____

_____ Dollars, (\$ _____) in lawful money of the United States, for the payment of which sum will and truly to be made, we bind ourselves, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the Principal entered into a certain contract with OWNER, dated ____ day of _____, 20____, for the construction of:

Orchard Lane Stormwater Drainage Improvements
Bid No. 2026-06

NOW, THEREFORE, if the Principal shall promptly make payment to all persons, firms, SUBCONTRACTORS, and corporations furnishing materials for or performing labor in the prosecution of the WORK provided for in such contract, and any authorized extension or modification thereof, including all amounts due for materials, lubricants, oil, gasoline, coal and coke, repairs on machinery, equipment and tools, consumed or used in connection with the construction of such WORK, and all insurance premiums on said WORK, and for all labor, performed in such WORK whether by SUBCONTRACTOR or otherwise, then this obligation shall be void; otherwise to remain in full force and effect.

PROVIDED, FURTHER, that the said Surety, for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to WORK to be performed thereunder or the SPECIFICATIONS accompanying the same shall in any wise affect its obligation on this BOND, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the WORK or to the SPECIFICATIONS. The Surety agrees that modifications and changes to the terms and conditions of the Contract that increase the total amount to be paid the Principal shall automatically increase the obligation of the Surety on this bond and notice to Surety is not required for such increased obligation.

PROVIDED, FURTHER, that no final settlement between the OWNER and the CONTRACTOR shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in _____ counterparts, each one of which shall be
(number)
deemed an original, this _____ day of _____, 20_____.

ATTEST:

Principal

By _____ (s)

(Principal) Secretary

(SEAL)

(Witness to Principal)

(Address)

(Address)

(Surety)

ATTEST:

(Surety) Secretary

(SEAL)

Witness to Surety

Attorney-In-Fact

(Address)

(Address)

NOTE: Date of BOND must not be prior to date of Contract. If CONTRACTOR is Partnership, all partners should execute BOND. All BONDS signed by an agent must be accompanied by a certified copy of the authority to act.

IMPORTANT: Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the state where the PROJECT is located.

END OF SECTION

OPINION OF ATTORNEY

This is to certify that I have examined the attached Contract Documents, and that I am of the opinion that such documents conform to the Laws of the State of Florida, and that the execution of the Contract is in due and proper form, and that the foregoing agreements constitute valid and binding obligations on such parties.

Attorney for Owner

This the _____ day of _____, 2025.

END OF SECTION

SECTION 00700
GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

ARTICLE 1 - DEFINITIONS

Whenever used in these General Conditions or in the other Contract Documents, the following terms have the meanings indicated which are applicable to both the singular and plural thereof.

1.01. Addenda - Written or graphic instruments issued prior to the opening of Bids which clarify, correct or change the bidding documents of the Contract Documents.

1.02. Agreement - The written agreement between OWNER and CONTRACTOR covering the Work to be performed; other Contract Documents are attached to the Agreement and made a part thereof as provided therein.

1.03. Application for Payment - The form accepted by ENGINEER which is to be used by CONTRACTOR in requesting progress or final payment and which is to include such supporting documentation as required by the Contract Documents.

1.04. Approve - The word approve is defined to mean review of the material, equipment or methods for general compliance with the design concepts and with the information given in the Contract Documents. It does not imply a responsibility on the part of the ENGINEER to verify in every detail conformance with the Drawings and Specifications.

1.05. Bid - The offer or proposal of the Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.

1.06. Bonds - Bid, Performance and Payment Bonds and other instruments of security.

1.07. Change Order - A written order to CONTRACTOR signed by OWNER authorizing an addition, deletion or revision in the Work, or an adjustment in the Contract Price or the Contract Time issued after the effective date of the Agreement.

1.08. Contract - The Agreement.

1.09. Contract Documents - The Agreement, Addenda (which pertain to the Contract Documents), CONTRACTOR's Bid (including documentation accompanying the bid and any post-Bid documentation submitted prior to the Notice of Award) when attached as an exhibit to the Agreement, Notice of Award, the Bonds, these General Conditions, the Supplementary Conditions, the Specifications and the Drawings as the same are more specifically identified in the Agreement, any other exhibits identified in the Agreement, together with all Modifications issued after the execution of the Agreement.

1.10. Contract Price - The Contract Price constitutes the total compensation (subject to authorized adjustments) payable by OWNER to CONTRACTOR for performing the Work.

1.11. Contract Time - The number of days (computed as provided in paragraph 16.2) or the

date stated in the Agreement for the completion of the Work.

1.12. CONTRACTOR - The person, firm or corporation with whom OWNER has entered into the Agreement.

1.13. Day - A calendar day of twenty-four hours measured from midnight to the next midnight.

1.14. Defective - Work that is unsatisfactory, faulty or deficient, or does not conform to the Contract Documents or does not meet the requirements of any inspection, test or approval referred to in the Contract Documents, or has been damaged prior to ENGINEER's recommendation of final payment.

1.15. Drawings - The drawings, which will be identified in the Agreement, which show the character and scope of the Work to be performed and which have been prepared or approved by ENGINEER and are referred to in the Contract Documents.

1.16. Effective Date of the Agreement - The date indicated in the Agreement on which it becomes effective, but if no such date is indicated it means the date on which the Agreement is signed and delivered by the last of the two parties to sign and deliver.

1.17. ENGINEER - The City Engineer of the City of Ormond Beach, Florida, or the designee of such Engineer.

1.18. Engineering Order - A written request issued by ENGINEER to CONTRACTOR requesting a cost for certain modifications to the Work. An Engineering Order is not an authorization to perform the modifications.

1.19. Field Order - A written order issued by ENGINEER which clarifies or interprets the Contract Documents or orders minor changes in the Work in accordance with paragraph 10.2, but which does not involve a change in the Contract Price or the Contract Time.

1.20. Furnish - The words "furnish", "furnish and install", "install", and "provide" or words with similar meaning shall be interpreted, unless otherwise specifically stated, to mean "furnish and install complete in place and ready for service".

1.21. General Requirements - Sections of Division 1 of the Specifications.

1.22. Inspection - The term "Inspection" and the act of inspecting as used in these Contract Documents is defined to mean examination of construction to ensure that it conforms to the design concept expressed in the Drawings and Specifications. These terms shall not be construed to mean supervision, superintending and/or overseeing.

1.23. Modification - (a) A written amendment of the Contract Documents signed by both parties, (b) a Change Order, or (c) a Field Order. A modification may only be issued after the effective date of the Agreement and must be in writing to be effective.

- 1.24. Notice of Award - The written notice by OWNER to the apparent successful Bidder stating that upon compliance by the apparent successful Bidder with the conditions precedent enumerated therein, within the time specified, OWNER will sign and deliver the Agreement.
- 1.25. Notice to Proceed - A written notice given by OWNER to CONTRACTOR (with a copy to ENGINEER) fixing the date on which the Contract Time will commence to run and on which CONTRACTOR shall start to perform his obligation under the Contract Documents.
- 1.26. OWNER - The City of Ormond Beach, Florida.
- 1.27. Product - Materials, systems, and equipment provided by the CONTRACTOR.
- 1.28. Project - The total construction of which the Work to be provided under the Contract Documents may be the whole, or a part as indicated elsewhere in the Contract Documents.
- 1.29. Project Manual - The term "Project Manual" includes Bidding Requirements, Conditions of the Contract, Specifications, and Drawings.
- 1.30. Project Representative - The authorized representative of ENGINEER who is assigned to the site or any part thereof.
- 1.31. Shop Drawings - All drawings, diagrams, illustrations, schedules and other data which are specifically prepared by CONTRACTOR, a Subcontractor, manufacturer, fabricator, supplier or distributor to illustrate some portion of the Work and all illustrations, brochures, standard schedules, performance charts, instructions, diagrams and other information prepared by a manufacturer, fabricator, supplier or distributor and submitted by CONTRACTOR to illustrate material or equipment for some portion of the Work.
- 1.32. Specifications - Those portions of the Contract Documents consisting of written technical descriptions of materials, equipment, construction systems, standards and workmanship as applied to the Work and certain administrative details applicable thereto.
- 1.33. Subcontractor - An individual, firm or corporation having a contract with CONTRACTOR or with any other Subcontractor for the performance of a part of the Work at the site.
- 1.34. Substantial Completion - The point reached when the Work (or a specified part thereof), in the opinion of ENGINEER as evidenced by his final certificate of Substantial Completion, is sufficiently complete, in accordance with the Contract Documents, so that the Work (or specified part) can be utilized for the purposes for which it was intended; or if there be no such certificate issued, when final payment is due in accordance with paragraph 14.10. The terms "substantially complete" and "substantially completed" as applied to any Work refer to Substantial Completion thereof.
- 1.35. Surety - Any person, firm or corporation which is bound with CONTRACTOR and which engages to be responsible for CONTRACTOR and his acceptable performance of the Work by a Performance or Payment Bond, or by a Public Construction Bond.

1.36. Work - The entire completed construction or the various separately identifiable parts thereof required to be furnished under the Contract Documents. Work is the result of performing services, furnishing labor and furnishing and incorporating materials and equipment into the construction, all as required by the Contract Documents.

ARTICLE 2 - PRELIMINARY MATTERS

Delivery of Bonds:

2.1. When CONTRACTOR delivers the executed Agreements to OWNER, CONTRACTOR shall also deliver to OWNER such Bonds as CONTRACTOR may be required to furnish in accordance with paragraph 5.1.

Copies of Documents:

2.2. OWNER shall furnish to CONTRACTOR, at OWNER's expense, up to three copies of the Contract Documents. Additional copies will be furnished, upon request, at the cost of reproduction.

Commencement of Contract Time; Notice to Proceed:

2.3. The Contract Time will commence on the day indicated in the Notice to Proceed.

Starting the Project:

2.4. CONTRACTOR shall start to perform the work on the date when the Contract Time commences to run, but no work shall be done at the site prior to the date on which the Contract Time commences to run, and no work shall be done at the site before the Payment and Performance Bond is executed, delivered to the OWNER, and recorded in the public records of Volusia County, Florida.

Before Starting Construction:

2.5. Before undertaking each part of the Work, CONTRACTOR shall carefully study and compare the Contract Documents and check and verify pertinent figures shown thereon and all applicable field measurements. CONTRACTOR shall promptly report in writing to ENGINEER any conflict, error or discrepancy which CONTRACTOR may discover; however, CONTRACTOR shall not be liable to OWNER for failure to report any conflict, error or discrepancy in the Drawings or Specifications, unless CONTRACTOR had actual knowledge thereof or should reasonably have known thereof. No verbal agreement or conversation with any officer, agent or employee of OWNER, either before or after the execution of this Contract, shall affect or modify any of the terms or obligations herein contained.

2.6. Before any Work at the site is started, CONTRACTOR shall deliver to OWNER certificates (and other evidence of insurance requested by OWNER) which CONTRACTOR is

required to purchase and maintain in accordance with paragraphs 5.3, 5.4, 5.6 and 5.7.

2.7. CONTRACTOR shall not allow any on-site Subcontractor to commence work on his subcontract until insurance required of the Subcontractor has been obtained and approved by the CONTRACTOR. Failure to obtain this insurance will be the sole responsibility of the CONTRACTOR.

ARTICLE 3 - CONTRACT DOCUMENTS; INTENT AND REUSE

3.1. The Contract Documents comprise the entire Agreement between OWNER and CONTRACTOR concerning the Work. They may be altered only by a Modification.

3.2. The Contract Documents are complementary; a requirement contained in one is applicable to all. If, during the performance of the Work, CONTRACTOR finds a conflict, error or discrepancy in the Contract Documents, he shall report it to ENGINEER in writing at once and before proceeding with the Work affected thereby; however, CONTRACTOR shall not be liable to OWNER for failure to report any conflict, error or discrepancy in the Specifications or Drawings unless CONTRACTOR had actual knowledge thereof or should reasonably have known thereof. The various Contract Documents shall be given precedence, in case of conflict, error or discrepancy, as follows: Modifications, Agreement, Addenda, Supplementary Conditions, General Conditions, Drawings and Specifications. In a series of Modifications or Addenda the latest will govern.

3.3. It is the intent of the Specifications and Drawings to describe a complete project (or part thereof) to be constructed in accordance with the Contract Documents. Any Work that may reasonably be inferred from the Specifications or Drawings as being required to produce the intended results shall be supplied whether or not it is specifically called for. When words which have well-known technical or trade meaning are used to describe Work, materials or equipment such words shall be interpreted in accordance with such meaning. Reference to standard specifications, manuals or codes of any technical society, organization or association, or to the code of any governmental authority, whether such reference be specific or by implication, shall mean the latest standard specification, manual or code in effect at the time of opening of Bids (or, on the effective date of the Agreement if there were no Bids), except as may be otherwise specifically stated. However, no provision of any referenced standard specification, manual or code (whether or not specifically incorporated by reference in the Contract Documents) shall change the duties and responsibilities of OWNER, CONTRACTOR or ENGINEER, or any of their agents or employees from those set forth in the Contract Documents. Clarifications and interpretations of the Contract Documents shall be issued by ENGINEER as provided for in paragraph 9.2.

3.4. The Contract Documents will be governed by the law of the State of Florida, and venue for any action brought thereunder shall lie solely and exclusively in the Circuit Court in and for Volusia County, Florida.

Reuse of Documents:

3.5. Neither CONTRACTOR nor any Subcontractor, manufacturer, fabricator, supplier or distributor shall have or acquire any title to or ownership rights in any of the Drawings, Specifications or other documents (or copies of any thereof) prepared by or bearing the seal of ENGINEER; and they shall not reuse any of them on extensions of the Project or any other project without written consent of OWNER and ENGINEER and specific written verification or adaptation by ENGINEER.

ARTICLE 4 - AVAILABILITY OF LANDS; PHYSICAL CONDITIONS; REFERENCE POINTS

4.1. OWNER shall furnish, as indicated in the Contract Documents, the lands upon which the Work is to be performed, rights-of-way for access thereto, and such other lands which are designated for the use of CONTRACTOR. Easements for permanent structures or permanent changes in existing facilities will be obtained and paid for by OWNER, unless otherwise provided in the Contract Documents. If CONTRACTOR believes that any delay in OWNER's furnishing these lands or easements entitles him to an extension of the Contract Time, CONTRACTOR may make a claim therefor as provided in Article 12. CONTRACTOR shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

Physical Conditions - Investigations and Reports:

4.2. Reference is made to the Supplementary Conditions for identification of those reports of investigations and tests of subsurface and latent physical conditions at the site or otherwise affecting cost, progress or performance of the Work which have been relied upon by ENGINEER in preparation of the Drawings and Specifications. Such reports are not guaranteed as to accuracy or completeness and are not part of the Contract Documents.

Unforeseen Physical Conditions:

4.3. CONTRACTOR shall promptly, after becoming aware of and before further disturbing conditions affected thereby or performing any work in connection therewith, notify ENGINEER in writing of any subsurface or latent physical conditions at the site or in an existing structure differing materially from those indicated or referred to in the Contract Documents. CONTRACTOR, upon discovering and notifying OWNER of such subsurface or latent conditions, shall not perform work in the affected area until authorized to do so by OWNER. ENGINEER will promptly review those conditions and determine if further investigation or tests are necessary. If so determined by the ENGINEER, OWNER shall promptly obtain the necessary additional investigations and tests and furnish copies to CONTRACTOR. If ENGINEER finds that the results of such investigations or tests indicate that there are subsurface or latent physical conditions which differ materially from those intended in the Contract Documents, and which could not reasonably have been anticipated by CONTRACTOR, a Change Order authorizing CONTRACTOR to perform the additional work may be issued incorporating the necessary revisions.

Reference Points:

4.4. OWNER shall provide engineering surveys for construction to establish reference points which in his judgment are necessary to enable CONTRACTOR to proceed with the Work. CONTRACTOR shall be responsible for laying out the Work (unless otherwise specified in the General Requirements), shall protect and preserve the established reference points and shall make no changes or relocations without the prior written approval of OWNER. CONTRACTOR shall report to ENGINEER whenever any reference point is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for replacement or relocation of such reference points by professionally qualified personnel.

ARTICLE 5 - BONDS AND INSURANCE

Performance and Other Bonds:

5.1. CONTRACTOR shall furnish Performance and Payment Bonds, each in an amount at least equal to the Contract Price as security for the faithful performance and payment of all CONTRACTOR's obligations under the Contract Documents. The City will record the bonds in the public records at the CONTRACTOR's expense. These Bonds shall remain in effect at least until one (1) year after the date of final payment, except as otherwise provided by law. All bonds shall be deemed to contain all of the Conditions of Section 255.05, Florida Statutes, even if such language is not directly contained within the bond. CONTRACTOR shall also furnish such other Bonds as are required by the Supplementary Conditions. All Bonds shall be in the forms prescribed by the bidding documents or Supplementary Conditions and be executed by such Sureties as (i) are licensed to conduct business in the State of Florida, and (ii) are named in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (amended) by the Audit Staff Bureau of Accounts, U.S. Treasury Department. All Bonds signed by an agent must be accompanied by a certified copy of the authority to act.

5.2. If the Surety on any Bond furnished by CONTRACTOR is declared bankrupt or becomes insolvent or its right to do business is terminated in the State of Florida or it ceases to meet the requirements of clauses (i) and (ii) of paragraph 5.1, CONTRACTOR shall within five (5) days after notice thereof, substitute another Bond and Surety, both of which shall meet the requirements of clauses (i) and (ii) of paragraph 5.1.

CONTRACTOR's Liability Insurance:

5.3. CONTRACTOR and on-site Subcontractors shall purchase and maintain such Commercial General Liability and other insurance as will provide protection from claims set forth below which may arise out of or result from CONTRACTOR's performance of the Work and CONTRACTOR's other obligations under the Contract Documents, whether such performance is by CONTRACTOR, by any Subcontractor, by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable;

5.3.1. Claims under workers' compensation, disability benefits and other similar employee benefit acts;

5.3.2. Claims for damages because of bodily injury, occupational sickness or disease, or death of CONTRACTOR's employees;

5.3.3. Claims for damages because of bodily injury, sickness or disease, or death of any person other than CONTRACTOR's employees.

5.3.4. Claims for damages insured by personal injury liability coverage which are sustained (i) by any person as a result of an offense directly or indirectly related to the employment of such person by CONTRACTOR, or (ii) by any other person for any other reason.

5.3.5. Claims for damages, other than to the Work itself, because of injury to or destruction of tangible property, including loss of use resulting therefrom; and

5.3.6. Claims for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance or use of any motor vehicle.

The insurance required by this paragraph 5.3 shall include the specific coverages and be written for not less than the limits of liability and coverages provided in the **Supplementary Conditions**, or required by law, whichever is greater. The Commercial General Liability insurance shall include completed operations insurance. All such insurance shall contain a provision that the coverage afforded will not be canceled, materially changed or renewal refused until at least **sixty** (60) days prior written notice of such cancellation, non-renewal or change (except for nonpayment of premium, which shall be fifteen (15) days) has been given to OWNER. All such insurance shall remain in effect until final payment and at all times thereafter when CONTRACTOR may be correcting, removing or replacing defective Work in accordance with paragraph 13.12. In addition, CONTRACTOR shall maintain such completed operations insurance for at least two years after final payment and furnish OWNER with evidence of continuation of such insurance at final payment and one year thereafter.

Contractual Liability Insurance:

5.4. The Commercial General Liability insurance required by paragraph 5.3 will include contractual liability insurance applicable to CONTRACTOR's obligations under paragraphs 6.15 and 6.16. The OWNER shall be named as "Additionally Insured" under the CONTRACTOR's Commercial General Liability insurance policy.

Owner's Liability Insurance:

5.5. OWNER may, at its option, purchase and maintain its own liability insurance and, at its option, may purchase and maintain such insurance as will protect OWNER against claims which may arise from operations under the Contract Documents.

Property Insurance:

5.6. CONTRACTOR shall purchase and maintain property insurance upon the Work at the site to the full insurable value thereof (subject to such deductible amounts as may be provided in the Supplementary Conditions or required by law). This insurance shall include the interests of

OWNER, CONTRACTOR, and Subcontractors in the Work, shall insure against the perils of fire and extended coverage and shall include "all risk" insurance for physical loss and damage including theft, vandalism and malicious mischief, collapse and water damage, and such other perils as may be provided in the Supplementary Conditions, and shall include damages, losses and expenses arising out of or resulting from any insured loss or incurred in the repair or replacement of any insured property (including fees and charges of engineers, architects, attorneys and other professionals). If not covered under the "all risk" insurance or otherwise provided in the Supplementary Conditions, CONTRACTOR shall purchase and maintain similar property insurance on portions of the Work stored on and off the site or in transit when such portions of the Work are to be included in the Application for Payment. The policies of insurance required to be purchased and maintained by CONTRACTOR in accordance with paragraphs 5.6 and 5.7 shall contain provisions that the coverage afforded will not be canceled or materially changed until at least **sixty** (60) days prior written notice has been given to OWNER.

5.7. CONTRACTOR shall purchase and maintain such boiler and machinery insurance as may be required by the Supplementary Conditions or by law. This insurance shall include the interests of OWNER, CONTRACTOR and Subcontractors in the Work.

5.8. OWNER shall not be responsible for purchasing and maintaining any property insurance to protect the interests of CONTRACTOR or Subcontractors in the Work to the extent of any deductible amounts that are provided in the Supplementary Conditions. If CONTRACTOR wishes property insurance coverage within the limits of such amounts, CONTRACTOR may purchase and maintain it at his own expense.

5.9. If CONTRACTOR requests in writing that other special insurance be included in the property insurance policy, OWNER shall, if possible, include such insurance, and the cost thereof shall be charged to CONTRACTOR by appropriate Change Order. Prior to commencement of the Work at the site, OWNER shall in writing advise CONTRACTOR whether or not such other insurance has been procured by OWNER.

Waiver of Rights:

5.10. OWNER and CONTRACTOR waive all rights against each other and the Subcontractors and their agents and employees and separate contractors (if any) and their subcontractors' agents and employees, for damages caused by fire or other perils to the extent covered by insurance provided under paragraphs 5.6 and 5.7, inclusive, or any other property insurance applicable to the Work, except such rights as they may have to the proceeds of such insurance held by OWNER as trustee. OWNER shall require similar written waivers from each separate contractor, and CONTRACTOR shall require similar written waivers from each Subcontractor (in accordance with paragraph 6.8 as applicable); each such waiver will be in favor of all other parties enumerated in this paragraph 5.10.

Receipt and Application of Proceeds:

5.11. Any insured loss under the policies of insurance required by paragraphs 5.6 and 5.7 shall be adjusted with CONTRACTOR and made payable to CONTRACTOR as trustee for the insured, as their interests may appear, subject to the requirements of paragraph 5.12. CONTRACTOR shall

deposit in a separate account any money so received, and shall distribute it in accordance with such agreement as the parties in interest may reach. If no other special agreement is reached the damaged Work shall be repaired or replaced, the moneys so received applied on account thereof and the Work and the cost thereof covered by an appropriate Change Order.

5.12. CONTRACTOR as trustee shall have power to adjust and settle any loss with the insurers unless one of the parties in interest shall object in writing within fifteen days after the occurrence of loss to CONTRACTOR's exercise of this power. If such objection be made, CONTRACTOR as trustee shall make settlement with the insurers in accordance with such agreement as the parties in interest may reach. If required in writing by any party in interest, CONTRACTOR as trustee shall upon the occurrence of an insured loss, give bond for the proper performance of his duties.

Acceptance of Bonds and Insurance:

5.13. If OWNER has any objection to the coverage afforded by or other provisions of the Bonds or Insurance required to be purchased and maintained by CONTRACTOR in accordance with Article 5 on the basis of non-conformance with the Contract Documents, OWNER shall so notify CONTRACTOR in writing within ten days after receipt of the certificates (or other evidence requested) required by paragraph 2.6. CONTRACTOR shall provide to OWNER such additional information in respect of insurance provided as OWNER may reasonably request. If CONTRACTOR does not purchase or maintain all of the Bonds and Insurance required of CONTRACTOR by the Contract Documents, CONTRACTOR shall notify OWNER in writing of such failure to purchase prior to the start of the Work, or such failure to maintain prior to any change in the required coverage. Without prejudice to any other right or remedy, OWNER may elect to obtain equivalent Bonds or Insurance to protect OWNER's interests at the expense of CONTRACTOR, and a Change Order shall be issued to adjust the Contract Price accordingly.

Partial Utilization - Property Insurance:

5.14. If OWNER finds it necessary to occupy or use a portion or portions of the Work prior to Substantial Completion of all the Work, such use or occupancy may be accomplished in accordance with paragraph 14.7; provided that no such use or occupancy shall commence before the insurers providing the property insurance have acknowledged notice thereof and in writing effected the changes in coverage necessitated thereby. The insurers providing the property insurance shall consent by endorsement on the policy or policies that the property insurance shall not be canceled or lapse on account of any such partial use of occupancy.

ARTICLE 6 - CONTRACTOR'S RESPONSIBILITIES

Supervision and Superintendence:

6.1. CONTRACTOR shall supervise and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents. CONTRACTOR shall be solely responsible for the means, methods, techniques, sequences and procedures of construction.

CONTRACTOR shall be responsible to see that the finished Work complies accurately with the Contract Documents.

6.2. CONTRACTOR shall keep on the Work at all times during its progress a competent resident superintendent, who shall not be replaced without written notice to OWNER except under extraordinary circumstances. The superintendent will be CONTRACTOR's representative at the site and shall have authority to act on behalf of CONTRACTOR. All communications given to the superintendent shall be as binding as if given to CONTRACTOR.

Materials and Equipment:

6.3. All materials and equipment installed in the Work shall be of good quality and new, except as otherwise provided in the Contract Documents. If required by ENGINEER, CONTRACTOR shall furnish satisfactory evidence (including reports of required tests) as to the kind and quality of materials and equipment.

Equipment manufacturers/suppliers must agree to OWNER'S terms of purchase. In no event will OWNER accept terms of sale that limit OWNER'S ability to reasonably recover in the event of equipment failure/defect such as, but not limited to; mandatory arbitration clauses, venue of court proceedings and applicable law outside of Volusia County, Florida, or damage limitations that preclude recovery for failed or defective equipment that would be less than full compensation for OWNER's loss.

6.4. All materials and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned in accordance with the instructions of the applicable manufacturer, fabricator, supplier or distributor, except as otherwise provided in the Contract Documents.

Concerning Subcontractors:

6.5. CONTRACTOR shall not employ any Subcontractor or other person or organization (including those who are to furnish the principal items of materials or equipment), whether initially or as a substitute, to which OWNER may have any reasonable objection. CONTRACTOR shall submit with his Bid in writing the names, mailing addresses, and work classifications of all Subcontractors proposed for the Work. The failure to list all Subcontractors proposed for the Work may result in the Bid being rejected as incomplete and nonresponsive. A Subcontractor or other person or organization identified in writing to OWNER by CONTRACTOR prior to the Notice of Award and not objected to in writing by OWNER prior to the Notice of Award will be deemed acceptable to OWNER. Acceptance of any Subcontractor, other person or organization of OWNER shall not constitute a waiver of any right of OWNER to reject defective Work. If OWNER after due investigation has reasonable objection to any Subcontractor, other person or organization proposed by CONTRACTOR after the Notice of Award because the qualifications and experience of the Subcontractor, other person or organization indicate that he cannot perform or provide work, materials or equipment which will perform the specified functions, CONTRACTOR shall submit an acceptable substitute and the Contract Price shall be increased or decreased by the difference in cost occasioned by such substitution, and an appropriate Change Order may be issued. CONTRACTOR shall not be required to employ any Subcontractor, other person or organization to which CONTRACTOR has any reasonable objection. Whether

objections are reasonable shall be determined as specified in paragraph 9.8.

6.6. CONTRACTOR shall be fully responsible for all acts and omissions of his Subcontractors and of persons and organizations directly or indirectly employed by them and of persons and organizations for whose acts any of them may be liable to the same extent that CONTRACTOR is responsible for the acts and omissions of persons directly employed by CONTRACTOR. Nothing in the Contract Documents shall create any contractual relationship between OWNER and any Subcontractor or other person or organization having a direct contact with CONTRACTOR, nor shall it create any obligation on the part of OWNER to pay or to see to the payment of any moneys due any Subcontractor or other person or organization, except as may otherwise be required by law. OWNER may furnish to any Subcontractor or other person or organization, to the extent practicable, evidence of amounts paid to CONTRACTOR on account of specific Work done.

6.7. The divisions and sections of the Specifications and the identifications of any Drawings shall not control CONTRACTOR in dividing the Work among Subcontractors or delineating the Work to be performed by any specific trade.

6.8. All Work performed for CONTRACTOR by a Subcontractor will be pursuant to an appropriate agreement between CONTRACTOR and the Subcontractor which specifically binds the Subcontractor to the applicable terms and conditions of the Contract Documents for the benefit of OWNER and contains waiver provisions as required by paragraph 5.10. CONTRACTOR shall pay each Subcontractor an appropriate share of any insurance proceeds received by CONTRACTOR on account of losses under policies issued pursuant to paragraphs 5.6 through 5.8.

6.9. Neither the OWNER nor the ENGINEER will undertake to settle any differences between CONTRACTOR and his Subcontractors or between Subcontractors.

Patent Fees and Royalties:

6.10. CONTRACTOR shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product or device which is the subject of patent rights or copyrights held by others. If a particular invention, design, process, product or device is specified in the Contract Documents for use in the performance of the Work and if to the actual knowledge of OWNER its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights shall be disclosed by OWNER in the Contract Documents. CONTRACTOR shall **indemnify** and **hold harmless** OWNER and anyone directly or indirectly employed by either of them from and against all claims, damages, losses and expenses (including attorneys' fees) arising out of any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product or device not specified in the Contract Documents, and shall defend all such claims in connection with any alleged infringement of such rights. OWNER will promptly notify CONTRACTOR of any such allegation of infringement of such rights.

Safety and Protection:

6.11. Precaution shall be exercised at all times by the CONTRACTOR for the protection of all persons, including employees, and property. The CONTRACTOR shall comply with all laws, regulations or ordinances related to safety and health, shall make special effort to detect hazardous conditions, and shall take prompt action where loss control/safety measures are reasonably expected. The OWNER may order work to be stopped if conditions exist that present on immediate danger to persons or property. The CONTRACTOR acknowledges that such stoppage will not shift responsibility for any damages from the CONTRACTOR to the OWNER.

6.12. CONTRACTOR be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. CONTRACTOR shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss to:

6.12.1. All employees on the Work and other persons who may be affected thereby.

6.12.2. All the Work and all materials or equipment to be incorporated therein, whether in storage on or off the site, and

6.12.3. Other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of construction.

CONTRACTOR shall comply with all applicable laws, ordinances, rules, regulations and orders of any public body having jurisdiction for the safety of persons or property or to protect them from damage, injury or loss; and shall erect and maintain all necessary safeguards for such safety and protection. CONTRACTOR shall notify owners of adjacent property and utilities when prosecution of the Work may affect them. All damage, injury or loss to any property referred to in paragraph 6.12.2 or 6.12.3 caused, directly or indirectly, in whole or in part, by CONTRACTOR, any Subcontractor or anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, shall be remedied by CONTRACTOR. CONTRACTOR's duties and responsibilities for the safety and protection of the Work shall continue until such time as all the Work is completed and ENGINEER has issued a notice to OWNER and CONTRACTOR in accordance with paragraph 14.12 that the Work is acceptable.

6.13. CONTRACTOR shall designate a responsible member of his organization at the site whose duty shall be the prevention of accidents. This person shall be CONTRACTOR's superintendent unless otherwise designated in writing by CONTRACTOR to OWNER.

Emergencies:

6.14. In emergencies affecting the safety or protection of persons or the Work or property at the site or adjacent thereto, CONTRACTOR, without special instruction or authorization from OWNER, is obligated to act to prevent threatened damage, injury or loss. CONTRACTOR shall give OWNER prompt written notice of any significant changes in the Work or deviations from the Contract Documents caused thereby.

Indemnification/Hold Harmless:

6.15 The parties recognize that the CONTRACTOR is an independent contractor. The CONTRACTOR agrees to assume liability for and indemnify, hold harmless, and defend the CITY, its commissioners, mayor, officers, employees, agents, and attorneys of, from, and against all liability and expense, including reasonable attorney's fees, in connection with any and all claims, demands, damages, actions, causes of action, and suits in equity of whatever kind or nature, including claims for personal injury, property damage, equitable relief, or loss of use, to the extent caused by the negligence, recklessness, or intentionally wrongful conduct of the CONTRACTOR, its agents, officers, contractors, subcontractors, employees, or anyone else utilized by the CONTRACTOR in the performance of this Agreement. The CONTRACTOR's liability hereunder shall include all attorney's fees and costs incurred by the CITY in the enforcement of this indemnification provision. This includes claims made by the employees of the CONTRACTOR against the CITY and the CONTRACTOR hereby waives its entitlement, if any, to immunity under Section 440.11, Florida Statutes. Such obligations contained in this provision shall survive termination of this Agreement and shall not be limited by the amount of any insurance required to be obtained or maintained under this Agreement.

In the event of any claim arising out of the paragraph above, the CITY will elect, in its sole discretion, that either:

- 1) The CONTRACTOR assume control of the defense of any claim asserted by a third party against the CITY and, in connection with such defense, shall appoint lead counsel, in each case at the CONTRACTOR's expense. The CITY shall have the right, at its option, to participate in the defense of any third party claim, without relieving CONTRACTOR of any of its obligations hereunder. If the CONTRACTOR assumes control of the defense of any third party claim in accordance with this paragraph, the CONTRACTOR shall obtain the prior written consent of the CITY before entering into any settlement of such claim. If the CONTRACTOR assumes control of the defense and the CONTRACTOR has failed or is failing to prosecute or defend vigorously the third party claim, the CITY may assume the control of the defense as provided by sub (2); or
- 2) The CITY will assume control of the defense of any third party claim, but CONTRACTOR shall pay the fees of counsel retained by the CITY and all expenses, including experts' fees.

Each party shall cooperate, and cause its agents to cooperate, in the defense or prosecution of any third party claim and shall furnish or cause to be furnished such records and information, and attend such conferences, discovery proceedings, hearings, trials, or appeals, as may be reasonably requested in connection therewith. It is further the specific intent and agreement of said parties that all the Contract Documents on this Project are hereby amended to include the foregoing indemnification. CONTRACTOR expressly agrees that it will not claim, and waives any claim, that this indemnification violates Section 725.06, Florida Statutes or is unenforceable pursuant to Section 725.06, Florida Statutes.

Nothing contained in the foregoing indemnification shall be construed as a waiver of any immunity or limitation of liability the CITY may have under the doctrine of sovereign immunity or Section 768.28, Florida Statutes.

Precaution shall be exercised at all times by the CONTRACTOR for the protection of all persons, including employees and property. The CONTRACTOR shall comply with all applicable laws, regulation and ordinances related to safety and health, shall make special efforts to detect hazardous conditions, and shall take prompt action with loss control/safety measures as are reasonably necessary. The CITY may order work to be stopped if conditions exist that present an immediate danger to persons or property. The CONTRACTOR acknowledges that such work stoppage will not shift responsibility for any damages from the CONTRACTOR to the CITY.

Payment on Behalf of OWNER:

6.16. The CONTRACTOR agrees to pay on behalf of the OWNER, and to pay the cost of the OWNER's legal defense, as may be selected by the OWNER, for all claims described in 6.15 Indemnification/Hold Harmless. Such payment on behalf of the OWNER shall be in addition to any and all other legal remedies available to the OWNER and shall not be considered to be the OWNER's exclusive remedy.

ARTICLE 7 - WORK BY OTHERS

7.1. OWNER may perform additional work related to the Project by itself, or have additional work performed by utility service companies, or let other direct contracts therefor which shall contain General Conditions similar to these. CONTRACTOR shall afford the utility service companies and the other contractors who are parties to such direct contracts (or OWNER, if OWNER is performing the additional work with OWNER's employees) reasonable opportunity for the introduction and storage of materials and equipment and the execution of work, and shall properly connect and coordinate his Work with theirs.

7.2. If any part of CONTRACTOR's Work depends for proper execution or results upon the work of any such other contractor or utility service company (or OWNER), CONTRACTOR shall inspect and promptly report to ENGINEER in writing any patent or apparent defects or deficiencies in such work that render it unsuitable for such proper execution and results. CONTRACTOR's failure so to report shall constitute an acceptance of the work as fit and proper for integration with CONTRACTOR's Work except for latent or non-apparent defects and deficiencies in the other work.

7.3. If the performance of additional work by other contractors or utility service companies or OWNER was not noted in the Contract Documents, written notice thereof shall be given to CONTRACTOR prior to starting any such additional work. If CONTRACTOR believes that the performance of such additional work by OWNER or others involves additional expense to CONTRACTOR or requires an extension of the Contract Time, CONTRACTOR may make a claim therefor as provided in Articles 11 and 12.

7.4. Should any other contractor having, or who shall hereafter have, a contract with

OWNER for the performance of work upon the site of the Work to be performed hereunder sustain any damage through any act or omission of CONTRACTOR hereunder or through any act or omission of any Sub-contractor of CONTRACTOR, CONTRACTOR agrees to reimburse such other contractor for all such damages and to indemnify, defend and hold OWNER harmless from all such claims.

ARTICLE 8 - OWNER'S RESPONSIBILITIES

8.1. OWNER shall issue all communications to CONTRACTOR through ENGINEER.

8.2. OWNER shall furnish the data required of OWNER under the Contract Documents promptly and shall make payments to CONTRACTOR promptly after they are due as provided in paragraphs 14.3 and 14.10.

8.3. OWNER's duties with respect to providing lands and easements and providing engineering surveys to establish reference points are set forth in paragraphs 4.1 and 4.4. Paragraph 4.2 refers to OWNER's identifying and making available to CONTRACTOR copies of reports of investigations and tests of subsurface and latent physical conditions at the site or otherwise affecting performance of the Work which have been relied upon by ENGINEER in preparing the Drawings and Specifications.

8.4. OWNER's responsibilities with respect to the purchase and maintenance of liability insurance are set forth in paragraph 5.5.

8.5. In connection with OWNER's rights to request changes in the Work in accordance with Article 10, OWNER (especially in certain instances as provided in paragraph 10.4) may execute Change Orders.

8.6. OWNER's responsibility with respect to certain inspections, tests and approvals is set forth in paragraph 13.4.

8.7. The provisions relative to the OWNER's right to stop Work or suspend Work are set forth in paragraphs 6.11, 13.10 and 15.1.

ARTICLE 9 - ENGINEER'S STATUS DURING CONSTRUCTION

9.1. ENGINEER will be OWNER's representative during the construction period. The authority of ENGINEER shall, under no circumstances, relieve CONTRACTOR from CONTRACTOR's responsibilities to perform the Work in accordance with this Contract.

Clarifications and Interpretations:

9.2. ENGINEER will issue with reasonable promptness such written clarifications or interpretations of the Contract Documents (in the form of Drawings or otherwise) as ENGINEER may determine necessary, which shall be consistent with or reasonably inferable from the overall

intent of the Contract Documents. If CONTRACTOR believes that a written clarification or interpretation justifies an increase in the Contract Price or Contract Time, CONTRACTOR may make a claim therefor as provided in Article 11 or Article 12.

Rejecting Defective Work:

9.3. ENGINEER will have authority to disapprove or reject WORK which is defective, and will also have authority to require special inspection or testing of the Work as provided in paragraph 13.9, whether or not the Work is fabricated, installed or completed.

Change Orders and Payments:

9.4. In connection with ENGINEER's responsibilities as to Change Orders, see Articles 10, 11 and 12.

9.5 In connection with ENGINEER's responsibilities as to Applications for Payment, etc., see Article 14.

Project Representation:

9.6. ENGINEER may designate a Project Representative to assist ENGINEER in inspecting the performance of the Work. The duties, responsibilities and limitations of authority of any such Project Representative and assistants will be as provided in paragraphs 9.6.1 through 9.6.3.

9.6.1. General: Project Representative is ENGINEER's Agent. He shall have the authority to do anything which the ENGINEER could do. His dealings in matters pertaining to the on-site work will in general be only with OWNER, ENGINEER and CONTRACTOR. His dealings with subcontractors will only be through or with the full knowledge of CONTRACTOR or his superintendent.

9.6.2. Duties and Responsibilities: Project Representative shall:

9.6.2.1. Schedules: Review the progress schedule, schedule of Shop Drawing submissions, schedule of values and other schedules prepared by CONTRACTOR and consult with ENGINEER concerning their acceptability.

9.6.2.2. Conferences: Attend preconstruction conferences.

9.6.2.3. Liaison: Serve as ENGINEER's liaison with CONTRACTOR, working principally through CONTRACTOR's superintendent, and assist him in understanding the intent of the Contract Documents. Assist in obtaining from OWNER additional details or information, when required at the job site for proper execution of the Work.

9.6.2.4. Shop Drawings and Samples: Receive and record date of receipt of Shop Drawings and samples which have been furnished by CONTRACTOR. Review the Shop Drawings for conformance with the information given in the Contract Documents. Provide office review and approval of Shop Drawings (as that term is defined in Article 1) and samples, the results of tests

and inspections and other data which any contractor is required to submit, but only for conformance with the design concept of the project and compliance with the information given in the Contract Documents; determine the acceptability of substitute materials and equipment proposed by CONTRACTOR(S); and receive and review (for general content as required by the Specifications) maintenance and operating instructions, schedules, guarantees, bonds and certificates of inspection which are to be assembled by CONTRACTOR(S) in accordance with the Contract Documents.

9.6.2.5. Review of Work, Rejection of Defective Work, Inspections and Tests: Conduct on-site inspections of the Work in progress to assist ENGINEER in determining that the Project is proceeding in accordance with the Contract Documents and that completed Work will conform to the Contract Documents. Report to ENGINEER whenever he believes that any Work is unsatisfactory, faulty or defective or does not conform to the Contract Documents, or has been damaged, or does not meet the requirements of any inspections, tests or approvals required to be made; and advise ENGINEER when he believes Work should be corrected or rejected or should be uncovered for observation, or requires special testing or inspection. Verify that tests, equipment and systems start-ups and operating and maintenance instructions are conducted as required by the Contract Documents and in the presence of the required personnel, and that CONTRACTOR maintains adequate records thereof; observe, record and report appropriate details relative to the test procedures and start-ups.

9.6.2.6. Modifications: Consider and evaluate CONTRACTOR's suggestions for modifications in Drawings or Specifications and report them to ENGINEER with recommendations. Prepare change orders as required; he may, as OWNER's representative, require special inspection or testing of the work; he shall act as interpreter of the requirements of the Contract Documents, judge of the performance thereunder by the parties thereto, and transmitter of clarification and interpretation of the Contract Documents. Process contract change orders to reflect final measured contract quantities and to reflect changes in the contract Drawings and Specifications.

9.6.2.7. Payment Requisitions: Based on his on-site observations and on his review of CONTRACTOR(S) applications for payment and the accompanying data and schedules, determine the amounts owed the CONTRACTOR(S). The ENGINEER will then approve in writing payments to CONTRACTOR(S) in such amounts; such approvals of payment will constitute a presentation to OWNER, based on such observations and review, that the Work has progressed to the point indicated and that, to the best of his knowledge, information and belief, the quality of the Work is in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning Project upon Substantial Completion, to the results of any subsequent tests called for in the Contract Documents, and to any qualifications stated in his approval).

9.6.2.8. Guarantees, Certificates, Maintenance and Operation Manuals: During the course of the Work verify that guarantees, certificates, maintenance and operation manuals and other data required to be assembled and furnished by CONTRACTOR are applicable to the items actually installed; and deliver this data to ENGINEER for his review prior to final acceptance of the Project.

9.6.2.9. Completion: Before ENGINEER issues a Certificate of Substantial Completion, submit to CONTRACTOR a list of observed items requiring correction. Conduct final inspection in the company of CONTRACTOR and prepare a final list of items to be corrected. Verify that all items

on final list have been corrected and make recommendations to ENGINEER concerning acceptance.

9.6.3. Limitations of Authority: The Project Representative; shall not undertake any of the responsibilities of CONTRACTOR, subcontractors or CONTRACTOR's superintendent; shall not expedite Work for CONTRACTOR; shall not advise on or issue directions as to safety precautions and programs in connection with the Work; and shall not assist CONTRACTOR in maintaining up-to-date copies of Record Drawings.

Decisions on Disagreements:

9.7. ENGINEER will be the initial interpreter of the requirements of the Contract Documents and judge of the acceptability of the Work thereunder. Claims, disputes and other matters relating to the acceptability of the Work or the interpretation of the requirements of the Contract Documents pertaining to the execution and progress of the Work shall be referred initially to ENGINEER in writing with a request for a formal decision in accordance with this paragraph, which ENGINEER will render in writing within a reasonable time. Written notice of each such claim, dispute and other matter shall be delivered by the claimant to ENGINEER and the other party to the Agreement within fifteen days of the occurrence of the event giving rise thereto, and written supporting data will be submitted to ENGINEER and the other party within forty-five days of such occurrence unless ENGINEER allows an additional period of time to ascertain more accurate data. Failure to give the required notice constitutes a waiver of the claim.

9.8. The rendering of a decision by ENGINEER pursuant to paragraph 9.7 with respect to any such claim, dispute or other matter (except any which have been waived by the making or acceptance of final payment as provided in paragraph 14.13) will be a condition precedent to any exercise by OWNER or CONTRACTOR of such rights or remedies as either may otherwise have under the Contract Documents or at law in respect of any such claim, dispute or other matter. If the Owner agrees to pay all or part of a claim for which notice was not timely made, such agreement shall not be deemed a waiver of the right to enforce notice requirements in connection with any other claim.

Limitations on ENGINEER's Responsibilities:

9.9. Neither ENGINEER's authority to act under this Article 9 or elsewhere in the Contract Documents nor any decision made by ENGINEER in good faith either to exercise or not exercise such authority shall give rise to any duty or responsibility of ENGINEER to CONTRACTOR, any Subcontractor, any manufacturer, fabricator, supplier or distributor, or any of their agents or employees or any other person performing any of the Work.

9.10. Whenever in the Contract Documents the terms "as ordered", "as directed", "as required", "as allowed" or terms of like effect or import are used, or the adjective "reasonable", "suitable", "acceptable", "proper" or "satisfactory" or adjectives of like effect or import are used, to describe requirements, decision, review or judgment of ENGINEER as to the Work, it is intended that such requirement, direction, review or judgment will be solely to evaluate the Work for compliance with the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective never indicates that ENGINEER shall have

authority to supervise or direct performance of the Work or authority to undertake responsibility contrary to the provisions of paragraphs 9.11 or 9.12.

9.11. ENGINEER will not be responsible for CONTRACTOR's means, methods, techniques, sequences or procedures of construction, or the safety precautions and programs incident thereto, and ENGINEER will not be responsible for CONTRACTOR's failure to perform the Work in accordance with the Contract Documents.

9.12. ENGINEER will not be responsible for the acts or omissions of CONTRACTOR or of any Subcontractors, or of the agents or employees of any CONTRACTOR or Subcontractor, or of any other persons at the site or otherwise performing any of the Work.

ARTICLE 10 - CHANGES IN THE WORK

10.1. Without invalidating the Agreement, OWNER may, at any time or from time to time, order additions, deletions or revisions in the Work; these will be authorized by Change Orders. Upon receipt of a Change Order, CONTRACTOR shall proceed with the Work involved. All such Work shall be executed under the applicable conditions of the Contract Documents. If any Change Order causes an increase or decrease in the Contract Price or an extension or shortening of the Contract Time, an equitable adjustment will be made as provided in Article 11 or Article 12 on the basis of a claim made by either party.

10.2. ENGINEER may authorize minor changes in the Work not involving an adjustment in the Contract Price or the Contract Time, which are consistent with the overall intent of the Contract Documents. These may be accomplished by a Field Order and shall be binding on OWNER, and also on CONTRACTOR who shall perform the change promptly. If CONTRACTOR believes that a Field Order justifies an increase in the Contract Price or Contract Time, CONTRACTOR may make a claim therefor as provided in Article 11 or Article 12.

10.3. Additional Work performed without authorization of a Change Order will not entitle CONTRACTOR to an increase in the Contract Price or an extension of the Contract Time, except in the case of an emergency as provided in paragraph 6.14 and except as provided in paragraphs 10.2 and 13.9.

10.4. OWNER may execute appropriate Change Orders covering changes in the Work which are required by OWNER, or required because of unforeseen physical conditions or emergencies, or because of uncovering Work found not to be defective or as provided in paragraph 11.9, or because of any other claim of CONTRACTOR for a change in the Contract Time or the Contract Price which is recommended by ENGINEER.

10.5. If notice of any change affecting the general scope of the Work or change in the Contract Price is required by the provisions of any Bond to be given to the Surety, it will be CONTRACTOR's responsibility to so notify the Surety, and the amount of each applicable Bond shall be adjusted accordingly. CONTRACTOR shall furnish proof of such adjustment to OWNER.

ARTICLE 11 - CHANGE OF CONTRACT PRICE

11.1. The Contract Price constitutes the total compensation (subject to authorized adjustments) payable by OWNER to CONTRACTOR for performing the Work. All duties, responsibilities and obligations assigned to or undertaken by CONTRACTOR shall be at his expense without change in the Contract Price.

11.2. The Contract Price may only be changed by a Change Order. Any claim for an increase in the Contract Price shall be based on written notice delivered to ENGINEER within fifteen days of the occurrence of the event giving rise to the claim. Notice of the amount of the claim with supporting data shall be delivered within forty-five days of such occurrence unless ENGINEER allows an additional period of time to ascertain accurate cost data.

11.3. The value of any Work covered by a Change Order or of any claim for an increase or decrease in the Contract Price shall be determined in one of the following ways:

11.3.1. Where the Work involved is covered by unit prices contained in the Contract Documents, by application of unit prices to the quantities of the items involved (subject to the provisions of paragraph 11.9).

11.3.2. By mutual acceptance of a lump sum.

11.3.3. On the basis of the Cost of the Work (determined as provided in paragraphs 11.4 and 11.5) plus a Contractor's Fee for overhead and profit (determined as provided in paragraph 11.6).

Cost of the Work:

11.4. The term Cost of the Work means the sum of all costs necessarily incurred and paid by CONTRACTOR in the proper performance of the Work. Except as otherwise may be agreed to in writing by OWNER, such costs shall be in amounts no higher than those prevailing in the locality of the Project, shall include only the following items and shall not include any of the costs itemized in paragraph 11.5:

11.4.1. Payroll costs for employees in the direct employ of CONTRACTOR in the performance of the Work under schedules of job classifications agreed upon in advance by OWNER and CONTRACTOR. Payroll costs for employees not employed full time on the Work shall be apportioned on the basis for their time spent on the Work. Payroll cost shall include, but not be limited to, salaries and wages plus the cost of fringe benefits which shall include social security contributions, unemployment, excise and payroll taxes, workers' compensation, health and retirement benefits, sick leave, vacation and holiday pay applicable thereto. Such employees shall include superintendents and foremen at the site.

11.4.2. Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and manufacturers' field services required in connection therewith. All cash discounts shall accrue to CONTRACTOR unless OWNER deposits funds with CONTRACTOR with which to make payments, in which case the cash discounts shall accrue to OWNER. All trade discounts, rebates and refunds, and all returns from sale of surplus materials

and equipment shall accrue to OWNER and CONTRACTOR shall make provisions so that they may be obtained.

11.4.3. Payments made by CONTRACTOR to the Subcontractors for Work performed by Subcontractors. CONTRACTOR shall obtain competitive bids from Subcontractors acceptable to CONTRACTOR and shall deliver such bids to OWNER who will then determine which bids will be accepted. If a subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work Plus a Fee, the Subcontractor's Cost of the Work shall be determined in the same manner as CONTRACTOR's Cost of the Work. All subcontracts shall be subject to the other provisions of the Contract Documents insofar as applicable.

11.4.4. Costs of special consultants (including, but not limited to, engineers, architects, testing laboratories, surveyors, lawyers and accountants) employed for services specifically related to the Work. Any such special consultants covered by the Consultants' Competitive Negotiations Act (Section 287.055, Florida Statutes), shall be selected in accordance with such Act.

11.4.5. Supplemental costs including the following:

11.4.5.1. The proportion of necessary transportation, travel and subsistence expenses of CONTRACTOR's employees incurred in discharge of duties connected with the Work.

11.4.5.2. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office and temporary facilities at the site and hand tools not owned by the workmen, which are consumed in the performance of the Work, and cost less market value of such items used but not consumed which remain the property of CONTRACTOR.

11.4.5.3. Rentals of all construction equipment and machinery and the parts thereof whether rented from CONTRACTOR or others in accordance with rental agreements approved by OWNER, and the costs of transportation, loading, unloading, installation, dismantling and removal thereof - all in accordance with terms of said rental agreements. The rental of any such equipment, machinery or parts shall cease when the use thereof is no longer necessary for the Work.

11.4.5.4. Sales, use or similar taxes related to the Work, and for which CONTRACTOR is liable, imposed by any government authority.

11.4.5.5. Deposits lost for causes other than CONTRACTOR's negligence, royalty payments and fees for permits and licenses.

11.4.5.6. Losses and damages (and related expenses), not compensated by insurance or otherwise, to the Work or otherwise sustained by CONTRACTOR in connection with the execution of the Work, provided they have resulted from causes other than the negligence of CONTRACTOR, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses shall include settlements made with the written consent and approval of OWNER. No such losses, damages and expenses shall be included in the Cost of the Work for the purpose of determining Contractor's Fee. If, however, any such loss or damage requires construction and CONTRACTOR is placed in charge thereof, CONTRACTOR shall be paid for services a fee proportionate to that stated in paragraph 11.6.2.

11.4.5.7. The cost of utilities, fuel and sanitary facilities at the site.

11.4.5.8. Minor expenses such as telegrams, long distance telephone calls, telephone service at the site, expressage and similar petty cash items in connection with the Work.

11.4.5.9. Cost of premiums for additional Bonds and insurance required because of changes in the Work.

11.5. The term Cost of the Work shall not include any of the following:

11.5.1. Payroll costs and other compensation of CONTRACTOR's officers, executives, principals (of partnership and estimators, lawyers, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks and other personnel employed by CONTRACTOR whether at the site or in his principal or a branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in subparagraph 11.4.1. - all of which are to be considered administrative costs covered by the Contractor's Fee.

11.5.2. Expenses of CONTRACTOR's principal and branch offices other than CONTRACTOR's office at the site.

11.5.3. Any part of CONTRACTOR's capital expenses, including interest on CONTRACTOR's capital employed for the Work and charges against CONTRACTOR for delinquent payments.

11.5.4. Cost of premiums for all Bonds and for all insurance whether or not CONTRACTOR is required by the Contract Documents to purchase and maintain the same (except for additional Bonds and insurance required because of changes in the Work).

11.5.5. Costs, including damages, due to the negligence of intentional acts of CONTRACTOR, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective Work, disposal of materials or equipment wrongly supplied and making good any damage to property.

11.5.6. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in paragraph 11.4.

Contractor's Fee:

11.6. The Contractor's Fee allowed to CONTRACTOR for overhead and profit shall be determined as follows:

11.6.1. A mutually acceptable fixed fee; or if none can be agreed upon,

11.6.2. A fee based on the following percentages of the various portions of the Cost of the Work;

11.6.2.1. For costs incurred under paragraphs 11.4.1. and 11.4.2., the Contractor's Fee shall be ten percent,

11.6.2.2. For costs incurred under paragraph 11.4.3., the Contractor's Fee shall be five percent; and if a subcontract is on the basis of Cost of the Work Plus a Fee, the maximum allowable to the Subcontractor as a fee for overhead and profit shall be ten percent, and

11.6.2.3. No fee shall be payable on the basis of costs itemized under paragraphs 11.4.4., 11.4.5. and 11.5.

11.7. The amount of credit to be allowed by CONTRACTOR to OWNER for any such change which results in a net decrease in costs, will be the amount of the actual net decrease. When both additions and credits are involved in any one change, the combined overhead and profit shall be figured on the basis of the net increase, if any.

Adjustment of Unit Prices:

11.8. Whenever the cost of any Work is to be determined pursuant to paragraphs 11.4. and 11.5., CONTRACTOR will submit in form acceptable to ENGINEER an itemized cost breakdown together with supporting data.

11.9. Where the quantity of Work with respect to any item that is covered by a unit price differs materially and significantly from the quantity of such Work indicated in the Contract Documents, an appropriate Change Order may be issued on recommendation of ENGINEER to adjust the unit price.

ARTICLE 12 - CHANGE OF THE CONTRACT TIME

12.1. The Contract Time may only be changed by a written Change Order. Any claim for an extension in the Contract Time shall be based on written notice delivered to ENGINEER within fifteen days of the occurrence of the event giving rise to the claim. Notice of the extent of the claim with supporting data shall be delivered within forty-five days of such occurrence unless ENGINEER allows an additional period of time to ascertain more accurate data. All claims for adjustment in the Contract Time shall be determined by ENGINEER if OWNER and CONTRACTOR cannot otherwise agree. Any change in the Contract Time resulting from any such claim shall be incorporated in a written Change Order.

12.2. The Contract Time will be extended in an amount equal to time lost due to delays beyond the control of CONTRACTOR if a claim is made therefor as provided in paragraph 12.1. Such delays shall include, but not be limited to, acts or neglect by OWNER or others performing additional Work as contemplated by Article 7, or fires, floods, labor disputes, epidemics, abnormal weather conditions, or acts of God.

12.3. All time limits stated in the Contract Documents are of the essence of the Agreement. The CONTRACTOR shall not be entitled to any claim for damages on account of hindrances or delays from any cause whatsoever, but if occasioned by an act of God, or by any act or omission

on the part of the Owner, such act, hindrance or delay may entitle the CONTRACTOR to an extension of time in which to complete the work which shall be determined by the ENGINEER, provided that the CONTRACTOR will give notice in writing of the cause of such act, hindrance or delay within ten (10) days after its occurrence.

ARTICLE 13 - WARRANTY AND GUARANTEE; TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK

Warranty and Guarantee:

13.1. CONTRACTOR warrants and guarantees to OWNER that all Work will be in accordance with the Contract Documents and will not be defective. Prompt notice of all defects shall be given to CONTRACTOR. All defective Work, whether or not in place, may be rejected, corrected or accepted as provided in this Article 13.

Access to Work:

13.2. ENGINEER and ENGINEER's representatives, other representatives of OWNER, testing agencies and governmental agencies with jurisdictional interests will have access to the Work at reasonable times for their observation, inspection and testing. CONTRACTOR shall provide proper and safe conditions for such access.

Tests and Inspections:

13.3. CONTRACTOR shall give ENGINEER timely notice of readiness of the Work for all required inspections, tests or approvals.

13.4. If any law, ordinance, rule, regulation, code, or order of any public body having jurisdiction requires any Work (or part thereof) to specifically be inspected, tested or approved, CONTRACTOR shall assume full responsibility therefor, pay all costs in connection therewith and furnish ENGINEER the required certificates of inspection, testing or approval. CONTRACTOR shall also be responsible for and shall pay all costs in connection with any inspection or testing required in connection with OWNER's acceptance of a manufacturer, fabricator, supplier, or distributor of materials or equipment proposed to be incorporated in the Work, or of materials or equipment submitted for approval prior to CONTRACTOR's purchase thereof for incorporation in the Work. The cost of all other inspections, tests and approvals required by the Contract Documents shall be paid by OWNER (unless otherwise specified).

13.5. All inspections, tests or approvals other than those required by law, ordinance, rule, regulation, code or order of any public body having jurisdiction shall be performed by organizations acceptable to OWNER and CONTRACTOR.

13.6. If any Work that is to be inspected, tested or approved is covered without written concurrence of ENGINEER, it must, if requested by ENGINEER, be uncovered for observation. Such uncovering shall be at CONTRACTOR's expense unless CONTRACTOR has given ENGINEER timely notice of CONTRACTOR's intention to cover such Work and ENGINEER

has not acted with reasonable promptness in response to such notice.

13.7. Neither observations by ENGINEER, nor inspections, tests or approvals by others shall relieve CONTRACTOR from his obligations to perform the Work in accordance with the Contract Documents, and in all events in no less than a workmanlike manner.

Uncovering Work:

13.8. If any Work is covered contrary to the written request of ENGINEER, it must, if requested by ENGINEER, be uncovered for ENGINEER's observation and replaced at CONTRACTOR's expense.

13.9. If ENGINEER considers it necessary or advisable that covered Work be observed by ENGINEER or inspected or tested by others, CONTRACTOR, at ENGINEER's request, shall uncover, expose or otherwise make available for observation, inspection or testing as ENGINEER may require, that portion of the Work in question, furnishing all necessary labor, material and equipment. If it is found that such Work is defective, CONTRACTOR shall bear all the expenses of such uncovering, exposure, observation, inspection and testing and of satisfactory reconstruction, including compensation for additional professional services, and an appropriate deductive Change Order shall be issued. If, however, such Work is not found to be defective, CONTRACTOR shall be allowed an increase in the Contract Price or an extension of the Contract Time, or both, directly attributable to such uncovering, exposure, observation, inspection, testing and reconstruction if he makes a claim therefor as provided in Articles 11 and 12.

Owner May Stop the Work:

13.10. If the Work is defective, or CONTRACTOR fails to supply sufficient skilled workmen or suitable materials or equipment, OWNER may order CONTRACTOR to stop the Work, or any portion thereof, until the cause of such order has been eliminated; however, this right of OWNER to stop the Work shall not give rise to any duty on the part of OWNER to exercise this right for the benefit of CONTRACTOR or any other party.

Correction or Removal of Defective Work:

13.11. If required by ENGINEER, CONTRACTOR shall promptly, without cost to OWNER and as specified by ENGINEER, either correct any defective Work, whether or not fabricated, installed or completed, or, if the Work has been rejected by ENGINEER, remove it from the site and replace it with nondefective Work.

One Year Correction Period:

13.12. If within one year after the date of Substantial Completion or such longer period of time as may be prescribed by law or by the terms of any applicable special guarantee required by the Contract Documents, any Work is found to be defective, CONTRACTOR shall promptly, without cost to OWNER and in accordance with OWNER's written instructions, either correct such defective Work, or, if it has been rejected by OWNER, remove it from the site and replace it with nondefective Work. If CONTRACTOR does not promptly comply with the terms of such

instructions, or in an emergency where delay would cause serious risk of loss or damage, OWNER may have the defective Work corrected or the rejected Work removed and replaced, and all direct and indirect costs of such removal and replacement, including compensation for additional professional services, shall be paid by CONTRACTOR.

Acceptance of Defective Work:

13.13. If, instead of requiring correction or removal and replacement of defective Work, OWNER prefers to accept it, OWNER may do so. In such case, if acceptance occurs prior to ENGINEER's recommendation of final payment, a Change Order shall be issued incorporating the necessary revisions in the Contract Documents, including appropriate reduction in the Contract Price; or, if the acceptance occurs after such recommendation, an appropriate amount shall be paid by CONTRACTOR to OWNER.

OWNER May Correct Defective Work:

13.14. If CONTRACTOR fails, within a reasonable time after written notice of ENGINEER to proceed, to correct and to correct defective Work or to remove and replace rejected Work as required by ENGINEER in accordance with paragraph 13.11., or if CONTRACTOR fails to perform the Work in accordance with the Contract Documents (including any requirements of the progress schedule), OWNER may, after seven days' written notice to CONTRACTOR, correct and remedy any such deficiency. In exercising his rights under this paragraph OWNER shall proceed expeditiously. To the extent necessary to complete corrective and remedial action, OWNER may exclude CONTRACTOR from all or part of the site, take possession of all or part of the Work, and suspend CONTRACTOR's services related thereto, take possession of CONTRACTOR's tools, appliances, construction equipment and machinery at the site and incorporate in the Work all materials and equipment stored at the site or for which OWNER has paid CONTRACTOR but which are stored elsewhere. CONTRACTOR shall allow OWNER, OWNER's representatives, agents and employees such access to the site as may be necessary to enable OWNER to exercise his rights under this paragraph. All direct and indirect costs of OWNER in exercising such rights shall be charged against CONTRACTOR in an amount verified by ENGINEER, and a Change Order shall be issued incorporating the necessary revisions in the Contract Documents and a reduction in the Contract Price. Such direct and indirect costs shall include, in particular but without limitation, compensation for additional professional services required and all costs of repair and replacement of work of others destroyed or damaged by correction, removal or replacement of CONTRACTOR's defective Work. CONTRACTOR shall not be allowed an extension of the Contract Time because of any delay in performance of the Work attributable to the exercise by OWNER of OWNER's rights hereunder.

ARTICLE 14 - PAYMENTS TO CONTRACTOR AND COMPLETION

Application for Progress Payment:

14.1. At least ten days before each progress payment falls due (but not more often than once a month), CONTRACTOR shall submit to ENGINEER for review an Application for Payment filled out and signed by CONTRACTOR covering the Work completed as of the date of the

Application and accompanied by such supporting documentation as is required by the Contract Documents and also as ENGINEER may reasonably require. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the site or at another location agreed to in writing, the Application for Payment shall also be accompanied by such data, satisfactory to OWNER, as will establish OWNER's title to the material and equipment and protect OWNER's interest therein, including applicable insurance. Each subsequent Application for Payment shall include an affidavit of CONTRACTOR stating that all previous progress payments received on account of the Work have been applied to discharge in full all of CONTRACTOR's obligations reflected in prior Applications for Payment. The amount of retainage with respect to progress payments will be as stipulated in the Form of Agreement, Article 5.

CONTRACTOR's Warranty of Title:

14.2. CONTRACTOR warrants and guarantees that title to all Work, materials and equipment covered by an Application for Payment, whether incorporated in the project or not, will pass to OWNER at the time of payment free and clear of all liens, claims, security interests and encumbrances (hereafter in these General Conditions referred to as "Liens").

Review of Applications for Progress Payment:

14.3. ENGINEER will, within ten days after receipt of each Application for Payment, either indicate in writing a recommendation of payment, or return the Application to CONTRACTOR indicating in writing ENGINEER's reasons for refusing to recommend payment. In the latter case, CONTRACTOR may make the necessary corrections and resubmit the Application. OWNER shall, within ten days of presentation to him of the ENGINEER's recommendation of payment, pay CONTRACTOR the amount recommended.

14.4. ENGINEER may refuse to recommend the whole or any part of any payment if, in his opinion, it would be incorrect to make such representations to OWNER. He may also refuse to recommend any such payment, or, because of subsequently discovered evidence or the results of subsequent inspections or tests, nullify any such payment previously recommended to such extent as may be necessary in ENGINEER's opinion to protect OWNER from loss because:

14.4.1. The Work is defective, or completed Work has been damaged requiring correction or replacement;

14.4.2. Written claims have been made against OWNER or Liens have been filed in connection with the Work;

14.4.3. The Contract Price has been reduced because of Modifications;

14.4.4. OWNER has been required to correct defective Work or complete the Work in accordance with paragraph 13.14;

14.4.5. Of CONTRACTOR's unsatisfactory prosecution of the Work in accordance with the Contract Documents, including failure to clean up;

14.4.6. Of liquidated damages payable by CONTRACTOR; or

14.4.7. CONTRACTOR's failure to make payment to Subcontractors, or for labor, materials or equipment.

Substantial Completion:

14.5. When CONTRACTOR considers the entire Work ready for its intended use CONTRACTOR shall, in writing to ENGINEER, certify that the entire Work is substantially complete and request that ENGINEER issue a certificate of Substantial Completion. Within a reasonable time thereafter, CONTRACTOR and ENGINEER shall make an inspection of the Work to determine the status of completion. If ENGINEER does not consider the Work substantially complete, ENGINEER will notify CONTRACTOR in writing giving his reasons therefor. If ENGINEER considers the Work substantially complete, ENGINEER will prepare a certificate of Substantial Completion which shall fix the date of Substantial Completion. There shall be attached to the certificate a list of items to be completed or corrected before final payment.

14.6. OWNER shall have the right to exclude CONTRACTOR from the Work after the date of Substantial Completion, but OWNER shall allow CONTRACTOR reasonable access to complete or correct items on the list.

Partial Utilization:

14.7. Use by OWNER of completed portions of the Work may be accomplished prior to Substantial Completion of all the Work subject to the following:

14.7.1. OWNER at any time may request CONTRACTOR in writing to permit OWNER to use any part of the Work which OWNER believes to be substantially complete and which may be so used without significant interference with construction of the other parts of the Work. If CONTRACTOR agrees, CONTRACTOR will certify to ENGINEER that said part of the Work is substantially complete and request ENGINEER to issue a certificate of Substantial Completion for that part of the Work. Within a reasonable time thereafter CONTRACTOR and ENGINEER shall make an inspection of that part of the Work to determine its status of completion. If ENGINEER does not consider that part of the Work to be substantially complete, ENGINEER will notify CONTRACTOR in writing giving his reasons therefor. If ENGINEER considers that part of the Work to be substantially complete, ENGINEER will execute and deliver to CONTRACTOR a certificate to that effect, fixing the date of Substantial Completion as to that part of the Work, attaching thereto a list of items to be completed or corrected before final payment. OWNER shall have the right to exclude CONTRACTOR from any part of the Work which ENGINEER has so certified to be substantially complete, but OWNER shall allow CONTRACTOR reasonable access to complete or correct items on the list.

14.7.2. In lieu of the issuance of a certificate of Substantial Completion as to part of the Work, OWNER may take over operation of a facility constituting part of the Work whether or not it is substantially complete if such facility is functionally and separately usable; provided that prior to any such takeover, OWNER and CONTRACTOR have agreed as to the division of responsibilities

between OWNER and CONTRACTOR for security, operation, safety, maintenance, correction period, heat, utilities and insurance with respect to such facility.

14.7.3. No occupancy of part of the Work or taking over of operations of a facility will be accomplished prior to compliance with the requirements of paragraph 5.14 with regard to property insurance.

Final Inspection:

14.8. Upon written notice from CONTRACTOR that the work is complete, ENGINEER will make a final inspection with CONTRACTOR and will notify CONTRACTOR in writing of all particulars in which this inspection reveals that the Work is incomplete or defective. CONTRACTOR shall immediately take such measures as are necessary to remedy such deficiencies.

Final Application for Payment:

14.9. After CONTRACTOR has completed all such corrections to the satisfaction of ENGINEER and delivered all maintenance and operating instructions, schedules, guarantees, Bonds, certificates of inspection, marked-up record documents and other documents - all as required by the Contract Documents, and after ENGINEER has indicated that the Work is acceptable (subject to the provisions of paragraph 14.13), CONTRACTOR may make application for final payment following the procedure for progress payments. The final Application for Payment shall be accompanied by all documentation called for in the Contract Documents and such other data and schedules as ENGINEER may reasonably require, together with complete and legally effective releases or waivers (satisfactory to OWNER) of all Liens arising out of or filed in connection with the Work. In lieu thereof and as approved by OWNER, CONTRACTOR may furnish receipts or releases in full; an affidavit of CONTRACTOR that the releases and receipts include all labor, services, material and equipment for which a Lien could be filed, and that all payrolls, material and equipment bills, and other indebtedness connected with the Work for which OWNER or his property might in any way be responsible, have been paid or otherwise satisfied; and consent of the Surety, if any, to final payment. If any Subcontractor, manufacturer, fabricator, supplier or distributor fails to furnish a release or receipt in full, CONTRACTOR may furnish a Bond or other collateral satisfactory to OWNER to indemnify OWNER against any Lien.

Final Payment and Acceptance:

14.10. If, on the basis of ENGINEER's observation of the Work during construction and final inspection, and ENGINEER's review of the final Application for Payment and accompanying documentation - all as required by the Contract Documents, ENGINEER is satisfied that the Work has been completed and CONTRACTOR has fulfilled all of his obligations under the Contract Documents, ENGINEER will, within ten days after receipt of the final Application for Payment, indicate in writing his recommendation of payment and present the Application for payment. Thereupon ENGINEER will give written notice to CONTRACTOR that the Work is acceptable subject to the provisions of paragraph 14.13. Otherwise, ENGINEER will return the Application to CONTRACTOR, indicating in writing the reasons for refusing to recommend final payment, in which case CONTRACTOR shall make the necessary corrections and resubmit the Application.

If the Application and accompanying documentation are appropriate as to form and substance, OWNER shall, within thirty days after receipt thereof pay CONTRACTOR the amount recommended by ENGINEER.

14.11. If, through no fault of CONTRACTOR, final completion of the Work is significantly delayed and if ENGINEER so confirms, OWNER shall, upon receipt of CONTRACTOR's final Application for Payment and recommendation of ENGINEER, and without terminating the Agreement, make payment of the balance due for that portion of the Work fully completed and accepted. If the remaining balance to be held by OWNER for Work not fully completed or corrected is less than the retainage stipulated in the Agreement, and if Bonds have been furnished as required in paragraph 5.1, the written consent of the Surety to the payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by CONTRACTOR to ENGINEER with the Application for such payment. Such payment shall be made under the terms and conditions governing final payment, except that it shall not constitute a waiver of claims.

CONTRACTOR's Continuing Obligation:

14.12. CONTRACTOR's obligation to perform and complete the Work in accordance with the Contract Documents shall be absolute. Neither recommendation of any progress or final payment by ENGINEER, nor the issuance of a certificate of Substantial Completion, nor any payment by OWNER to CONTRACTOR under the Contract Documents, nor any use or occupancy of the Work or any part thereof by OWNER, nor any act of acceptance by OWNER nor any failure to do so, nor the issuance of a notice of acceptability by ENGINEER pursuant to paragraph 14.10, nor any correction of defective Work by OWNER shall constitute an acceptance of Work not in accordance with the Contract Documents or a release of CONTRACTOR's obligation to perform the Work in accordance with the Contract Documents.

Waiver of Claims:

14.13. The making and acceptance of final payment shall constitute:

14.13.1. A waiver of all claims by OWNER against CONTRACTOR, except claims arising from unsettled or unfilled Liens, from defective Work appearing after final inspection pursuant to paragraph 14.8 or from failure to comply with the Contract Documents or the terms of any special guarantees specified therein; however, it shall not constitute a waiver by OWNER of any rights in respect of CONTRACTOR's continuing obligations under the Contract Documents; and

14.13.2. A waiver of all claims by CONTRACTOR against OWNER other than those previously made in writing and still unsettled or unfilled.

ARTICLE 15 - SUSPENSION OF WORK AND TERMINATION

Owner May Suspend Work:

15.1. OWNER may, at any time and without cause, suspend the Work or any portion thereof for a period of not more than ninety days by notice in writing to CONTRACTOR and Surety which

shall fix the date on which Work shall be resumed. CONTRACTOR shall resume the Work on the date so fixed. CONTRACTOR may be allowed an increase in the Contract Price or an extension of the Contract Time, or both, directly attributable to any suspension of work at OWNER's request if he makes a claim therefor as provided in Articles 11 and 12.

Owner May Terminate:

- 15.2. Upon the occurrence of any one or more of the following events:
 - 15.2.1. If CONTRACTOR is adjudged a bankrupt or insolvent;
 - 15.2.2. If CONTRACTOR makes a general assignment for the benefit of creditors;
 - 15.2.3. If a trustee or receiver is appointed for CONTRACTOR or for any of CONTRACTOR's property;
 - 15.2.4. If CONTRACTOR files a petition to take advantage of any debtor's act, or to reorganize under the bankruptcy or similar laws;
 - 15.2.5. If CONTRACTOR repeatedly fails to supply sufficient skilled workmen or suitable materials or equipment;
 - 15.2.6. If CONTRACTOR repeatedly fails to make prompt payments to Subcontractors or for labor, materials or equipment;
 - 15.2.7. If CONTRACTOR violates any laws, ordinances, rules, regulations or orders of any public body having jurisdiction;
 - 15.2.8. If CONTRACTOR disregards the authority of ENGINEER; or
 - 15.2.9. If CONTRACTOR otherwise violates in any substantial way any provisions of the Contract Documents.

OWNER may after giving CONTRACTOR and his Surety seven (7) days' written notice, terminate the services of CONTRACTOR, exclude CONTRACTOR from the site and take possession of the Work and of all CONTRACTOR's tools, appliances, construction equipment and machinery at the site and demand the Surety to finish the Work by whatever methods he may deem expedient but subject to the approval of OWNER. The Surety shall use the same to the full extent they could be used by CONTRACTOR (without liability to CONTRACTOR for trespass or conversion), incorporate in the Work all materials and equipment stored at the site or for which OWNER has paid CONTRACTOR but which are stored elsewhere, and finish the Work as OWNER may require. In such case CONTRACTOR shall not be entitled to receive any further payment until the Work is finished. If the unpaid balance of the Contract Price exceeds the direct and indirect costs of completing the Work, including compensation for additional professional services, such excess shall be paid to CONTRACTOR. If such costs exceed such unpaid balance, CONTRACTOR and the Surety shall be jointly and severally liable to pay the difference to OWNER. Such costs incurred by OWNER shall be incorporated in a Change Order, but in

finishing the Work OWNER shall not be required to accept the lowest figure for the Work to be performed by the Surety.

15.3. Where CONTRACTOR's services have been so terminated by OWNER, the termination shall not affect any rights of OWNER against CONTRACTOR or the Surety then existing or which may thereafter accrue. Any retention or payment of moneys due CONTRACTOR by OWNER will not release CONTRACTOR from liability.

15.4. Upon seven (7) days' written notice to CONTRACTOR and Surety, OWNER may, without cause and without prejudice to any other right or remedy, elect to abandon the Work and terminate the Agreement. In such case, CONTRACTOR shall be paid for all Work executed, any expense sustained plus reasonable termination expenses.

CONTRACTOR May Stop Work or Terminate:

15.5. If, through no act or fault of CONTRACTOR, the Work is suspended for a period of more than ninety (90) days by OWNER or under an order of court or other public authority, or ENGINEER fails to act on any Application for Payment within thirty (30) days after it is submitted, or OWNER fails for thirty days to pay CONTRACTOR any sum finally determined to be due, the CONTRACTOR may, upon seven (7) days' written notice to OWNER, terminate the Agreement and recover from OWNER payment for all Work executed and any expense sustained plus reasonable termination expenses. In addition and in lieu of terminating the Agreement, if ENGINEER has failed to act on an Application for Payment or OWNER has failed to make any payment as aforesaid, CONTRACTOR may upon seven (7) days' notice to OWNER stop the Work until payment of all amounts then due. The provisions of this paragraph shall not relieve CONTRACTOR of his obligations to carry on the Work in accordance with the progress schedule and without delay during disputes and disagreements with OWNER.

ARTICLE 16 - MISCELLANEOUS

Giving Notice:

16.1. Whenever any provision of the Contract Documents requires the giving of written notice it shall be deemed to have been validly given if delivered in person to the individual or to a member of the firm or to an officer of the corporation for whom it is intended, or if delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to the giver of the notice.

Computation of Time:

16.2. When any period of time is referred to in the Contract Documents by days, it shall be computed to exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or on a day made a legal holiday by the law of the applicable jurisdiction, such day shall be omitted from the computation.

General:

16.3. The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto, and, in particular but without limitation, the warranties, guarantees and obligations imposed upon CONTRACTOR by paragraphs 6.15, 13.1, 13.11, 13.14, 14.2, and 15.2, and all of the rights and remedies available to OWNER thereunder, shall be in addition to, and not in limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by law or contractor, by special warranty or guarantee or by other provisions of the Contract Documents, and the provisions of this paragraph shall be as effective as if repeated specifically in the contract Documents in connection with each particular duty, obligation, right and remedy to which they apply. All representations, warranties and guarantees made in the Contract Documents shall survive final payment and termination or completion of this Agreement.

Liquidated Damages:

16.4. OWNER and CONTRACTOR recognize that time is of the essence to complete this Project and that OWNER will suffer financial loss if the Work is not substantially complete within the time specified in Agreement, plus any extensions thereof allowed in accordance with Article 12. They also recognize the delays, expense and difficulties involved in proving in a legal proceeding the actual loss suffered by OWNER if the Work is not substantially complete on time. Accordingly, instead of requiring any such proof, OWNER and CONTRACTOR agree that as liquidated damages for delay (but not as a penalty) CONTRACTOR shall pay OWNER the amount stated in the Contract for each day that expires after the time specified in the Contract for Substantial Completion until the Work is substantially complete. After Substantial Completion, if CONTRACTOR shall neglect, refuse or fail to complete the remaining Work within the time specified in the Contract or any proper extension thereof granted by OWNER, CONTRACTOR shall pay the OWNER an amount equal to all actual expenses incurred by the OWNER as a direct result of the CONTRACTOR'S negligence, refusal, or failure to so complete the remaining Work. In the event the CONTRACTOR is terminated or abandons the Work prior to the scheduled date for final completion, the CONTRACTOR may be liable for both liquidated damages attributable to delay and for excess completion costs.

Reports of Investigations and Tests of Subsurface and Latent Physical Conditions:

16.5. Reports of investigations and tests of subsurface and latent physical conditions at the site or otherwise affecting cost, progress or performance of the work which have been relied upon by ENGINEER in preparing the Drawings and Specifications are as listed in the Supplementary Conditions. OWNER will make such reports available for inspection to any Bidder or copies may be obtained from the ENGINEER by the Bidder at reproduction cost. These reports are not guaranteed as to accuracy or completeness, nor are they part of the Contract Documents.

Performance of Work by CONTRACTOR:

16.6. Contract Assignment. The successful bidder (or bidders) will be required to perform the work as a prime contractor. CONTRACTOR shall not sublet, sell, transfer, assign or otherwise dispose of the contract or any portion thereof, or of his right, title, or interest therein. CONTRACTOR shall perform on the site and with his own organization work equivalent to not

less than fifty (50%) percent of the total dollar value of the work to be performed under this contract except that work designated in the Supplementary Conditions as specialty work may be performed by subcontractors and the cost of any such specialty work so performed by subcontracts may be deducted from the total contract amount before computing the amount of work required to be performed by CONTRACTOR with his own organization.

Limitation of Remedy and Liability:

16.7 Contractor and Owner expressly waive any claim for consequential damages against the other including but not limited to, a waiver of claims for diminished bonding capacity, loss of financing, loss of business reputation, lost profits on other projects or other lost opportunity damage claims.

Contractor expressly agrees that any claim (tort, contract, claim in equity, or otherwise) by Contractor for damages against Owner shall not exceed the total amount of the contract price, less any amounts actually paid to the Contractor by the Owner (or by an insurer of the Owner).

All liability of the City allegedly resulting from, arising out of or connected with this Agreement, or from the performance or breach thereof, shall terminate three years from the termination of this Agreement.

Waiver of Right to Jury Trial:

16.8 THE PARTIES HEREBY KNOWINGLY, VOLUNTARILY AND INTENTIONALLY WAIVE ANY RIGHT WHICH ANY PARTY MAY HAVE TO TRIAL BY JURY IN RESPECT OF ANY PROCEEDING, LITIGATION OR COUNTERCLAIM BASED ON, OR ARISING OUT OF, UNDER OR IN CONNECTION WITH THIS AGREEMENT OR ANY COURSE OF CONDUCT, COURSE OF DEALING, STATEMENTS (WHETHER VERBAL OR WRITTEN) OR ACTIONS OF ANY PARTY. IF THE SUBJECT MATTER OF ANY LAWSUIT IS ONE IN WHICH THE WAIVER OF JURY TRIAL IS PROHIBITED, NO PARTY TO THIS AGREEMENT SHALL PRESENT AS A NON-COMPULSORY COUNTERCLAIM IN ANY SUCH LAWSUIT ANY CLAIM BASED ON, OR ARISING OUT OF, UNDER OR IN CONNECTION WITH THIS AGREEMENT. FURTHERMORE, NO PARTY TO THIS AGREEMENT SHALL SEEK TO CONSOLIDATE ANY SUCH ACTION IN WHICH A JURY TRIAL CANNOT BE WAIVED.

END OF SECTION

SECTION 00800
SUPPLEMENTARY CONDITIONS

The following supplements modify, change, delete from, or add to the General Conditions of the Construction Contract (Section 00700). Where any article of the General Conditions is modified or any paragraph, subparagraph or clause thereof is modified or deleted by these supplements, the unaltered provisions of that article, paragraph, subparagraph or clause shall remain in effect.

ARTICLE 16 - MISCELLANEOUS

Section 16.5 – Reports of Investigations and Test of Subsurface and Latent Physical Conditions

Add the following subparagraph:

16.5.1 The list of reports of investigations and tests of subsurface and latent physical conditions as referred to in General Conditions Section 16.5 are as follows:

None

Add the following:

16.7 Minimum Requirements for the provision and maintenance of Payment and Performance Bonds, and Contractor's Insurance

In accordance with Resolution 2021-144 as it presently exists or may hereafter change, or applicable state, federal or local law, whichever is stricter, the following minimum requirements have been established:

A. Payment and Performance Bonds

1. Except as otherwise provided herein, the Contractor shall, prior to beginning performance, deliver to the City, and the City shall record in the public records of Volusia County, Florida, the Contractor's Payment and Performance Bond in an amount equal to the full amount of the Contract.
2.
 - (a) Payment and Performance Bonds shall not be required for any contract except those which are for the construction of a public building, for the prosecution and completion of a public work (as described in Section 180.06, **Florida Statutes**, as amended from time to time) or for repairs upon a public building or public work (as described in Section 180.06, **Florida Statutes**, as amended from time to time).
 - (b) With respect to those Contracts for which Payment and Performance Bonds are otherwise required:
 - i. Unless the City Manager, or designee, determines such Bond to be necessary to protect the interests of the City, no Contractor shall be

required to provide a Payment and Performance Bond for any Contract which is for \$25,000.00 or less.

- ii. Upon the request of the contractor, good cause shown by the Contractor, and a determination that the public health, safety and welfare will be sufficiently protected, the City Commission may exempt the contractor from the requirement of providing a Payment and Performance Bond for any Contract which is for more than \$25,000.00 but is less than \$200,000.00.
3. The Payment and Performance Bond shall list the Contractor as Principal and be issued by a surety insurer authorized to do business in Florida as a surety and listed as an acceptable surety in the Federal Register.
4. The Payment and Performance Bond shall be executed pursuant to Section 255.05, **Florida Statutes**, and be in a form substantially similar to the form set forth in Section 255.05(3), **Florida Statutes**.
5. The Payment and Performance Bond shall specifically provide coverage for delay damages due to a default by the Contractor.
6. The Payment and Performance Bond shall not make the Contract part of the Bond agreement.
7. In lieu of the Payment and Performance Bond, the Contractor may file with the Finance Director of the City, in an amount equal to the full amount of the Contract, cash, a money order, a certified check, a cashier's check, an irrevocable letter of credit, or a security of a type listed in Part II, Chapter 625, **Florida Statutes**.
8. In the event the surety on any Payment and Performance Bond furnished by the Contractor is declared bankrupt or becomes insolvent, or its right to do business in the State of Florida is terminated, the Contractor shall, within five (5) working days thereafter, substitute another Payment and Performance Bond and surety acceptable to the City.
9. The Contractor is totally and solely responsible for keeping its surety informed as to the Base Contract Price as bid, significant changes in the Project Scope, and the overall progress and completion of the Project for the entire life of the Contract.
10. The payment and performance bond requirements stated herein above shall not be applicable to service-related contracts unless otherwise determined by the City Manager in order to protect the health, safety and welfare of the general public.

B. Contractual Provisions Relative to Risk Management

All contracts for any public works to be performed, and service-related contracts, for or on behalf of the City shall include at a minimum, the following, or substantially similar, provisions:

1. Hold Harmless and Indemnity

The Contractor agrees to assume liability for and indemnify, hold harmless, and defend the City, its commissioners, mayor, officers, employees, agents, and attorneys of, from, and against all liability and expense, including reasonable attorney's fees, in connection with any and all claims, demands, damages, actions, causes of action, and suits in equity of whatever kind or nature, including claims for personal injury, property damage, equitable relief, or loss of use, to the extent caused by the negligence, recklessness, or intentionally wrongful conduct of the Contractor, its agents, officers, contractors, subcontractors, employees, or anyone else employed or utilized by the Contractor in the performance of this Contract. The Contractor's liability hereunder shall include all attorney's fees and costs incurred by the City in the enforcement of this provision.

2. Payment on Behalf of City

The Contractor shall pay all costs of the City's legal defense, as may be selected by the City, for all claims described in the Hold Harmless paragraph.

Such payment on behalf of the City shall be in addition to any and all other legal remedies available to the City and shall not be considered to be the City's exclusive remedy.

3. Loss Control/Safety

Precaution shall be exercised at all times by the Contractor for the protection of all persons, including employees and property. The Contractor shall comply with all applicable laws, regulations and ordinances related to safety and health, shall make special efforts to detect hazardous conditions, and shall take prompt action when loss control/safety measures are reasonably necessary.

The City may order work to be stopped if conditions exist that present an immediate danger to persons or property. The Contractor acknowledges that such work stoppage will not shift responsibility for any damages from the Contractor to the City.

4. Service Bond

For Service-related contracts only, the City may require the Contractor to secure a service bond with a minimum \$25,000 coverage limit for the period of the service agreement. The service bond covers dishonest acts of the contractor's employees against the City. A copy of the bond shall be provided to the City when the agreement commences.

Service-related contracts include and are not limited to businesses providing janitorial, pest control, general repair, security, carpet cleaning, locksmith,

temporary employment, painting, moving services or other contracts as determined in the discretion of the Risk Manager as necessary to minimize loss.

C. Contractor's Insurance

1. General

The Contractor, including service-related contractors, shall purchase and maintain for the entire life of the Project, including any and all approved time extensions, until its final acceptance by the City, such insurance as will protect the Contractor from claims under Workers' Compensation, disability benefit laws or other similar employee benefit laws; from claims for damages because of bodily injury, occupational sickness or disease, or death of Contractor's employees; from claims insured by usual or unusual injury liability coverage; from claims or injury to or destruction of tangible property and from claims insured by usual Commercial General Liability coverage. This includes loss of use resulting therefrom, any or all of which may arise out of the Contractor's operations under the Contract Documents, whether such operations be by the Contractor, by any Subcontractor, or by anyone directly or indirectly employed by any of them or for whose acts any of them may be legally liable. The Contractor's deductibles/self-insured retentions shall be disclosed to the City and may be disapproved by the City, and may be reduced or eliminated at the sole discretion of the City. The Contractor is responsible for the amount of any deductible or self-insured retention.

2. Types of Insurance and Limits of Liability

The insurance required herein shall be written for not less than any limits of liability specified and incorporated as part of the Contract Documents or as required by law, whichever is greater, and shall include and not limited to the following:

- (a)** Workers' Compensation Insurance in statutory limits for the State of Florida with Coverage B - Employer's Liability limits of not less than:

\$100,000 Each Accident Bodily Injury by Accident
\$100,000 Each Employee Bodily Injury by Disease
\$500,000 Policy Limit Bodily Injury by Disease

Certificate of Exemptions. If the contractor has a State-issued Certificate of Exemption, the contractor may provide a copy in place of the requirement for coverage. However, if the contractor subcontracts or retains any other person or entity to perform under the contract, that person or entity must provide proof of workers' compensation insurance as required by law or provide a Certificate of Exemption.

It is the intent of the City that any individual who either contracts directly with the city or performs any work on behalf of any such contractor be covered by workers' compensation insurance or have a valid exemption from said coverage.

(If applicable to the Project, the policy must include benefits under the United States Longshoremen's and Harbor Workers' Act and the Jones Act coverage--all maritime coverage.)

- (b) Commercial General Liability Insurance shall be written on a coverage form as broad as Insurance Services Office (ISO) Form CG 00 01 11 85, or its successor form, including but not limited to the following coverage (any deviation shall be noted on the Certificates of Insurance):
- a. Premises, Operations, Products and Completed Operations
 - b. Owners' & Contractors' Protective
 - c. Products & Completed Operation
 - d. Explosion, Collapse & Underground Conditions
 - e. Blanket Contractual Liability
 - f. Personal Injury Liability
 - g. Broad Form Property Damage Endorsement, including Completed Operations
 - h. Independent Contractors
 - i. Watercraft--Owned and Non-Owned (if applicable, endorsement must be included in General Liability policy or a separate Protection & Indemnity Policy must be written)
 - j. Pollution Liability (if applicable)
 - k. Asbestos Abatement (if applicable)
 - l. Fire Damage Liability

Certain coverage outlined above may not be required if they do not relate to the Project, as may be determined at the sole discretion of the City.

Commercial General Liability Coverage shall be written on an occurrence basis and the limits shall be no less and not limited to the following amounts:

Limits (not less than)

\$1 Million Each Occurrence
\$2 Million General Aggregate
\$1 Million Aggregate Products & Completed Operations

NOTE: Commercial General Liability Coverage must be purchased on either a project basis (separate policy per contract) or an endorsement allocating an aggregate limit per location or specified project.

- (c) Automobile Liability Insurance is required if an Automobile(s) is used in the performance of the contract.

ISO Symbol 1 (Any Auto), or alternatively a combination of Symbol 2 (Owned Autos), Symbol 8 (Hired Autos), and Symbol 9 (Non-Owned Autos), and limits shall be no less than:

\$1 Million	Combined Single Limit for Bodily Injury and Property Damage
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(d) Excess Liability

For contracts \$250,000 or greater an Excess Liability Policy of at least but not limited to \$1,000,000 in addition to the scheduled underlying policies for Commercial General Liability, Automobile Liability and Employers' Liability, the Contractor shall also provide an Excess Liability Policy with a maximum self-insured retention not to exceed \$25,0000 per occurrence.

(e) Builder's Risk

Contractor shall purchase Builder's Risk Insurance for any contracts that are deemed to be vertical construction on an All-Risk policy, and shall also include coverage for wind, hail, and named storm. Limits of coverage shall be at least and not limited to the value of the project.

**(f) Professional Liability, Malpractice and/or Errors and Omissions
(N/A for construction contracts)**

The Contractor shall purchase and maintain professional liability, malpractice, or errors or omissions insurance with minimum limits of \$1,000,000 per occurrence. If a claims made form of coverage is provided, the retroactive date of coverage shall be no later than the inception date of claims made coverage, unless the prior policy was extended indefinitely to cover prior acts. Coverage shall be extended beyond the policy year either by a supplemental extended reporting period (ERP) of as great a duration as is available, and with no less coverage and with reinstated aggregate limits, or by requiring that any new policy provides a retroactive date no later than the inception date of claims made coverage.

D. Requirements for Certificates of Insurance

1. With the execution of the Contract Documents, the Contractor, including service-related contractors, shall provide certificates of such insurance acceptable to the City. These certificates and insurance policies shall contain an endorsement that the coverage under the policies will not be canceled, non-renewed or materially changed until at least thirty (30) days' prior written notice of such cancellation, non-renewal or change (except for nonpayment of premium, which shall be ten (10) days) and a copy of the cancellation endorsement signed by an authorized representative of the insurer, be given to the City. The contractor shall be required to replace any expired or canceled policies in like amount and coverage to the satisfaction of the City. The Certificate of Insurance shall be the ACORD FORM

25-S (7/90), or its successor form, and shall be made a part of the Contract Documents.

2. New certificates of insurance shall be provided to the City at least fifteen (15) days prior to coverage renewals.
3. If requested by the City, the contractor shall immediately furnish complete copies of the Contractor's insurance policies, forms and endorsements.
4. For Commercial General Liability coverage the Contractor shall, at the option of the City, provide an indication of the amount of claims payments or reserves chargeable to the aggregate amount of liability coverage. If the Commercial General Liability form of coverage includes an annual aggregate limitation on the amount of insurance provided, a separate project aggregate limit may be required by the City for the given contract.
5. If the Contractor fails to obtain and maintain for the life of the Project the insurance required hereby or to replace any such expired or canceled policy, the City may obtain and maintain such insurance with such company as it deems satisfactory. Any amounts expended by the City in payment of premiums for such insurance shall be deducted by the City from the amount due the Contractor for the work covered by the Contract.

E. Policies of Insurance

1. Except as otherwise provided in this Exhibit, all insurance policies shall be issued by insurers licensed to do business in the State of Florida on an admitted basis or which is an eligible surplus lines insurer in the State of Florida, and any such insuring company is required to have a minimum financial rating of (A-), in the latest edition of "Best's Key Rating Guide", published by A. M. Best Co., Inc., or some similarly nationally recognized rating authority, including Standard and Poors and Demotech.
2. For Workers' Compensation coverage only, self-insurance programs are acceptable with a minimum A- rated reinsurance carrier; written confirmation is required.
3. All policies of insurance or certificates thereof referred to in this Exhibit shall be deposited with the City Clerk.
4. The City shall be named an Additional Insured on General Liability including products and completed operations and Automobile Liability policies of insurance and certificates thereof.

END OF SECTION

LIEN WAIVER

The undersigned does hereby certify that through _____, 20____, the undersigned has performed labor and/or furnished materials for the construction of the _____ located at _____ owned by _____, at a price of \$_____, and in consideration of the payment to the undersigned of such sum, the receipt of which is hereby acknowledged, the undersigned does hereby release and waive all liens and claims to liens which the undersigned may have as a result of the performance of such labor and/or the furnishing of such materials, and that the undersigned has paid in full for all materials purchased by the undersigned in connection with such project and for all labor furnished by the undersigned in connection with such project. The undersigned further certifies that the last date on which the undersigned furnished such labor and/or materials was _____, 20_____.

CONTRACTOR

By _____ DATE: _____

TITLE: _____

THE STATE OF _____

COUNTY OF _____

Before me, the undersigned authority, on this day personally appeared _____, the _____ of _____, a corporation, known to me to be the person and officer whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed, and as the act and deed of said corporation, and in capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this _____ day of _____, 20_____.

Notary Public in and for
said County and State

SECTION 01010 SUMMARY OF WORK

PART 1 - GENERAL

1.01 DESCRIPTION OF WORK

Work Covered by Contract Documents:

Work under this Contract is described as: **Orchard Lane Stormwater Drainage Improvements
Bid Number 2026-06**

Installation of approximately 400 LF of stormwater RCP and associated structures

The Specification Divisions and Drawings are an integrated part of the Contract Documents and as such will not stand alone if used independently as individual Sections, Divisions or Drawings sheets.

The Specifications and Drawings establish minimum standards of quality for this project. They do not purport to cover all details entering into the design and construction of materials or equipment.

The CONTRACTOR is advised that the equipment arrangements as shown on the drawings may vary with different manufacturers and the CONTRACTOR is responsible at no cost to the OWNER for making the changes necessary to accommodate the specific equipment installed.

Omission of a specific item or component part of a system obviously necessary for the proper functioning of the system shall not relieve the CONTRACTOR of the responsibility of furnishing the item as part of the work at no additional cost to the OWNER.

Contracts:

Construct work under a single, unit price contract.

1.02 QUALITY ASSURANCE

Laws and Regulations:

The CONTRACTOR shall give all notices and comply with all laws, ordinances, rules and regulations applicable to the work. If the CONTRACTOR observes that the Specifications or Drawings are at variance therewith, the CONTRACTOR shall give the ENGINEER prompt written notice thereof, and any necessary changes shall be adjusted by an appropriate modification. If the CONTRACTOR performs any work knowing or having reason to know that it is contrary to such laws, ordinances, rules and regulations, and without such notice to ENGINEER, the CONTRACTOR shall bear all costs arising therefrom; however, it shall not be the CONTRACTOR's primary responsibility to make certain that the Specifications and Drawings are in accordance with such laws, ordinances, rules and regulations.

1.03 JOB CONDITIONS

Taxes:

The CONTRACTOR shall pay all sales, consumer, use and other similar taxes required to be paid by him in accordance with the law of the place of the project.

Permits and Business Tax Receipts:

The CONTRACTOR shall obtain and pay for all construction permits and business tax receipts. The OWNER shall assist the CONTRACTOR, when necessary, in obtaining such permits and business tax receipts. The CONTRACTOR shall provide OWNER with copies of all permits prior to commencing work.

The CONTRACTOR shall pay all charges of utility service companies for connections to the work, and the OWNER shall pay all charges of such companies for capital costs related thereto.

It shall be the responsibility of the CONTRACTOR to verify the existence of all necessary permits and business tax receipts prior to the start of work. The OWNER will obtain permits involving interagency agreements, i.e., State Highway Crossing Permits, Railroad Crossing Permits, and similar permits.

Fees for building permits and impact fees are the responsibility of CONTRACTOR.

The CONTRACTOR and each Subcontractor must be Registered with Volusia County or with the City of Ormond Beach. Requirements for registering a business are as follows:

STATE CERTIFIED CONTRACTORS

1. Register with Volusia County Contractor Licensing (386-248-8158)

OR

2. Provide City with:
Copy of local business tax receipt (where your business is located)
Copy of State License (if applicable)
Certificate of Insurance

For additional information regarding registration, permits or business tax receipts, please call:
(386) 610-0540

Labor, Materials and Equipment:

The CONTRACTOR shall provide competent, suitably qualified personnel to survey and lay out the work and perform construction as required by the Contract Documents. The CONTRACTOR shall at all times maintain good discipline and order at the site. Except in connection with the safety or protection of persons or the work or property at the site or adjacent thereto, and except as otherwise indicated in the Supplementary Conditions, all work at the site shall be performed during regular working hours, and the CONTRACTOR will not permit overtime work or the performance of work on Saturday, Sunday or any legal holiday without the OWNER's written consent given after prior written notice to the ENGINEER.

Unless otherwise shown, the CONTRACTOR shall furnish all materials, equipment, labor transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water and sanitary facilities and all other facilities and incidentals necessary for the execution, testing, initial operation and completion of the work.

The CONTRACTOR shall be responsible for all materials furnished by him and shall replace at his own expense all such material found to be defective in manufacture or damaged in handling. This shall include the furnishing of all material and labor required for the replacement of installed material discovered defective prior to the final acceptance of the work.

Contractor Use of Premises:

The CONTRACTOR shall confine construction equipment, the storage of materials and equipment and the operations of workmen to areas permitted by law, ordinances, permits or the requirements of the Contract Documents, and shall not unreasonably encumber the premises with construction equipment or other materials or equipment.

The CONTRACTOR shall not enter upon private property for any purpose without first securing the permission of the property owner in writing and furnishing the ENGINEER with a copy of said permission. This requirement will be strictly enforced, particularly with regard to such vacant properties as may be utilized for material storage.

The CONTRACTOR shall conduct his work in such a manner as to avoid damage to adjacent private or public property. Any damage to existing structures or work of any kind, including permanent reference markers or property corner markers, or the interruption of utility service, shall be repaired or restored promptly at no additional expense to the OWNER.

The CONTRACTOR shall preserve and protect all existing vegetation such as trees, shrubs and grass on or adjacent to the site which do not reasonably interfere with the construction, as determined by the ENGINEER. The CONTRACTOR will be responsible for all unauthorized cutting or damaging of trees and shrubs, including damage due to careless operation of equipment, stockpiling of materials or tracking of grass by equipment. The CONTRACTOR will be liable for, or will be required to replace or restore at no additional expense to the OWNER, all vegetation not protected or preserved as required herein that may be destroyed or damaged.

The CONTRACTOR will not be required to move or remove any utilities except as specifically required by the Drawings and Specifications.

During the progress of the work, the CONTRACTOR shall keep the premises free from accumulations of waste materials, rubbish and other debris resulting from work. At the completion of the work, the CONTRACTOR shall remove all waste materials, rubbish and debris from and about the premises as well as all tools, appliances, construction equipment and machinery, and surplus materials, and shall leave the site clean and ready for occupancy by the OWNER. The CONTRACTOR shall restore to their original condition those portions of the site not designated for alteration by the Contract Documents.

The CONTRACTOR shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall the CONTRACTOR subject any part of the work or adjacent property to stresses or pressures that will endanger it.

Subsurface Reports:

None.

Notification of Construction:

The CONTRACTOR shall notify, in writing, all residents and businesses adjacent to the project work area of pending construction no later than 48 hours prior to commencement of actual construction. Copies of the written Notice shall be provided to the ENGINEER for approval of wording prior to public distribution.

Notification of Street Closure:

The CONTRACTOR is required to obtain permission from the City Engineer prior to initiating street closures.

In the event a street closure is required, the CONTRACTOR shall notify, in writing, all emergency services and agencies, residents and businesses directly effected by any partial or full street closure caused by the construction no later than 48 hours prior to actual closure.

Below is a list of the agencies that are required to be notified in the event of a street closure:

<u>Agency:</u>	<u>Contact phone number:</u>
EVAC Ambulance Service	(386) 252-4911
Ormond Beach City Hall	(386) 610-0400
Ormond Beach Fire Dept. Administration	(386) 229-7090
Ormond Beach Police Dept. Dispatch	(386) 229-7120
Ormond Beach Public Works Department	(386) 610-0700
Ormond Beach Postmaster (US Postal Service)	(386) 676-0693
Volusia County School Board - Transportation	(386) 258-4677
Volusia County VOTRAN	(386) 756-7496

If a **County** or **State Road** is to be closed, add the following agencies to the list:

Volusia County Department of Public Works	(386) 239-6535
Volusia County Emergency Management	(386) 254-1500
Volusia County Fire Services	(386) 254-4657
Florida Highway Patrol Dispatch	(407) 737-2200

If the closure will last longer than 5 days, the CONTRACTOR shall also notify the general public of such closures by placing an advertisement in the "Area" section of the local newspaper no later than 48 hours prior to the closure. The advertisement shall include information describing the extent of the closure (i.e. between which streets; detour routes, etc.), the date the closure will begin, and estimated date the road will be reopened. Provide a copy of the proposed notification, for approval by the ENGINEER, before placing the advertisement.

The CONTRACTOR shall maintain full compliance with the traffic regulations found in Paragraph 1.06, Section 01500 of this Contract.

Contractor's Hours of Operation:

Except in the event of an emergency, no work shall be done between the hours of 7:00 P.M. and 7:00 A.M., or on Saturdays and Sundays. If the proper and efficient execution of the work requires operations during the night or on week-ends, the written permission of the ENGINEER shall be obtained prior to starting such items of the work.

PART 2 - PRODUCTS

(Not Applicable)

PART 3 - EXECUTION

(Not Applicable)

END OF SECTION

SECTION 01025 MEASUREMENT AND PAYMENT

PART 1 - GENERAL

1.01 DESCRIPTION OF WORK

This section defines the method which will be used to determine the quantities of work performed or materials supplied and establishes the basis upon which payment will be made.

1.02 ESTIMATED QUANTITIES

Where quantities are shown they are approximate and are given only as a basis of calculation upon which the award of the Contract is to be made. OWNER or ENGINEER do not assume any responsibility that the final quantities, nor shall CONTRACTOR claim misunderstanding because of such estimate of quantities. Final payment will be made only for the satisfactorily completed quantity of each item.

1.03 MEASUREMENT STANDARDS

All work completed under the Contract shall be measured according to United States Standard Methods.

1.04 METHOD OF MEASUREMENT

Measurement of Length:

Unless otherwise specified for the particular items involved, all measurements of distance for items to be paid for on the basis of length shall be taken horizontally or vertically.

Measurement of Area:

In the measurement of items paid for on the basis of area of finished work, the lengths and/or widths to be used in the calculations shall be the actual dimensions measured along the surface of the completed work within the neat lines shown or designated. At intersections, the measurement used for length of side area will be measured from the outside edge of the width allowed along the main trench.

1.05 PAYMENT

Lump Sum Items:

Where payment for items is shown to be paid for on a lump sum basis, no separate payment will be made for any item of work required to complete the lump sum item within the limits of work shown or specified.

Unit Price Items:

Where payment for items is shown to be paid for on a unit price basis, separate payment will be made for the items of work described herein and listed on the Bid Form. Any related work not specifically listed, but required for satisfactory completion of the work, shall be considered to be included in the scope of the appropriate listed work items.

1.06 COSTS INCLUDED IN PAYMENT ITEMS

No separate payment will be made for the following items and the cost of such work shall be included in the applicable pay items of work.

- Clearing and grubbing (including disposal of material).
- Trench excavation, including necessary pavement removal and removal of vegetative surfaces.
- Dewatering and disposal of surplus water.
- Structural fill, backfill, and grading.
- Replacement of unpaved roadways, grass and shrubbery plots.
- Cleanup.
- Foundation and borrow materials, except as hereinafter specified.
- Testing and placing system in operation.
- Any material and equipment required to be installed and utilized for tests.
- Pipe, structures, pavement replacement, restoration and/or appurtenances included within the limits of lump sum work, unless otherwise shown.
- Maintaining or detouring of the traffic.
- Appurtenant work as required for a complete and operable system.
- Surface restoration including removal and replacement of trees (under 4-inch diameter), shrubs, and sod disturbed by construction activities.
- Relocation and/or replacement of irrigation systems disturbed by construction.
- Relocation and/or replacement of mail boxes disturbed by construction.
- Furnishing adequate sanitary facilities for workers.
- Adjustment of valve boxes.
- Supporting of existing utilities during construction

Cleanup:

CONTRACTOR's attention is called to the fact that cleanup is considered a part of the work of construction. No payment will be made until cleanup is essentially complete.

At the end of each week of construction, the CONTRACTOR shall perform cleaning of the work site, to the satisfaction of the Owner, before proceeding to the next week's scheduled work.

Work Outside Authorized Limits:

No payment will be made for work constructed outside the authorized limits of work.

1.07 APPLICATIONS FOR PAYMENT

Applications for payment shall be prepared by the CONTRACTOR and submitted to the ENGINEER in accordance with the schedule established by the Conditions of the Contract and the Agreement. The applications for payment shall be submitted in the number and form established by the ENGINEER at the Preconstruction Conference. The form shall be completely filled out and executed by an authorized representative of the CONTRACTOR. Supporting data such as schedules of stored materials shall be attached to each copy of the application.

1.08 CHANGE ORDER PROCEDURE

As defined in the General Conditions, a Change Order is a written order to the CONTRACTOR signed by the OWNER authorizing an addition, deletion or revision in the Work, or an adjustment in the Contract Price or the Contract Time which is issued after the execution of the Agreement.

The following procedure shall be used in processing Change Orders:

For Additions to the Work:

The OWNER shall issue a written order to the CONTRACTOR directing him to accomplish the additional work. The CONTRACTOR shall review the order and if he feels that the additional work entitles him to additional payment or additional time, he may submit a claim as prescribed in the Conditions of the Contract.

For Deletions From the Work:

The OWNER shall issue a written order to the CONTRACTOR directing him to make the change. If the OWNER feels that the Contract price should be reduced as a result of the change, the OWNER shall make a claim for the reduction as provided in the Conditions of the Contract.

Cost of the changes in the work shall be determined in accordance with the requirements spelled out in the Conditions of the Contract. Modifications to incorporate the changes in cost will be made as the amount of any change is determined.

PART 2 - PRODUCTS

(Not Applicable)

PART 3 - EXECUTION

3.01 BID ITEMS

Bid Item No. 1 Mobilization/Demobilization

Definition. Mobilization shall be the preparatory work and operations in mobilizing for beginning work on the project, including, but not limited to, those operations necessary for the movement of personnel, equipment, supplies and incidentals to the project site, and for the establishment of temporary offices, buildings, safety equipment and first aid supplies, sanitary and other facilities, as required by the Contract Documents and applicable laws and

regulations. The cost of bonds, required insurance, permits and any other preconstruction expense necessary for the start of work, excluding the cost of construction materials, shall also be included in this item. Demobilization shall be the work of removing temporary facilities from the site.

Payment. Partial payments for this item will be made in accordance with the following schedule:

<u>Percent of Original Contract Amount Earned</u>	<u>Allowable Percent of the Lump Sum Price for the Item</u>
Contract Approval	25
10	50
25	75
50	100

These payments will be subject to the standard retainage provided in the agreement. Payment of the retainage will be made after successful completion of the work and demobilization.

Bid Item No. 2 Install Catch Basin

Measurement: Measurement under this item shall be for the proper installation of each catch basin as shown in the drawings and listed in the bid form.

Payment: Payment of the Contract unit price shall be full compensation for furnishing all plant, labor materials and equipment necessary to install each catch basin.

Bid Item No. 3 Install 15" RCP Stormwater Drainage Pipe

Measurement: Measurement under this item shall be furnishing and installing Traffic Rated Reinforced Concrete Pipe (RCP) as shown on the Drawings and listed in the Bid Form.

Payment: Payment of the applicable unit price per linear foot shall be full compensation for furnishing all plant, labor, materials and equipment necessary to furnish and install 15" Traffic Rated reinforced concrete pipe (RCP).

Bid Item No. 4 Deflect 4" Reclaim Line

Measurement: Measurement under this item shall be for the deflection of the 4" reclaim line as shown on the Drawings and listed in the Bid Form.

Payment: Payment of the Contract lump sum shall be full compensation for furnishing all plant, labor materials and equipment necessary to deflect the 4" reclaim water line.

Bid Item No. 3 Roadway Mill & Resurface

Measurement: The quantity to be paid for shall be the number of square yards of cutting and patching completed and accepted. In determining the quantity, the length to be used in the calculation shall be the actual length measured along the surface of the asphalt, and the width

shall be the width measured along the surface of the asphalt. The material used for asphalt, base course and sub-base shall be approved by the ENGINEER.

Payment: Payment for removing of existing asphalt, base course and sub-grade within the existing driveways and replacing with new asphalt, base course and sub-base, as shown on the Drawings and listed in the bid items, shall be made at the Contract unit price per square yard and shall be full compensation for all labor, material and equipment necessary to complete the work. Payment shall include full compensation for saw cutting, excavation, and removal, and grading, mixing, compaction, preparation of base course, sub-base and construction of asphalt.

Bid Item No. 6 Restoration

Payment: Payment of the applicable lump sum price shall be full compensation for all plant, labor, materials, and equipment necessary to restore the construction site to its original state. Work shall include all restoration within the project area including, but not limited to, repair and replacement of residential sprinkler system piping and sprinkler heads disturbed by construction; replacement or transplanting of landscape trees, shrubs, bushes, flowers, garden plants, rock, decorative borders; mailboxes; yard lights or retaining walls and removal and replacement of any wooden, metal, or plastic fencing.

Bid Item No. 7 Hold FPL Utility Pole

An allowance is established to reimburse costs associated with securing any affected FPL utility pole(s). ***This will be paid at actual cost. Allowance will be used solely based upon prior, written approval from the Owner and Engineer.***

END OF SECTION

SECTION 01040 COORDINATION

PART 1 - GENERAL

1.01 PROJECT COORDINATION

A. The Contractor shall provide for the complete coordination of the construction efforts. This shall include, but not necessarily be limited to, coordination of the following:

1. the work of subcontractors
2. the flow of material and equipment from suppliers
3. the interrelated work with public utilities companies
4. the interrelated work with the Owner where tie-ins to existing facilities are required
5. the effort of independent testing agencies.

B. The Contractor will be allowed the widest practicable latitude in establishing his work plan. Contractor shall submit a plan of work to Owner and Engineer.

1.02 CUTTING AND PATCHING

A. The Contractor shall do all cutting, fitting and patching of his work that may be required to make its several parts come together properly and integrate with such other work. The Contractor shall not endanger any work of others by cutting, excavating or otherwise altering their work and will only cut or alter their work with the written consent of the Engineer and the others whose work will be affected.

PART 2 - MATERIALS AND EQUIPMENT

(Not Applicable)

PART 3 - EXECUTION

(Not Applicable)

END OF SECTION

SECTION 01050 FIELD ENGINEERING

PART 1 - GENERAL

1.01 DESCRIPTION OF WORK

The Contractor shall provide and pay for field engineering service required for the project. Such work shall include survey work to establish lines and levels and to locate and lay out site improvements, structures, and controlling lines and levels required for the construction of the work. Also included are such Engineering services as are specified or required to execute the Contractor's construction methods. Engineers and Surveyors shall be licensed professionals under the laws of the state where the project is located.

1.02 GRADES, LINES AND LEVELS

Existing basic horizontal and vertical control points for the project are those designated on the Drawings. The Contractor shall locate and protect control points prior to starting site work and shall preserve all permanent reference points prior to starting site work and shall preserve all permanent reference points during construction. In working near any permanent property corners or reference markers, the Contractor shall use care not to remove or disturb any such markers. In the event that markers must be removed or are disturbed due to the proximity of the construction work, the Contractor shall have them referenced and reset by a Land Surveyor qualified under the laws of the state of the project.

1.03 LAYOUT DATA

The Contractor shall lay out the work at the location and to the lines and grades shown on the Drawings. Survey notes indicating the information and measurements used in establishing locations and grades shall be kept and furnished with the record drawings for the project.

PART 2 - PRODUCTS

(Not Applicable)

PART 3 - EXECUTION

(Not Applicable)

END OF SECTION

01050-1

SECTION 01200 PROJECT MEETINGS

PART 1 - GENERAL

1.01 DESCRIPTION OF WORK

Project meetings shall be scheduled as needed throughout the progress of the work. Those responsible for scheduling the meetings shall prepare the agenda, distribute written notice of each meeting not less than four days in advance of the meeting date, make physical arrangements for the meeting, preside at the meeting, record the minutes (include all significant proceedings and decisions), and reproduce and distribute copies of the minutes to all participants, all parties affected by decisions made, and the Engineer.

Representatives attending the meetings shall be qualified and authorized to act on behalf of the entities they represent.

1.02 PRE CONSTRUCTION CONFERENCE

Before the Contractor starts the work at the site, the Engineer will schedule a preconstruction conference which will be held for review and acceptance of the schedules referred to in Section 01300, to establish procedures for handling shop drawings and other submittals and for processing Applications for Payment, and to establish a working understanding among the parties as to the work.

The date for the start of construction shall be established at this conference.

PART 2 - PRODUCTS

(Not Applicable)

PART 3 - EXECUTION

(Not Applicable)

END OF SECTION

01200-1

SECTION 01300 SUBMITTALS

PART 1 - GENERAL

1.01 DESCRIPTION OF REQUIREMENTS

The type of submittal requirements specified in this section include the following:

- Progress Schedules and Reports
- Product Data
- Shop Drawings
- Manufacturer's Data
- Miscellaneous

Submittals shall be clear and legible, printed or typed. Submittals received that are not so, shall be returned to be resubmitted when in legible form.

1.02 PROGRESS SCHEDULES AND REPORTS

Within 10 days after the effective date of the Agreement, the Contractor shall submit to the Engineer for review and acceptance an estimated progress schedule indicating the starting and completion dates of the various stages of the work, a preliminary schedule of shop drawing submissions, and a preliminary schedule of values of the work. Include subschedules of related activities which are essential to its progress.

Revised schedules shall be submitted periodically as changes become apparent.

Unless other format or use of a network analysis system is required, schedules shall be prepared in the form of a horizontal bar chart. A separate horizontal bar shall be provided for each trade or operation. The first work day of each week shall be identified on the horizontal time scale. Scale and spacing will be such as to allow space for notations and revisions.

Schedules shall show the complete sequence of construction by activity with dates for the beginning and completion of each major element of construction. Projected percentage of completion for each item as of the first day of each month shall be shown.

Progress Reports:

The Contractor shall prepare and submit a monthly progress report. The report shall indicate the progress at the date of submission of each activity shown on his progress schedule. It shall show changes occurring since previous submissions, activities modified since previous submissions, and revised projections of progress and completion. The submittal shall include a narrative report to define: problem areas, anticipated delays, and the impact on the schedule, and corrective action recommended and its effect.

1.03 PRODUCT DATA (Shop Drawings and Manufacturer's Data)

The Contractor shall prepare and submit to the Engineer a schedule of the shop drawings, product data and samples which are required for the work together with anticipated submittal time. Any drawings which require critical timing for maintaining delivery or construction schedules shall be so noted. Shop drawing submittal schedule shall be coordinated with the requirements of construction progress schedules.

Those submittals required under various sections of the specifications, but not listed on the Contract Submittal List shall be submitted as "RECORD SUBMITTALS" and given to the Engineer along with the Record Drawings as specified in Section 01700 - Contract Closeout.

Product data submitted for substitutions shall be handled as specified in Section 01630 - Substitutions and Product Options.

Definitions:

Work-related submittals of this section are categorized for convenience as follows:

Shop drawings include specially-prepared technical data for this project, including drawings, diagrams, performance curves, data sheets, schedules, templates, patterns, reports, calculations, instructions, measurements and similar information not in standard printed form for general application to several projects.

Product data include standard printed information on materials, products and systems; not specially-prepared for this project, other than the designation of selections from among available choices printed in the information.

Miscellaneous submittals related directly to the work (non-administrative) include warranties, maintenance agreements, workmanship bonds, project photographs, survey data and reports, physical work records, quality testing and certifying reports, copies of industry standard, record drawings, field measurement data, operating and maintenance materials, overrun stock, and similar information, devices and materials applicable to the work and not processed as shop drawings, product data or samples.

1.04 GENERAL SUBMITTAL REQUIREMENTS

After checking and verifying all field measurements, the Contractor shall submit to the Engineer for review and approval, in accordance with the accepted schedule of shop drawing submissions, five copies of all shop drawings, which shall have been checked by and stamped with the approval of the Contractor and identified as the Engineer may require. The data shown on the shop drawings will be complete with respect to dimensions, design criteria, materials of construction and like information to enable the Engineer to review the information as required.

The Contractor shall also submit to the Engineer for review and approval with such promptness as to cause no delay in work, all samples required by the Contract Documents. All samples will have

been checked by and stamped with the approval of the Contractor, identified clearly as to material, manufacturer, and pertinent catalog numbers and the use for which intended. At the time of each submission, the Contractor shall, in writing, call the Engineer's attention to any deviations that the shop drawings or samples may have from the requirements of the Contract Documents.

The Engineer will review and approve with reasonable promptness shop drawings and samples, but the Engineer's review and approval shall be only for conformance with the design concept of the project and for compliance with the information given in the Contract Documents and shall not extend to means, methods, sequences, techniques or procedures of construction or to safety precautions or programs incident to the work. The review and approval of a separate item as such will not indicate approval of the assembly in which the item functions. The Contractor shall make any corrections required by the Engineer and shall return the required number of corrected copies of shop drawings and resubmit new samples for review and approval. The Contractor shall direct specific attention, in writing, to revisions other than the corrections called for by the Engineer on previous submittals. The Contractor's stamp of approval on any shop drawing or sample shall constitute a representation to the Owner and the Engineer that the Contractor has either determined and verified all quantities, dimension, field construction criteria, materials, catalog numbers, and similar data or assumes full responsibility for doing so, and that the Contractor has reviewed or coordinated each shop drawing or sample with the requirements of the work and the Contract Documents.

Where a shop drawing or sample is required by the Specifications, no related work shall be commenced until the submittal has been reviewed and approved by the Engineer.

The Engineer's review and approval of shop drawings or samples shall not relieve the Contractor from responsibility for any deviations from the Contract Documents unless the Contractor has in writing called the Engineer's attention to such deviations at the time of submission and the Engineer has given written concurrence and approval to the specific deviation, nor shall any concurrence or approval by the Engineer relieve the Contractor from responsibility for errors or omissions in the shop drawings.

Systems to be submitted in the shop drawing submittal shall include but not necessarily be limited to:

1. Each item of equipment and/or materials listed in the project equipment and material schedules;

Certifications:

Whenever a standard of quality is established by a reference specification, the Contractor shall submit a certificate by the manufacturer that the material supplied meets the requirements of both the project and reference specification.

Schedule of Values:

At least 10 days prior to submitting the first Application for a progress payment, the Contractor shall submit to the Engineer a schedule of values of the work. This schedule shall be satisfactory in form and substance to the Engineer. The schedule of values shall include quantities and unit prices aggregating the contract price, and shall subdivide the work into component parts in sufficient detail to serve as the basis for progress payments during construction. Upon acceptance of the schedule of values by the Engineer, it shall be incorporated into a form of Application for Payment acceptable to the Engineer.

Where estimated quantities and unit prices are shown in the Bid Form as the basis of payment, the quantities shown in the Bid Form are approximate and are given only as a basis of calculation upon which the award of the contract is to be made. The Owner or Engineer do not assume any responsibility that the final quantities will remain in accordance with estimated quantities, nor shall the Contractor claim misunderstanding or deception because of such estimate of quantities. Final payment will be made on the basis of the actual completed quantities of each item.

PART 2 - PRODUCTS

(Not Applicable)

PART 3 - EXECUTION

(Not Applicable)

END OF SECTION

**SECTION 01340
SHOP DRAWINGS**

PART 1 -GENERAL

1.01 REQUIREMENTS INCLUDED

- A. The Contractor shall submit to the Engineer for review and approval, such working drawings, shop drawings, test reports and data on materials and equipment, and certificates and affidavits as are required for the proper control of work, including but not limited to those working drawings, shop drawings, data and samples for materials and equipment specified elsewhere in the Specifications and in the Contract Drawings.
- B. Within twenty (20) calendar days after the effective date of the agreement, The Contractor shall submit to the Engineer a complete materials list of preliminary data on items for which shop drawings are to be submitted. Included in this materials list shall be the names of all proposed manufacturers furnishing specified items. Review of this list by the Engineer shall in no way be expressed or implied relief to the Contractor from submitting complete shop drawings and providing material, equipment, etc., fully in accordance with the specifications. This procedure is required in order to expedite final review of shop drawings.
- C. The Contractor shall maintain an accurate updated submittal log and will bring this log to each scheduled progress meeting with the Owner and the Engineer. This log shall include the following items:
 - 1. Submittal – Description and Number assigned.
 - 2. Date to Engineer
 - 3. Date returned to Contractor (from Engineer).
 - 4. Status of Submittal (Approved, Approved as Noted, Not Approved/Resubmit).
 - 5. Date of resubmittal and return (as applicable).
 - 6. Date material release (for fabrication).
 - 7. Projected date of fabrication.
 - 8. Projected date of delivery to site.
 - 9. Status of O&M manuals submitted.
 - 10. Specification Section.
 - 11. Drawings Sheet Number.

1.02 CONTRACTOR'S RESPONSIBILITY

- A. It is the duty of the Contractor to check all drawings, data and samples prepared by or for him before submitting them to the Engineer for review. Each and every copy of the drawings and data shall bear Contractor's stamp and signature showing that they have been so checked. Shop drawings submitted to the Engineer without the Contractor's stamp and signature will be returned to the Contractor for conformance with this requirement. Shop drawings shall indicate any deviations in the submittal from requirements of the Contract Documents. If the Contractor takes exception to the specifications, the Contractor shall note the exception in the letter of transmittal to the Engineer. Shop drawings submittals shall not be used as a vehicle for requesting approval of substitute or alternative equipment and materials. Substitution requests will be considered only when submitted in accordance with the applicable provisions of Section 01600.
- B. Determine and Verify:
 - 1. Field measurements
 - 2. Field construction criteria
 - 3. Catalog numbers and similar data
 - 4. Conformance with Specifications
- C. The Contractor shall furnish the Engineer a schedule of Shop Drawing submittals fixing the respective dates for the submission of shop and working drawings, the beginning of manufacture, testing and installation of materials, supplies and equipment. This schedule shall indicate those that are critical to the progress schedule.
- D. The Contractor shall not begin any of the work covered by a drawing, data, or a sample returned for correction until a revision or correction thereof has been reviewed and returned to him, by the Engineer, with approval.
- E. The Contractor shall submit to the Engineer all drawings and schedules sufficiently in advance of construction requirements to provide no less than thirty (30) calendar days for checking and appropriate action from the time the Engineer receives them.
- F. All submittals shall be accompanied by a transmittal letter prepared in duplicate containing the following information:

1. Date
 2. Project title and number
 3. Contractor's name and address
 4. The number of each shop drawing, product data, and sample submitted
 5. Notification of deviations from contract documents
 6. Submittal log number conforming to specification section numbers.
- G. The Contractor shall submit four (4) copies of descriptive or product data submittals to complete shop drawings for the Engineer plus the number of copies which the Contractor requires returned. The Engineer will retain four (4) sets.
- H. The Contractor shall be responsible for and bear all costs of damages which may result from the ordering of any material or from proceeding with any part of work prior to the completion of the review by Engineer of the necessary shop drawings.
- I. The Contractor shall be fully responsible for observing the need for and making any changes in the arrangement of piping, connections, wiring, manner of installation, etc., which may be required by the materials/equipment he proposed to supply both as pertaining to his own work and any work affected under other parts, headings, or divisions of Drawings and Specifications.

1.03 ENGINEER'S REVIEW OF SHOP DRAWINGS

- A. The Engineer's review of drawings, data and samples submitted by the Contractor will cover only general conformity to the specifications, external connections, and dimensions which affect the installation. The Engineer's review and exceptions, if any, will not constitute an approval of dimensions, quantities, and details of the material, equipment, device or item shown.
- B. The review of drawings and schedules will be general, and shall not be construed:
1. as permitting any departure from the Contract requirements;
 2. as relieving the Contractor of responsibility of any errors, including details, dimensions and materials;
 3. As approving departures from details furnished by the Engineer, except as otherwise provided herein.
- C. If the drawings or schedules as submitted describe variations and show a departure from the contract requirements which Engineer finds to be in the interest of the Owner and to be so minor as not to involve a change in contract price or time for

performance, the Engineer may return the reviewed drawings without noting an exception.

- D. When reviewed by the Engineer, each of the shop drawings will be identified as having received such review being so stamped and dated. Shop drawings stamped “NOT APPROVED/RESUBMIT” and with required corrections shown will be returned to the Contractor for correction and resubmittal.
- E. Resubmittals will be handled in the same manner as first submittals. On resubmittals the Contractor shall direct specific attention, in writing or on resubmitted shop drawings, to revisions other than the corrections requested by the Engineer on previous submissions. The Contractor shall make any corrections required by the Engineer.
- F. If the Contractor considers any correction indicated on the drawings to constitute a change to the contract drawings or specifications, the Contractor shall give written notice thereof to the Engineer.
- G. Shop drawings and submittal data shall be reviewed by the Engineer for each original submittal and first resubmittal; thereafter review time for subsequent resubmittals shall be charged to the Contractor in accordance with the terms of the Engineer’s agreement with the Owner.
- H. When the shop drawings have been completed to the satisfaction of the Engineer, the Contractor shall carry out the construction in accordance therewith and shall make not further changes therein except upon written instructions from the Engineer.
- I. No partial submittals will be reviewed. Submittals not complete will be returned to the Contractor for resubmittal. Unless otherwise specifically permitted by the Engineer, make all submittals in groups containing all associated items for:
 - 1. Systems
 - 2. Processes
 - 3. As indicated in the specifications sections. All drawings, schematics, manufacturer’s product data, certifications and other shop drawing submittals required by a system specification shall be submitted at one time as a package to facilitate interface checking.

1.04 SHOP DRAWINGS

- A. When used in the Contract Documents, the term “shop drawings” shall be considered to mean Contractor’s plans for materials and equipment which become

an integral part of the project. These drawings shall be completed and detailed. Shop drawings shall consist of fabrication, erection and setting drawings and schedule drawings, manufacturer's scale drawing, and wiring and control diagrams. Cuts, catalogs, pamphlets, descriptive literature, and performance and test data, shall be considered only as supportive to required shop drawings as defined above. As used herein, the term "manufactured" applied to standard units usually mass produced; and "fabricate" means items specifically assembled or made out of selected materials to meet individual design requirements.

- B. Manufacturer's catalog sheets, brochures, diagrams, illustrations and other standard descriptive data shall be clearly marked to identify pertinent materials, product or models. Delete information which is not applicable to the work by striking or cross-hatching.
- C. Drawings and schedules shall be checked and coordinated with the work of all trades involved, before they are submitted for review by the Engineer and shall bear the Contractor's stamp of approval as evidence of such checking and coordination. Drawings or schedules submitted without this stamp of approval shall be returned to the Contractor for resubmission.
- D. Each shop drawing shall have a blank area located adjacent to the title block. The title block shall display the following:
 - 1. Project title and number
 - 2. Name of project building or structure
 - 3. Number and title of the shop drawing
 - 4. Date of shop drawing or revision
 - 5. Name of Contractor and subcontractor submitting drawing
 - 6. Supplier/manufacturer
 - 7. Separate detailer when pertinent
 - 8. Specification section
 - 10. Drawing number
- E. If drawings show variations from contract requirements because of standard shop practice or for other reasons, the Contractor shall describe such variations in his letter of transmittal. If acceptable, proper adjustment in the contract shall be implemented where appropriate. If the Contractor fails to describe such variations,

he shall not be relieved of the responsibility for executing the work in accordance with the contract, even though such drawings have been reviewed.

- F. Data on materials and equipment include, without limitation, materials and equipment lists, catalog data sheets, cuts, performance curves, diagrams materials of construction and similar descriptive material. Materials and equipment lists shall give, for each item thereon, the name and location of the supplier or manufacturer, trade name, catalog reference, size, finish and all other pertinent data.
- G. For all mechanical and electrical equipment furnished, the Contractor shall provide a list including the equipment name, and address and telephone number of the manufacturer's representative and service company so that service and/or spare parts can be readily obtained.
- H. All manufacturers or equipment suppliers who are proposed to furnish equipment or products shall submit an installation list to the Engineer along with the required shop drawings. The installation list shall include at least five (5) installations where identical equipment has been installed and has been in operation for a period of at least (1) year.
- I. Only the Engineer will utilize the color "red" in marking shop drawing submittals.
- J. Final, approved shop drawings shall be provided in pdf format.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

END OF SECTION

SECTION 01380
CONSTRUCTION PHOTOGRAPHS

PART 1 - GENERAL

1.01 SCOPE OF WORK

- A. Scope of Work: The Contractor shall employ a competent photographer to take construction record photographs and video recording prior to start of work and periodically during the course of the Work.

1.02 PHOTOGRAPHY REQUIRED

- A. Digital photographs shall be taken in conformance with this Section shall be furnished to the Engineer with each pay request. Failure to comply will result in rejection of pay request.
- B. Digital photographs shall be taken at each of the major stages of construction and as directed by the Engineer.
- C. Digital photographs may be taken by the Contractor's personnel but must be of professional quality as herein specified. Photographs which are deemed unsatisfactory will be rejected and retakes will be required.
- D. Views and Quantities Required:
 - 1. Contractor shall supply Digital pictures on a minimum 4 GB USB Flash Drive. One (1) view of each activity, as directed by the Resident Project Representative, up to a limit of ten activities photographed per month.
 - 2. One (1) Digital picture of five (5) views of overall Project site monthly including any change of condition, any structural changes, relocation, and all conflicts with utilities, as directed by the Resident Project Representative.
- E. Digital pictures shall contain and comply with the following:
 - 1. The Contractor shall maintain all Digital copies of photos for the entire Project and then shall convey the disks to the Owner at the completion of the Project.
 - 2. All disks shall be properly labeled with project name, project number, project start and end dates, Contractor's name, and Owner's name for which work was completed.

3. The photographer shall agree to furnish additional disks to Owner and the Engineer at commercial rates applicable at time of purchase.

1.03 COST OF PHOTOGRAPHY

- A. The Contractor shall pay costs for specified Digital photography and any required prints.

PART 2 - PRODUCTS

2.01 DIGITAL PHOTOGRAPH AND/OR PRINTS

- A. Type of Print (if required):
 1. Paper: Single weight, color print paper.
 2. Finish: Smooth surface, glossy.

Size: 4 inch x 6 inch for construction photos.
- B. Identify each photograph with the following (each print shall have information listed on back of each photograph and digital pictures shall have coordinating log sheet with information):
 1. Name of project
 2. Orientation of view
 3. Date and time of exposure
 4. Name and address of photographer
 5. Each photograph shall be numbered in consecutive order.

Note: Digital prints shall be used to clarify as-builts.

PART 3 - EXECUTION

3.01 TECHNIQUE

- A. Factual Presentation.
- B. Correct exposure and focus.
 1. High resolution and sharpness (minimum 800 DPI)
 2. Maximum depth-of-field
 3. Minimum distortion

3.02 VIEWS REQUIRED

- A. Digital photographs shall adequately illustrate condition of construction and state of progress.

1. At successive periods of photography, take at least one digital photograph from the same overall view as previously photographed.
2. Consult with the Engineer at each period of digital photography for instructions concerning views required.

3.03 DELIVERY OF PRINTS

- A. Deliver photographs, on USB Flash Drive with coordinating log, to the Engineer as attachment to Application for Payment. (Flash Drive will become property of Engineer and/or Owner).
- B. Distribution of construction photographs, as soon as processed, is anticipated to be as follows:
 1. Engineer one (1) set.
 2. Project record file one (1) set to be stored by Contractor until the end of the project which shall be delivered with Project Record Documents.
 3. Contractor one (1) set.

PART 4 – CONSTRUCTION VIDEO RECORDING

4.01 SCOPE OF WORK

- A. Furnish all labor, materials and equipment to furnish color audio video recording of the project site as specified herein.
- B. Furnish to the Engineer an original and one copy of a continuous color audio video recording on DVD around the entire project site. The recording shall be taken prior to any construction activity.
- C. The Engineer reserves the right to reject the audio video recording because of poor quality, unintelligible audio or uncontrolled pan or zoom. Any DVD rejected by the Engineer shall be redone at no cost to the Owner. Under no circumstances shall construction begin until the Engineer has received and accepted the audio video DVD(s).
- D. The recording shall be performed by a qualified, established audio video recording firm, knowledgeable in construction practices which have a minimum of one (1) year experience in the implementation of established inspection procedures.

4.02 COLOR AUDIO VIDEO SURVEY

- A. Complete coverage shall include all surface features located within the project site, easement areas, and adjacent private properties covering the extent of the project site to be utilized by the Contractor and will be supported by appropriate audio description made simultaneously with video coverage. Such coverage shall include, but not be limited to, all existing driveways, sidewalks, curbs, ditches, roadways including viaducts, landscaping, trees, culverts, headwalls, and retaining walls, and buildings located within the area. Video coverage shall extend to the maximum height of all structures within this zone.
- B. All recording shall be done during times of good visibility. No recording shall be done during periods of visible precipitation, or when more than ten percent of the ground area is covered with standing water, unless otherwise authorized by Owner.

4.03 AUDIO AND VIDEO

- A. Contractor shall furnish continuous color, audio-video DVD(s) of professional quality.
- B. Pre and post construction recording should be recorded on a DVD –R disk, 4.7 gigabits, recorded in SP mode (120 mins) or better (HQ,HSP), disk must be finalized with no editing of information and must be properly marked with date, location, contractors name, job site, and name of Videographer. The date and time stamp must be visible at all times on image and disk must be stored in an individual sleeve.
- C. Each DVD shall begin with the Owner’s name, Contract name and number, Contractor’s name, date and location information such as street name, direction of travel, viewing side, etc.
- D. Information appearing on the DVD must be continuous and run simultaneously by computer generated transparent digital information. No editing or overlaying of information at a later date will be acceptable.
- E. Digital information will be as follows:
 - 1. Upper left corner
 - a) Name of Contractor
 - b) Day, date and time
 - c) Name of project
 - 2. Lower left corner
 - a) Route of travel
 - b) Viewing side
 - c) Direction of travel
 - d) Stationing

- F. Time must be accurate and continuously generated.
- G. Engineering station numbers must be continuous, be accurate and correspond to project stationing. The symbols should be the standard engineering symbols (i.e. 16+64).
- H. Written documentation must coincide with the information on the DVD so as to make easy retrieval of location sought for at a later date.
- I. The video system shall have the capability to transfer individual frames of video electronically into hard copy prints or photography negatives.
- J. Audio shall be recorded at the same time as the video recording and shall have the same information as on the viewing screen. Special commentary will be given for unusual conditions of buildings, sidewalks and curbing, foundations, trees and shrubbery, etc.
- K. All DVDs and boxes shall bare labels with the following information:
 - 1. Recording Number
 - 2. Owner's Name
 - 3. Date of Recording
 - 4. Project Name and Number
 - 5. Location and Standing Limit of DVD
- L. Prior to commencement of audio video recording, the contractor shall notify the Engineer in writing when and where the audio video recording will begin. The Engineer may provide a designated representative to accompany and oversee coverage of all recording operations. Audio video recording completed without an Engineer representative present will be unacceptable unless specifically authorized by the Engineer.

END OF SECTION

SECTION 01400 QUALITY CONTROL

PART 1 - GENERAL

1.01 TESTING LABORATORY SERVICES

Arrangements for testing laboratory services will be made by the Owner. Payment for testing to show compliance with specified requirements will be paid for by the Owner. The cost for tests, when materials and workmanship fail to meet specified requirements (failed tests), will be billed directly to the Contractor by the soils testing laboratory, or deducted from monies due the Contractor.

1.02 INSPECTION SERVICES

The authorized representative of all applicable Federal and/or State agencies, including Environmental Protection Agency, Corps of Engineers and Department of Environmental Regulation, shall be permitted to inspect all work, materials, payrolls, records of personnel, invoice of materials, and other relevant data and records. The Owner and his authorized representatives shall be permitted free access and every reasonable facility for the inspection of all work and materials, including the removal or uncovering of such portions of the finished work as may be directed. The Owner and his authorized representative shall also be permitted to inspect payrolls, invoices of materials and other relevant data and records.

1.03 INSPECTION OF WORK AWAY FROM SITE

If work to be done away from the construction site is to be inspected on behalf of the Owner during its fabrication, manufacture or testing or before shipment, the Contractor shall give notice to the Engineer of the time and place where such fabrication, manufacturing, testing or shipping is to be done. Such notice shall be in writing and delivered to the Engineer in ample time so that the necessary arrangements for the inspection can be made.

PART 2 - PRODUCTS

(Not Applicable)

PART 3 - EXECUTION

(Not Applicable)

END OF SECTION

01400-1

SECTION 01500 TEMPORARY FACILITIES AND CONTROLS

PART 1 - GENERAL

1.01 DESCRIPTION OF REQUIREMENTS

This section specifies the minimum requirements for temporary facilities, utilities to be brought to the site, refuse/waste collection and control required to enable the construction of the project to progress adequately. The providing of adequate facilities at every stage of performing the work is the Contractor's sole responsibility, and is not limited by the requirement of this section.

Except as otherwise indicated, the Contractor may, at his option, provide stand-alone utility plants to provide needed services, in lieu of connected services from available public utilities, provided such stand-alone plant facilities comply with governing regulations. Prior to availability of temporary utility services, provide trucked-in/trucked-out containerized or unitized services for startup of construction operations at the site.

Except as otherwise indicated, the costs of providing and using temporary utility services are included in the Contract Sum.

1.02 TEMPORARY FACILITIES

The types of utility services required for general temporary use at the project site include the following (other specific services may be required for specific construction methods or operations):

- Electrical Power Service
- Water Service (potable for certain uses)
- Sanitary
- Storm Sewer or Open Drainage/Run-off Control
- Refuse/Waste Collection

Temporary Electricity:

The Contractor shall make necessary applications and arrangements and pay all fees and charges for electrical energy for power and light necessary for proper completion of the work and during its entire progress up to time of final acceptance by the Owner. The Contractor shall provide and pay for all temporary switches, connections and meters.

Temporary Water:

The Contractor shall make all necessary application and arrangements, and pay all fees and charges for water necessary for the proper completion of the project up to the time of final acceptance. The Contractor shall provide and pay for any temporary piping and connections.

Temporary Sanitary Facilities:

The Contractor shall provide adequate sanitary facilities for the use of those employed on the work. Such facilities shall be made available when the first employees arrive on the site of the work, shall be properly secluded from public observation, and shall be constructed and maintained during the progress of the work in suitable numbers and at such points and in such manner as may be required or approved.

The Contractor shall provide these portable sanitary facilities “on-site” for use by workers. Transporting workers to the nearest “public” sanitary facility will not be considered an acceptable alternative to these requirements.

The Contractor shall maintain the sanitary facilities in a satisfactory and sanitary condition at all times and shall enforce their use. He shall rigorously prohibit the committing of nuisances on the site of the work, on the lands of the Owner, or on adjacent property. The cost of providing these sanitary facilities shall be included in the Contractor’s applicable pay items of work and no separate payment shall be made thereof.

Temporary Refuse/Waste Collection

The Contractor shall provide for adequate refuse/waste collection and disposal. City Ordinance requires that all rental open-top rolloff container units or rental cubic-yard container units must be procured from one of the City’s franchised construction and demolition debris providers. For a list of the City’s current Franchised Providers, please call Public Works at 386-676-3220.

It will be the Contractor’s responsibility to make all necessary arrangements for refuse/waste collection and disposal. The cost of providing for such refuse/waste collection and disposal shall be included in the Contractor’s applicable pay items of work and no separate payment shall be made thereof.

Termination and Removal:

At the time the need for temporary utility service or a substantial portion thereof has ended, or when its service has been replaced by use of permanent services, or not later than the time of substantial completion, promptly remove the installation unless requested by the Engineer to retain it for a longer period. Complete and restore work which may have been delayed or affected by the installation and use of the temporary utility, including repairs to construction and grades and restoration and cleaning of exposed surfaces. Replace work damaged beyond acceptable restoration.

1.03 TEMPORARY CONTROLS

Noise Control:

The Contractor shall provide adequate protection against objectionable noise levels caused by the operation of construction equipment.

Dust Control:

The Contractor shall provide for adequate protection against raising objectionable dust clouds caused by moving construction equipment, high winds or any other cause.

Water Control:

The Contractor shall provide for satisfactory disposal of surplus water and shall submit a plan to the Engineer for his review prior to initiation and implementation of the plan. Prior approval shall be obtained from the proper authorities for the use of public or private lands or facilities for such disposal.

Pollution Control:

The Contractor shall provide for adequate protection against polluting any public or private lands, lakes, ponds, rivers, streams, creeks, and other such areas, by the disposal of surplus material in the form of solids, liquids, or gases or from any other cause. The Contractor shall provide for adequate refuse/waste collection and disposal as described in Part 1, paragraph 1.02 of this Section.

The Contractor shall evaluate and assess the impact of any adverse effects on the natural environment which may result from construction operations and shall operate to minimize pollution of air, ground or surface waters vegetation, and afford the neighboring community the maximum protection during and up to completion of the construction project.

The Contractor shall take sufficient precautions to prevent pollution of streams, lakes and reservoirs with fuels, oils, bitumens, calcium chloride or other harmful materials. He shall conduct and schedule his operations so as to avoid or otherwise prevent pollution of siltation of streams, lakes and reservoirs and to avoid interference with movement of migratory fish.

All chemicals used during project construction or furnished for project operation, whether herbicide, pesticide, disinfectant, polymer, reactant or of other classification, must show approval of either EPA or USDA. Use of all such chemicals and disposal of residues shall be in strict conformance with instructions.

Erosion Control:

The Contractor shall not expose, by construction operations, a larger area of erosive land at any one time than the minimum necessary for efficient construction operations, and the duration of exposure of the uncompleted construction to the elements shall be as short as practicable.

Erosion control features shall be constructed concurrently with other work and at the earliest practicable time.

1.04 STORAGE FACILITIES

All products, materials and equipment shall be stored in accordance with the manufacturer's instructions, with seals and labels intact and legible. Products subject to damage by the elements shall be stored in weathertight enclosures. Temperature and humidity shall be maintained within the ranges required by the manufacturer's instructions. Fabricated products shall be stored above the

ground on blocking or skids. Products which are subject to deterioration shall be covered with impervious coatings with adequate ventilation to avoid condensation. Loose granular materials shall be stored in a well-drained area on solid surfaces to prevent mixing with foreign matter. Any products which will come in contact with potable water shall be stored off the ground so as to prevent contamination.

Storage shall be arranged in such a manner to provide easy access for inspection. Periodic inspections shall be made of all stored products to assure that they are maintained under specified conditions, and free from damage or deterioration.

After installation, Contractor shall provide substantial coverings as necessary to installed products to protect from damage from traffic and subsequent construction operations. Coverings shall be removed when no longer needed.

1.05 PRESERVATION OF PROPERTY

Preserve from damage all property along the line of the work, or which is in the vicinity of or in any wise affected by the work, the removal or destruction of which is not called for by the plans. Wherever such property is damaged due to the activities of the Contractor, it shall be immediately restored to its original condition by the Contractor at no cost to the Owner.

In case of failure on the part of the Contractor to restore such property, or make good such damage or injury, the Owner may, after 48 hours notice to the Contractor, proceed to repair, rebuild or otherwise restore such property as may be deemed necessary and the cost thereof will be deducted from any monies due or which may become due the Contractor under this Contract.

The Contractor shall be responsible for the protection of property, in the areas in the vicinity of the project; and for the protection of his equipment, supplies, materials and work, against any damage resulting from the elements, such as flooding, by rainstorm, wind damage, or other elemental cause resulting from the project configuration. The Contractor shall take all precautions against any such damage occurrence, and shall be responsible for damage resulting from same. The Contractor shall provide adequate drainage facilities, tie-downs, or other protection, throughout the Contract period, for the protection of his, the Owner's, and other properties from such damage.

1.06 TRAFFIC REGULATION

Signs, marking barricades and procedures shall conform to the requirements of the Florida Department of Transportation Manual on Traffic Controls and Safe Practices for Street and Highway Construction, Maintenance and Utility Operations.

The Contractor shall maintain one-lane, two-way traffic at all times and maintain customer access to local businesses at all times throughout the course of the work.

The Contractor shall provide and maintain adequate barricades, construction signs, torches, flashers, guards and flagmen as required in pedestrian and vehicular traffic areas. Regulations of local authorities shall be complied with.

The contractor shall provide suitable crossings at street intersections and driveways, and supply such aid as may be required for pedestrians and motorists, including delivery vehicles, to safely negotiate the construction areas.

The Contractor shall carry on the work in a manner that will cause the least interruption in traffic. Closing to through travel of more than two consecutive blocks, including the cross streets intersected will not be permitted without specific authorization from the local authorities. Where traffic must cross open trenches, the Contractor shall provide suitable bridges at street intersections and driveways and provide adequate ingress and egress to dwellings, business facilities, utilities and services. At any time the streets are required to be closed, the Contractor shall notify, in writing, law enforcement agencies, fire departments, and parties operating emergency vehicles before the street is closed and again as soon as it is opened. Access to fire hydrants and other fire extinguishing equipment shall be provided and maintained at all times. Refer to Section 01010 of these Specifications for "Notification of Construction" and "Notification of Street Closure" requirements.

On completion of work, the Contractor shall remove all debris, excess materials, barricades and temporary work leaving walkways and road clear of obstructions.

PART 2 - PRODUCTS

(Not Applicable)

PART 3 - EXECUTION

(Not Applicable)

END OF SECTION

SECTION 01600 MATERIALS AND EQUIPMENT

PART 1 - GENERAL

1.01 DESCRIPTION OF REQUIREMENTS

Materials and equipment furnished by CONTRACTOR shall be new and shall not have been in service at any other installation unless otherwise provided. Materials and equipment shall conform to applicable specifications and standards and comply with the size, make, type and quality specified, or as specifically approved in writing by ENGINEER.

Manufactured and fabricated items shall be designed, fabricated and assembled in accordance with the best engineering and shop practices. Like parts of duplicate units shall be manufactured to standard sizes and gauges to be interchangeable.

Two or more things of the same kind shall be identical, by the same manufacturer.

Materials and equipment shall be suitable for service conditions shown or specified.

Equipment which requires auxiliary devices or equipment in order to operate properly shall have such auxiliary devices or equipment included as a part of its system.

Equipment sizes, capacities and dimensions shown or specified shall be adhered to unless variations are specifically approved in writing.

Materials and equipment shall not be used for any purpose other than that for which it is designed or is specified.

Where existing materials or equipment is specifically shown or specified to be reused in the work, special care shall be used in removal, handling, storage, and reinstallation, to assure proper function in the completed work.

CONTRACTOR shall arrange for transportation, storage and handling of products which require off-site storage, restoration or renovation.

Salvaged Materials. In the absence of special provisions to the contrary, salvaged materials, equipment or supplies are the property of OWNER and shall be cleaned and stored as directed by ENGINEER.

Manufacturer's Instructions. The installation of all work shall comply with manufacturer's written instructions. CONTRACTOR shall obtain and distribute copies of such instructions to parties involved in the installation including two copies to ENGINEER. One complete set of instructions shall be maintained at the job site during installation and until completion. All products and equipment shall be handled, installed, connected, cleaned, conditioned and adjusted in accordance with the manufacturers instructions and specified requirements. Should job conditions or specified requirements conflict with manufacturers instructions, such conflicts shall be called to ENGINEER'S attention for resolution and revised instructions.

Equipment Guarantee. All mechanical and electrical equipment, together with devices of whatever nature and all components, which are furnished and/or installed by CONTRACTOR shall be guaranteed. The guarantee shall be against manufacturing and/or design inadequacies, materials and workmanship, improper assembly, hidden damage, failure of devices and/or components, excessive leakage or other circumstances which would cause the equipment to fail under normal design and/or specific operating conditions for a period of one year or such longer period as may be shown and/or specified from and after the date of acceptance of the equipment by OWNER. Each piece of equipment, device or component which shall fail within the above specified term shall be replaced with reasonable promptness by CONTRACTOR without cost to OWNER.

Operating Characteristics. Rotating machinery shall be designed and fabricated to provide satisfactory operation without excessive wear and without excessive maintenance during its operating life. Rotating parts shall be statically and dynamically balanced and shall operate without excessive vibration.

Lubrication System. The minimum design criteria for lubrication of moving parts of the equipment shall include one week of continuous operation during which no lubricants shall be added to the system. The system shall also be designed to receive lubricants whether in operation or shut down, and shall not leak or waste lubricants under either condition. The manufacturer's recommendations of grade and quality and a supply of the lubricants so recommended in quantities sufficient to conduct startup and testing operations shall be furnished with the equipment.

Safety Requirements. Screens, guards or cages shall be provided for all exposed, rotating or moving parts in accordance with accepted practices of applicable governmental agencies.

Nameplates. Each major component of equipment shall have the manufacturers name, catalog and/or model number, serial number and applicable performance requirements and characteristics embossed, stamped, or engraved on a stainless steel plate securely attached to the item of equipment.

Anchor Bolts. The manufacturer shall provide stainless steel anchor bolts for each piece of equipment furnished.

1.02 TRANSPORTATION AND HANDLING

Materials and equipment shall be loaded and unloaded by methods affording adequate protection against damage. Every precaution shall be taken to prevent injury to the materials or equipment during transportation and handling. Suitable power equipment will be used and the materials or equipment shall be under control at all times. Under no condition shall the materials or equipment be dropped, bumped or dragged. When a crane is used, a suitable hook or lift sling shall be used. The crane shall be so placed that all lifting is done in a vertical plane. Materials or equipment skid loaded, palletized or handled on skidways shall not be skidded or rolled against materials or equipment already unloaded.

Materials and equipment shall be delivered to the job site by means that will adequately support it and not subject it to undue stresses. Contractor shall promptly inspect the products for damage and defects and conformance with the specification. Materials and equipment damaged or

injured in the process of transportation, unloading or handling will be rejected and shall be immediately removed from the site.

1.03 STORAGE AND PROTECTION

All materials and equipment shall be stored in accordance with the manufacturer's instructions, with seals and labels intact and legible. Items subject to damage by the elements shall be stored in weathertight enclosures. Temperature and humidity shall be maintained within the ranges required by the manufacturers instructions. Fabricated items shall be stored above the ground on blocking or skids. Items which are subject to deterioration shall be covered with impervious coatings with adequate ventilation to avoid condensation. Loose granular materials shall be stored in a well-drained area on solid surfaces to prevent mixing with foreign matter. Any items which will come in contact with potable water shall be stored off the ground so as to prevent contamination.

Storage shall be arranged in such a manner to provide easy access for inspection. Periodic inspections shall be made of all stored items to assure that they are maintained under specified conditions, and free from damage or deterioration.

After installation, CONTRACTOR shall provide substantial coverings as necessary to protect installed items from damage, from traffic, and subsequent construction operations. Coverings shall be removed when no longer needed.

PART 2 - MATERIALS AND EQUIPMENT

(Not Applicable)

PART 3 - EXECUTION

(Not Applicable)

END OF SECTION

SECTION 01630
SUBSTITUTIONS AND PRODUCT OPTIONS

PART 1 - GENERAL

1.01 REQUESTS FOR REVIEW

- A. Requests to review substitute items of material and equipment will not be accepted by the Engineer from anyone other than the Contractor. If the Contractor wishes to furnish or use a substitute or equivalent item of material or equipment, the Contractor shall make written application to the Engineer for acceptance, certifying that the proposed substitute will perform adequately the functions called for by the general design, be similar and of equivalent substance to that specified and be suited to the same use and capable of performing the same function as that specified. The application will state whether or not acceptance of the substitute for use in the work will require a change in Drawings or Specifications to adapt the design to the substitute and whether or not incorporation or use of the substitute in connection with the work is subject to payment of any license fee or royalty. All variations of the proposed substitute from that specified shall be identified in the application and available maintenance, repair and replacement service will be indicated. The application will also contain an itemized estimate of all costs that will result directly or indirectly from acceptance of such substitute, including costs of redesign and claims of other contractors affected by the resulting change, all of which shall be considered by the Engineer in evaluating the proposed substitute. The Engineer may require the Contractor to furnish at the Contractor's expense additional data about the proposed substitute. The Engineer will be the sole judge of acceptability, and no substitute will be ordered or installed without the Engineer's prior written acceptance. The Owner may require the Contractor to furnish at the Contractor's expense, a special performance guarantee or other surety with respect to any substitute.

1.02 SUBSTITUTION AFTER EXECUTION OF AGREEMENT

- A. After execution of the Agreement, substitution of materials or equipment supplied by manufacturers or suppliers other than those listed, will be considered only if it is demonstrated by the Contractor that:
1. the material or equipment proposed for substitution is superior in design, construction and/or efficiency to that of the listed manufacturer or supplier;
 2. the material proposed for substitution is in every way equal to that of the listed supplier, and that availability and/or delivery of listed materials within the time frame scheduled cannot be met; or
 3. the material proposed for substitution is in every way equal to that of the listed supplier and is available at a lower cost. In the event such a substitution is allowed, the Contractor shall accept and execute a Change Order reducing the

Contract Price by an amount equal to the cost differential.

1.03 EQUIVALENT MATERIALS AND EQUIPMENT

- A. Whenever materials or equipment are specified or described in the Drawings or Specifications by using the name of a proprietary item or the name of a particular manufacturer, fabricator, supplier or distributor, the naming of the item is intended to establish the type, function, and quality required. Unless the name is followed by words indicating that no substitution is permitted, materials or equipment of other manufacturers, fabricators, suppliers or distributors may be accepted by the Engineer to determine that the material or equipment proposed is equivalent to that named.
- B. It is not the intent of the Contract Documents to function as proprietary specifications. Where a particular manufacturer make and model are cited and specifically required for interchangeability of parts and/or match existing equipment, this has been so stated in the Specifications.
- C. The standard products of manufacturers other than those specified may be considered when it is demonstrated to the ENGINEER that they are equal in quality, composition, durability, usefulness and convenience for the purpose intended. Requests for substitutions will only be considered, provided the following minimum conditions are met:
 - 1. The proposed coating system shall use an equal or greater number of separate coats to achieve the required dry film thickness.
 - 2. The proposed coating system shall use coatings of the same generic type.
 - 3. All requests for substitutions shall have the directions for application and descriptive literature which includes generic type, nonvolatile content by volume and information confirming that the substitution is equal to the specified coating system.
 - 4. The CONTRACTOR shall provide Certified Laboratory Data Sheets showing the results of complete spectrographic and durability tests performed on the proposed substitute. Tests shall be performed by a laboratory which conforms to the provisions of the American Society for Testing and Materials (ASTM E329) and which is a member of the American Council of Independent Laboratories. Costs incurred in the testing program shall be borne by the CONTRACTOR.
 - 5. The cost of all testing and analyzing of the proposed substitute materials that may be required by the ENGINEER, shall be paid by the CONTRACTOR. If the proposed substitution requires changes in the

contract work, the CONTRACTOR shall bear all such costs involved and the costs of allied trades affected by the substitution.

PART 2 - PRODUCTS

(Not Applicable)

PART 3 - EXECUTION

(Not Applicable)

END OF SECTION

SECTION 01700 CONTRACT CLOSEOUT

PART 1 - GENERAL

1.01 DESCRIPTION OF REQUIREMENTS

Definition:

Closeout is defined to include general requirements near end of Contract Time, in preparation for final acceptance, final payment, normal termination of contract, occupancy by OWNER and similar actions evidencing completion of the work. Specific requirements for individual units of work are specified in sections of Division 2 through 16. Time of closeout is directly related to "Substantial Completion", and therefore may be either a single time period for entire work or a series of time periods for individual parts of the work which have been certified as substantially complete at different dates. That time variation (if any) shall be applicable to other provisions of this section.

1.02 PREREQUISITES TO SUBSTANTIAL COMPLETION

When the CONTRACTOR considers the work to be substantially complete, he shall submit to the ENGINEER: a written notice that the work, or designated portion thereof, is substantially complete; and a list of items to be completed or corrected.

Within a reasonable time after receipt of such notice, the ENGINEER will make an inspection to determine the status of completion.

Should the ENGINEER determine that the work is not substantially complete, the ENGINEER will promptly notify the CONTRACTOR, in writing, giving the reasons. The CONTRACTOR shall remedy the deficiencies in the work and send a second written notice of substantial completion to the ENGINEER. The ENGINEER will reinspect the work.

When the ENGINEER finds that the work is substantially complete, he will prepare and deliver to the OWNER a tentative Certificate of Substantial Completion with a tentative list of items to be completed or corrected before final payment. After consideration of any objections made by the OWNER as provided in Conditions of the Contract, and when the ENGINEER considers the work substantially complete, the ENGINEER will execute and deliver to the OWNER and the CONTRACTOR a definite Certificate of Substantial Completion with a revised tentative list of items to be completed or corrected.

When the CONTRACTOR considers the work complete, he shall submit written certification that the Contract Documents have been reviewed, the work has been inspected for compliance with the Contract Documents, the work has been completed in accordance with the Contract Documents, equipment and systems have been tested in the presence of the OWNER's representative and are operational, and the work is completed and ready for final inspection.

With reasonable promptness after receipt of such certification, the ENGINEER will make an inspection to verify the status of completion. Should the ENGINEER consider that the work is

incomplete or defective, he will promptly notify the CONTRACTOR, in writing, listing the incomplete or defective work. The CONTRACTOR shall take immediate steps to remedy the stated deficiencies and send a second written certification to the ENGINEER that the work is complete. The ENGINEER will reinspect the work.

Should the ENGINEER perform reinspections due to failure of the Work to comply with the claims of status of completion made by the CONTRACTOR, the OWNER will compensate the ENGINEER for such additional services, and the OWNER will deduct the amount of such compensation from the final payment to the CONTRACTOR.

1.03 CLOSEOUT SUBMITTALS

When the ENGINEER finds that the work is acceptable under the Contract Documents, he shall request the CONTRACTOR to make closeout submittals.

The CONTRACTOR's closeout submittals shall include:

1. Evidence of compliance with requirements of governing authorities.
2. Project Record Documents.
3. Evidence of Payment and Release of Liens.
4. Certificate of Insurance for Products and Completed Operations.
5. Warranties and Bonds.

1.04 ADDITIONAL CLOSEOUT REQUIREMENTS

Project Record Documents:

The CONTRACTOR shall keep one Record copy of all specifications, drawings, addenda, modifications, shop drawings, field test records, and samples at the site in good order and annotated in red to show all changes made during the construction process. These shall be available to the ENGINEER for examination and shall be delivered to the ENGINEER for the OWNER upon completion of the work.

Documents and samples shall be stored in the CONTRACTOR's field office apart from documents used for construction. The CONTRACTOR shall provide files and racks for storage of documents, and a locked cabinet or secure storage space for storage of samples. Documents shall be maintained in a clean, dry, legible condition and in good order.

Record Documents shall not be used for construction purposes.

Each Document shall be labeled "PROJECT RECORD" in neat, large printed letters.

Information shall be recorded by the CONTRACTOR, on a daily basis, concurrently with construction progress. No work shall be concealed until required information is recorded on the CONTRACTOR's Record Drawings.

Drawings shall be legibly marked to record actual construction information on: depths of various elements of foundation in relation to finish first floor datum; horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements; location of internal utilities and appurtenances concealed in the construction, referenced to visible and accessible features of the structure; field changes of dimension and detail; changes made by Field Order or by Change Order; and details not on original contract drawings.

Specifications and Addenda shall have each section legibly marked to record: manufacturer, trade name, catalog number, and supplier of each product and item of equipment actually installed; and changes made by Field Order or by Change Order.

At contract closeout Record Documents shall be delivered to the ENGINEER for the OWNER. The submittal shall be accompanied with a transmittal letter in duplicate, containing:

1. Date
2. Project title and number
3. CONTRACTOR's name and address
4. Title and number of each Record Document
5. Signature of CONTRACTOR or his authorized representative

As-Built Survey Requirements:

(Not Applicable)

Operating and Maintenance Data:

The CONTRACTOR shall compile product data and related information appropriate for OWNER's maintenance and operation of products furnished under the Contract.

The submittals shall include but not necessarily be limited to:

Manufacturer's specifications.

Directions and instructions relating to assembly, installation, operation and maintenance.

Parts list with catalog numbers and other data necessary for ordering replacements.

1.05 WARRANTIES AND BONDS

The CONTRACTOR shall compile and submit to the ENGINEER in duplicate, for review and transmittal to the OWNER, warranties, bonds, service and maintenance contracts as specified in the respective sections of Specifications. Submittal shall be made within ten days after Substantial Completion and prior to final request for payment.

1.06 FINAL STATEMENT OF ACCOUNTING

The CONTRACTOR shall submit a final statement of accounting to the ENGINEER. The statement shall reflect all adjustments to the Contract Sum:

1. The original Contract Sum

2. Additions and deductions resulting from:
 - Previous Change Orders
 - Deductions for uncorrected work
 - Deductions for liquidated damages
 - Deductions for reinspection payments
 - Other adjustments
3. Total Contract Sum, as adjusted
4. Previous payments
5. Sum remaining due

1.07 FINAL CHANGE ORDER

The ENGINEER will prepare a final Change Order, if required, reflecting approved adjustments to the Contract Sum which were not previously made by Change Orders.

1.08 FINAL APPLICATION FOR PAYMENT

The CONTRACTOR shall submit the final Application for Payment in accordance with procedures and requirements stated in the Conditions of the Contract.

PART 2 - PRODUCTS

(Not Applicable)

PART 3 - EXECUTION

(Not Applicable)

END OF SECTION

SECTION 01710 FINAL CLEANING

PART 1 - GENERAL

1.01 DESCRIPTION OF REQUIREMENTS

The CONTRACTOR shall execute cleaning, during progress of the work, and at the completion of the work, as required by General Conditions.

Cleaning and disposal operations shall comply with all applicable codes, ordinances, regulations, and anti-pollution laws.

Refer to Section 01500 - Temporary Facilities And Controls for additional requirements.

PART 2 - MATERIALS

The CONTRACTOR shall:

Use only those materials which will not create hazards to health or property and which will not damage surfaces.

Use only those cleaning materials and methods recommended by manufacturer of the surfaces to be cleaned.

Use cleaning materials only on surfaces recommended by cleaning material manufacturer.

PART 3 - EXECUTION

3.01 CLEANING DURING CONSTRUCTION

The CONTRACTOR shall:

Execute periodic cleaning to keep the work, the site and adjacent properties free from accumulations of waste materials, rubbish and windblown debris, resulting from construction operations.

Provide on-site containers for the collection of waste materials, debris and rubbish. Rental of refuse/waste containers must fully comply with the requirements of Section 01500 - Temporary Facilities And Controls.

Remove waste materials, debris and rubbish from the site at least once a week and dispose of at legal disposal areas away from the site.

Prior to final completion, CONTRACTOR shall conduct an inspection of work areas, to verify that the entire work is clean.

3.02 FINAL CLEANING

The CONTRACTOR shall:

Employ skilled workmen for final cleaning.

Remove grease, mastic, adhesives, dust, dirt, stains, and other foreign materials from sight-exposed surfaces.

Broom clean exterior paved surface; rake clean other surfaces of the grounds.

Except as otherwise indicated or requested by the ENGINEER, remove temporary protection devices and facilities which were installed during the course of the work to protect previously completed work during the remainder of the construction project.

Prior to final completion, CONTRACTOR shall conduct an inspection of work areas, to verify that the entire work is clean.

Where extra materials of value remaining after completion of the associated work have become the OWNER's property, dispose or store at the site, as directed by the ENGINEER.

END OF SECTION

SECTION 01740 WARRANTIES

PART 1 - GENERAL

1.01 DESCRIPTION OF REQUIREMENTS

All work performed under this contract shall be warranted for labor and materials for a minimum period of one year after date of completion and acceptance of the project. Specific warranties are noted in specific sections.

Standard product warranties are preprinted written warranties published by individual manufacturers for particular products and are specifically endorsed by the manufacturer to the Owner.

Special warranties are written warranties required by or incorporated in the Contract Documents, either to extend time limits provided by standard warranties or to provide greater rights for the Owner.

1. Refer to the General Conditions for terms of the Contractor's period for correction of the work.

Disclaimers and Limitations: Manufacturer's disclaimers and limitations on product warranties do not relieve the Contractor of the warranty on the Work that incorporates the products. Manufacturer's disclaimers and limitations on product warranties do not relieve suppliers, manufacturers and subcontractors required to countersign special warranties with the Contractor.

Related Damages and Losses: When correcting failed or damaged warranted construction, remove and replace construction that has been damaged as a result of such failure or must be removed and replaced to provide access for correction of warranted construction.

Reinstatement of Warranty: When work covered by a warranty has failed and been corrected by replacement or rebuilding, reinstate the warranty by written endorsement. The reinstated warranty shall be equal to the original warranty with an equitable adjustment for depreciation.

Replacement Cost: Upon determination that work covered by a warranty has failed, replace or rebuild the work to an acceptable condition complying with the requirements of the Contract Documents. The Contractor is responsible for the cost of replacing or rebuilding defective work regardless of whether the owner has benefited from use of the work through a portion of its anticipated useful service life.

Owner's Recourse: Expressed warranties made to the Owner are in addition to implied warranties and shall not limit the duties, obligations, rights, and remedies otherwise available under the law. Expressed warranty periods shall not be interpreted as limitations on the time in which the Owner can enforce such other duties, obligations, rights or remedies.

1. **Rejection of Warranties:** The Owner reserves the right to reject warranties and to limit selection to products with warranties not in conflict with requirements of the Contract Documents.

2. Where the Contract Documents require a special warranty, or similar commitment, the Owner reserves the right to refuse to accept the work, until the Contractor presents evidence that entities required to countersign such commitments are willing to do so.

Submit written warranties to the Engineer prior to the date certified for Substantial Completion. If the Engineer's Certificate of Substantial Completion designates a commencement date for warranties other than the date of Substantial Completion, submit written warranties upon request of the Engineer.

END OF SECTION

SECTION 02010 SUBSURFACE INVESTIGATION

PART 1 - GENERAL

1.01 DESCRIPTION OF WORK

A soils investigation report has been prepared for the site of this work by NA, hereafter referred to as the Soils Engineer. The soils investigation report has been included as an appendix to these documents.

This report was obtained only for the Engineer's use in design and is not a part of the Contract Documents. The report is available for bidder's information, but is not a guarantee of subsurface conditions.

1.02 QUALITY ASSURANCE

Bidders should visit the site and acquaint themselves with all existing conditions. Prior to bidding, bidders may make their own subsurface investigations to satisfy themselves as to site and subsurface conditions, but all such investigations shall be performed under time schedules and arrangements approved in advance by the Owner.

Soils Engineer will be retained by the Owner to observe performance of work in connection with excavating, trenching, filling, backfilling and grading.

PART 2 - MATERIALS AND EQUIPMENT

(Not Applicable)

PART 3 - EXECUTION

(Not Applicable)

END OF SECTION

SECTION 02050 DEMOLITION

PART 1 - GENERAL

1.01 DESCRIPTION OF WORK

A. The work includes, but is not limited to, demolition and removal of the top slabs for lift station valve vaults and wet wells, removal of concrete pavement, removal of pumps, piping, electrical controls, wiring and lighting within grassed and landscaped dedicated easements as shown on the drawings.

1.02 QUALITY ASSURANCE

A. Accomplish all demolition work so there is no injury to any persons and no damage to adjacent structures or property. All demolition methods shall be in full compliance with municipal, county, state, and federal ordinances. Demolition work shall comply with the requirements of the Occupational Safety and Health Administration (OSHA).

B. The Contractor shall comply with all municipal, county, state, and federal ordinances regarding the disposal of rubble, scrap metal, and refuse.

C. Demolition procedures shall provide for safe conduct of the work, protection of property which is to remain undisturbed, and coordination with other work in progress.

1.03 JOB CONDITIONS

A. General:

1. It shall be the responsibility of the Contractor to visit the site and inspect the nature and condition of the items to be removed and salvaged before submitting his bid.

B. Dust Control:

1. Control the amount of dust resulting from demolition to prevent the spread of dust to occupied portions of buildings and to avoid creation of a nuisance in the surrounding area. Do not use water when it will result in, or create, hazardous or objectionable conditions such as flooding and pollution.

C. Protection of Existing Work:

1. Protect existing work. Work damaged by the Contractor shall be repaired to match existing work.

1.04 PERMITS AND NOTICES

A. Permits and Licenses: Contractor shall obtain all necessary permits and licenses for performing the work and shall furnish a copy of same to the Engineer prior to commencing the work. The contractor shall comply with the requirements of the permits.

- B. Notices: Contractor shall issue written notices of planned demolition to Owner, Engineer and businesses or local residents located in the vicinity of the project site. Notices shall be received at least 48 hours in advance of the planned demolition activity.
- C. Utility Services: Contractor shall notify utility companies or local authorities furnishing gas, sewer, water, electrical or telephone to remove any equipment owned by them in structures to be demolished and to remove, disconnect, cap or plug their services to facilitate demolition.

1.05 TRAFFIC AND ACCESS

- A. Conduct demolition and modification operation, and removal of piping and debris to ensure minimum interference with roads, streets and sidewalks both onsite and off site and to ensure minimum interference with occupied or used facilities.
- B. Contractor shall at all times maintain safe and convenient access to the existing site.
- C. Do not close or obstruct streets or walks without permission from the Owner and Engineer. Provide alternate traffic routes around closed or obstructed access ways.

1.06 UTILITIES

- A. Existing utilities to remain in service and protected against damage during demolition operations. This may include the installation/construction of bypass piping where necessary.
- B. Do not interrupt existing utilities serving occupied or used facilities, except when authorized by the Owner and Engineer. Provide temporary services during interruption to existing utilities as required by the Owner.
- C. The Contractor shall cooperate with the Owner to shut off utilities serving the existing facilities as required by demolition operations. If service must be cut off to existing customers, the Owner must have at least three (3) days notice to make necessary preparations.
- D. The Contractor shall be solely responsible for making all necessary arrangements and for performing any necessary work involved in connection with the discontinuance or interruption of all public and private utilities or services under this jurisdiction of utility companies.

1.07 POLLUTION CONTROL

- A. For pollution control, use water sprinkling, temporary enclosures and other suitable methods as necessary to limit the amount of dust and dirt rising and scattering in the air to the lowest level of air pollution practical for the conditions or work. Comply with the governing regulations.
- B. Clean structures and improvements of all dust, dirt and debris caused by demolition operations as directed by the Engineer. Return areas to conditions existing prior to the start of work.

1.08 QUALITY CONTROL

- A. Protect all existing materials and equipment to be salvaged or reused from damage.
- B. Cap or plug all lines to be abandoned.
- C. Leave all exposed ends of all pipe covered and safe.

PART 2 - PRODUCTS

NONE

PART 3 - EXECUTION

3.01 DISPOSAL

- A. Equipment, piping, and materials which are designated to remain the property of the Owner shall be moved to a location designated by the Owner.
- B. All removed materials not specifically designated to remain the property of the Owner shall become the property of the Contractor and shall be removed from the site and disposed of in a lawful manner.
- C. Do not allow debris and rubbish to accumulate on the site. Remove debris and rubbish from the site.

3.02 CLEAN-UP

- A. Clean-up in areas where other work is to be done following demolition shall be as specified in the applicable Sections.
- B. Clean-up the job site in areas where no other work is to be done under this Contract following demolition. Remove all debris and rubbish, temporary facilities, and equipment. Level surface irregularities to eliminate depressions. Leave the work in a neat and presentable condition.

END OF SECTION

SECTION 02100 CLEARING AND GRUBBING

PART 1 - GENERAL

1.01 DESCRIPTION OF WORK

A. The work consists of clearing and grubbing, within the limits of construction shown on the drawings. Included is the removal and disposal of all trees, stumps, roots and other such protruding objects necessary to prepare the area for the proposed construction and landscaping.

B. The removal and disposal of all, structures, appurtenances, existing pavement and other facilities is described in Section 02050, Demolition.

1.02 PROTECTION OF PROPERTY REMAINING IN PLACE

A. Property obstructions which are to remain in place, such as buildings, sewers, drains, water or gas pipes, conduits, poles, walls, posts, bridges, and similar items are to be carefully protected from injury and are not to be displaced. Restore damaged improvements to their original condition, as acceptable to parties having jurisdiction.

B. Protection of Existing Trees and Vegetation:

1. Protect existing trees and other vegetation indicated to remain in place, against unnecessary cutting, breaking or skinning of roots, skinning and bruising of bark, smothering of trees by stockpiling construction materials or excavated materials within drip lines, excess foot or vehicular traffic, or parking of vehicles within drip line.

2. When ground is to be excavated under the drip line of any existing protected tree (as defined in the City of Ormond Beach Land Development Code), roots shall be pruned at the juncture of the grade excavation to reduce tree root shock and dieback. The depth of the pruning shall be equal to the depth of the excavation. The location of root pruning shall be marked with two (2)-inch by four (4)-inch fencing. The City of Ormond Beach Parks Department shall supervise all root pruning activities.

3. Provide temporary guards to protect trees and vegetation to be left standing.

4. Contractor shall water trees and other vegetation remaining within the limits of the Contract work as required to maintain their health during the course of construction operations.

5. Provide protection for roots over 1/2-inch diameter cut during construction operations. Coat the cut faces with an emulsified asphalt, or other acceptable coating, formulated for use on damaged plant tissues. Temporarily cover exposed roots with wet burlap to prevent roots from drying out; cover with earth as soon as possible.

6. Repair or replace trees and vegetation damaged by construction operations, in a manner acceptable to the Engineer. Repair tree damage with the services of a qualified tree

surgeon.

7. Replace trees which cannot be repaired and restored to full-growth status, as determined by the tree surgeon.

C. Improvements on Adjoining Property:

1. Authority for performing removal and alteration work on property adjoining the Owner's property will be obtained by the Owner prior to award of Contract.

D. Salvageable Improvements:

1. Carefully remove items indicated to be salvaged, and store on the Owner's premises where indicated, unless otherwise directed.

1.03 OWNERSHIP OF MATERIALS

A. Except as may be otherwise called for on the drawings or elsewhere in the specifications, all materials removed by the Contractor shall become the property of the Contractor and shall be disposed of in a lawful manner.

PART 2 - PRODUCTS

(Not Applicable)

PART 3 - EXECUTION

3.01 STANDARD CLEARING AND GRUBBING

A. Standard clearing and grubbing shall consist of the complete removal and disposal of all timber, brush, stumps, roots, rubbish and debris and all other obstructions resting on or protruding through the surface of the existing ground and the surface of excavated areas, and of all other obstructions necessary to be removed and for which the removal is not specified to be done under other items of the contract, including pipes and demolition.

B. Unless otherwise shown on the drawings, standard clearing and grubbing shall be done within the following areas:

1. All areas where retention areas will be modified or constructed.

2. Any other areas specifically called for on the drawings to have standard clearing and grubbing.

C. In all areas where excavation is to be done, roots and other debris shall be removed to a depth of at least one-foot below the finished ground surface. The surface shall then be plowed to a depth of at least 6-inches and all roots thereby exposed shall be removed to a depth of at least one-foot. All stumps within the area of standard clearing and grubbing shall be completely removed and disposed of by the Contractor.

D. Where excavation is done within the standard clearing and grubbing area and where excavation for structures is done, all roots and similar items, protruding through or appearing on the surface of the completed excavation shall be removed to a depth of at least one-foot below the excavation surface.

E. Within all other areas where standard clearing and grubbing is to be done, roots and other debris, projecting through or appearing on the surface of the original ground, shall be removed to a depth of one-foot below the surface, but no plowing and harrowing will be required in these areas.

F. As an exception to the above provisions where so directed by the Engineer, desirable trees within the clearing and grubbing area shall be trimmed, protected and left standing. Trees shown on the drawings to be relocated shall be relocated to a location identified by the Engineer.

G. Any boulders encountered in the site excavation or found on the surface of the ground, shall be removed and placed in neat piles at a location approved by the Engineer.

H. For pipeline construction the Contractor shall only remove trees, shrubs and grass which interfere with the construction. All other vegetation shall be protected, preserved and/or replaced.

3.02 DISPOSAL OF MATERIALS

A. General Disposal:

1. Timber, stumps, brush, roots, rubbish, and other objectionable material resulting from clearing and grubbing shall be disposed of by the Contractor in locations and by methods approved by the Engineer.

2. In some instances, materials may be disposed of on the Owner's property at a location and by a method approved by the Engineer, but only with advance written permission of the Owner.

B. Burning Debris:

1. In some instances, burning may be permitted on the Owner's property at a location and by a method approved by the Engineer, but only with advance written permission of the Owner.

2. Where burning of such material is permitted all such burning shall be subject to applicable laws, ordinances and regulations and shall be done at locations where trees and shrubs adjacent to the cleared area will not be harmed.

3. Where burning is prohibited by law, ordinance, or regulation, the Contractor shall dispose of the materials within areas provided by him and approved by the Engineer.

C. Disposal in areas Adjacent to Project:

1. Materials may be disposed of on private property, provided the Engineer is furnished

with a written statement from the owner of the property giving permission for the disposal of the materials on his property. All disposal areas for materials resulting from clearing and grubbing, both on private property and on property owned by the Contractor, shall be in areas out of sight of the project and at least 300 feet from the nearest right-of-way line of the project, unless such materials are buried, in which case the requirement that the areas be 300 feet distant will be waived.

END OF SECTION

SECTION 02140 DEWATERING

PART 1 - GENERAL

1.01 DESCRIPTION OF WORK

- A. Scope: In general, the work specified in this section of the specifications shall consist of supplying labor, materials, and plant, and performing all work necessary to lower and control the groundwater levels and hydrostatic pressures to permit all excavations and construction specified under this Contract to be performed in the dry.
- B. Examination of Site: The Contractor shall take all steps that he considers necessary to familiarize himself with the site conditions, the ground conditions and the groundwater conditions. It is expressly understood that neither the Owner nor the Engineer will be held responsible for any interpretations or conclusions drawn by the Contractor.

PART 2 - PRODUCT

2.01 METHOD AND EQUIPMENT

- A. The Contractor may use any dewatering method he deems feasible so long as it results in working in the dry and in stable soil conditions. It is the intent of these specifications that an adequate dewatering system be installed to lower and control the groundwater in order to permit excavation, construction of the structures, construction of pipelines, and the placement of the fill materials, all to be performed under dry conditions. The dewatering system shall be adequate to pre-drain the water-bearing strata above and below the bottom of the foundations, the drains, the sewers and all other excavations. An adequate weight of fill material shall be in place prior to discontinuing operation of dewatering to prevent buoyancy of the structure.

PART 3 - EXECUTION

3.01 GENERAL

- A. The Contractor shall be solely responsible for the arrangement, location and depths of the dewatering system necessary to accomplish the work described under this section of the specifications. The dewatering shall be accomplished in a manner that will reduce the hydrostatic head below any excavation to the extent that the water level and piezometric water levels in the construction area are below the prevailing excavation surface; will prevent the loss of fines, seepage, boils, quick conditions, or softening of the foundation strata; will maintain stability of the sides and bottom of the excavation; and will result in all construction operations being performed in the dry.
- B. Disposal of Water: The Contractor shall promptly dispose of all water removed from the excavations in such a manner as will not endanger public health, damage public or

private property, or affect adversely any portion of the work under construction or completed by him or any other Contractor. Contractor shall obtain written permission from the Owner of any property involved before digging ditches or constructing water courses for the removal of water.

C. Siltation and Erosion:

1. The Contractor shall take steps and make suitable provisions to minimize siltation and erosion which may result from, or as a result of, his operations during the course of construction of this project.
2. The methods and provisions utilized by the Contractor to minimize siltation and erosion shall be approved by the Engineer and shall be in conformance with current Florida Department of Environmental Protection and St. Johns River Water Management District practices and regulations.

D. Inadequate System: If the dewatering requirements are not satisfied due to inadequacy or failure of the dewatering system, then loosening of the foundation strata, or instability of the slopes, or damage to the foundations or structures may occur. The supply of all labor, materials, and plant, and the performance of all work necessary to carry out additional work for reinstatement of the structures of foundation soil resulting from such inadequacy or failure shall be undertaken by the Contractor to the approval of the Engineer, and at no additional expense to the Owner.

END OF SECTION

SECTION 02200 EARTHWORK

PART 1 - GENERAL

1.01 DESCRIPTION OF WORK

- A. The extent of earthwork is shown on the drawings.
- B. Related Work Specified Elsewhere:

Section 02222 - Trenching, Backfilling and Compacting.

1.02 QUALITY ASSURANCE

- A. Codes and Standards:

1. Perform earthwork in compliance with applicable requirements of governing authorities having jurisdiction.

- B. Testing and Inspection Service:

1. The Owner will engage a testing and inspection service, to include testing soil materials proposed for use in the work and field facilities for quality control testing during earthwork operations.

2. Soil survey for satisfactory soil materials and samples of soil materials shall be furnished to the testing service by the Contractor.

3. All test reports must be signed by a licensed engineer.

1.03 JOB CONDITIONS

- A. Existing Utilities:

1. Locate existing underground utilities in the areas of work before starting earthwork operations. Where utilities are to remain in place, provide adequate means of protection during earthwork operations.

2. Should uncharted, or incorrectly charted, piping or other utilities be encountered during excavation, consult the utility owner immediately for directions. Cooperate with the Owner and public and private utility companies in keeping their respective services and facilities in operation. Repair damaged utilities to the satisfaction of the utility owner.

3. Do not interrupt existing utilities serving facilities occupied and used by the Owner or others, except when permitted in writing by the Engineer and then only after acceptable temporary utility services have been provided.

4. Demolish and completely remove from the site underground utilities indicated to be removed. Coordinate with local utility companies for shut-off of services if lines are active.

B. Use of Explosives:

1. The use of explosives is not permitted.

C. Temporary Protection:

1. Barricade open excavations made as a part of earthwork operations and post with warning lights. Operate warning lights as recommended by authorities having jurisdiction.

2. Protect structures, utilities, sidewalks, pavements, and other facilities from damages caused by settlement, lateral movement, undermining, washout, and other hazards created by earthwork operations.

PART 2 - PRODUCTS

2.01 SOIL MATERIALS

A. Backfill and Fill Materials:

1. Soil materials for use as backfill and fill shall be free of rock or gravel larger than 2-inches in any dimension, debris, waste, vegetable, and other deleterious matter.

2. Use excavated or borrows material that has been sampled, tested and certified as satisfactory soil material.

B. Subbase Material:

1. Properly graded mixture of natural and crushed gravel, crushed stone, crushed slag, natural or processed sand that will readily compact to the required density.

2. Use material complying with AASHTO M147, Grade A, unless otherwise indicated or acceptable to the Engineer.

PART 3 - EXECUTION

3.01 INSPECTION

A. Examine the areas and conditions under which earthwork is to be performed and notify the Engineer in writing of conditions detrimental to the proper and timely completion of the work. Do not proceed with the work until unsatisfactory conditions have been corrected in an acceptable manner.

3.02 EXCAVATION

A. Excavation consists of the removal and disposal of materials encountered when establishing the required grade elevations.

1. Where it is necessary to cut roots projecting into an excavation or to trim branches for equipment clearance, all severed root ends or cuts to branches over 1/2-inch diameter shall be treated with an asphalt base pruning paint. Backfill over exposed roots as soon as possible.

B. Excavation Classifications:

1. The following classifications of excavation will be made when unanticipated rock excavation is encountered in the work. Do not perform such work until material to be excavated has been cross-sectioned and classified by the Engineer. Such excavation will be paid for under the appropriate bid item in the Bid Proposal.

a. Earth excavation includes the removal and disposal of pavements and other obstructions visible on the ground surface, underground structures and utilities indicated to be demolished and removed, material of any classification indicated in data on subsurface conditions, and all other materials encountered that are not classified as rock excavation or unauthorized excavation.

b. Rock excavation consists of the removal and disposal of materials encountered that cannot be excavated with a 3/4 cubic yard capacity power shovel without drilling and blasting, or continuous use of a ripper or other special equipment, except such materials that are classified as earth excavation. Typical of materials classified as rock are boulders 1/2 cu. yd. or more in volume, solid rock, rock in ledges, and rock-hard cementitious aggregate deposits.

c. Intermittent drilling that may be performed to increase production and is not necessary to permit excavation of the material encountered will be classified as earth excavation.

C. Rock shall be removed to the following limits:

1. Two feet outside of concrete work for which forms are required, except footings. One foot outside the perimeters of footings.

2. In pipe trenches, a minimum of 4-inches below invert elevation of pipe and 2-feet wider than the inside diameter of pipe, but not less than 3-foot minimum trench width.

3. Neat outside dimensions of concrete work where no forms are required.

4. Under slabs on grade, 6-inches below bottoms of concrete slab.

D. Unauthorized excavation consists of removal of materials beyond indicated elevations without the specific direction of the Engineer. Replace unauthorized excavation by backfilling and compacting as specified for authorized excavations of the same classification, unless otherwise directed by the Engineer.

E. Additional Excavation:

1. When excavation has reached required subgrade elevations, notify the Engineer who will make an inspection of conditions.

2. If unsuitable materials are encountered at the required subgrade elevations, carry excavations deeper and replace the excavated material as directed by the Engineer.

3. Removal of unsuitable material and its replacement as directed will be paid for under the appropriate bid item in the Bid Proposal.

F. Dewatering:

1. Prevent surface water and subsurface or groundwater from flowing into excavations, and flooding the project site and surrounding area.

2. Do not allow water to accumulate in excavations. Remove water from excavations to prevent softening of foundation bottoms, undercutting footings, and soil changes detrimental to the stability of subgrades and foundations. Provide and maintain pumps, well points, sumps, suction and discharge lines, and other dewatering system components necessary to convey the water away from the site.

3. Convey water removed from excavations and rainwater to collecting or run-off areas. Do not use trench excavations for site utilities as temporary drainage ditches.

4. Contractor shall be required to obtain any demolition permits as may be required due to dewatering volume requirements set by local and state agencies.

G. Material Storage:

1. Stockpile excavated materials classified as satisfactory soil material where directed, until required for fill. Place, grade, and shape stockpiles for proper drainage.

2. Dispose of excess unsatisfactory soil material, trash and debris, as specified.

3.03 BACKFILL AND FILL

A. Ground Surface Preparation:

1. Remove vegetation, debris, unsatisfactory soil materials, obstructions, and deleterious materials from ground surface prior to placement of fills. Plow, strip, or break-up sloped surfaces steeper than one vertical to four horizontal so that fill material will bond with existing surface.

2. When the existing ground surface has a density less than that specified under "Compaction" for the particular area classification, break-up the ground surface, pulverize, moisture-condition to the optimum moisture content, and compact to the required depth and percentage of maximum density.

B. Placement and Compaction:

1. Place backfill and fill materials in layers not more than 8-inches in loose depth for material compacted by heavy compaction equipment, and not more than 4-inches loose depth for material compacted by hand-operated equipment.

2. Before compaction, moisten or aerate each layer as necessary to provide the optimum moisture content of the soil material. Compact each layer to the required percentage of maximum dry density or relative dry density for each area classification. Do not place backfill or fill material on surfaces that are muddy, frozen, or contain frost or ice.

a. Backfill excavations as promptly as the work permits, but not until completion of inspection, testing, approval, and recording location of underground utilities, as required.

3.04 COMPACTION

A. General:

1. Control soil compaction during construction, providing the minimum percentage of density specified for each area classification.

2. Percentage of Maximum Density Requirement:

a. Lawn Areas: Compact each layer of backfill or fill material at 85% maximum density (optimum moisture).

b. Walkways: Compact top 6-inches of subgrade and each layer of backfill or fill material at 95% maximum density (optimum moisture).

B. Moisture Control:

1. Where the subgrade or layer of soil materials must be moisture conditioned before compaction, uniformly apply water to the surface of subgrade, or layer of soil material, to prevent free water appearing on the surface during or subsequent to compaction operations. Remove and replace, or scarify and air dry, soil material that is too wet to permit compaction to specified density.

2. Soil material that has been removed because it is too wet to permit compaction may be stockpiled or spread and allowed to dry. Assist drying by disking, harrowing or pulverizing, until the moisture content is reduced to a satisfactory value.

3.05 FIELD QUALITY CONTROL

A. Quality Control Testing During Construction:

1. Testing service must inspect and approve subgrades and fill layers before further construction work is performed thereon.

2. Secure representative samples of the fill material and determine the Standard Density and required moisture content to be maintained by the Moisture-Density Relation Test ASTM D-1557.

3. Make in-place soil density tests during compaction operations in accordance with ASTM D-1556.

4. If, in the opinion of the Engineer, based on reports of the testing service and inspection, the subgrade or fills which have been placed are below the specified density, additional compaction and testing will be required until satisfactory results are obtained.

a. The results of density tests of soil-in-place will be considered satisfactory if the average of any four consecutive density tests which may be selected are in each instance equal to or greater than the specified density, and if not more than one density test out of five has a value more than 2% below the required density.

3.06 MAINTENANCE

A. Reconditioning Compacted Areas:

1. Where completed compacted areas are disturbed by subsequent construction operations or adverse weather, scarify the surface, re-shape, and compact to the required density prior to further construction.

3.07 DISPOSAL OF EXCESS AND WASTE MATERIALS

A. Removal from Owner's Property:

1. Remove waste materials, including excavated material classified as unsatisfactory soil material, trash and debris, and dispose of it off the Owner's property in a lawful manner.

END OF SECTION

SECTION 02222
TRENCHING, BACKFILLING AND COMPACTING

PART 1 - GENERAL

1.01 DESCRIPTION OF WORK

- A. The extent of trenching, backfilling and compacting is shown on the drawings.
- B. This section includes furnishing equipment, labor and materials, and performing all operations necessary and incidental to perform the required work.

PART 2 - PRODUCTS

(Not Applicable)

PART 3 - EXECUTION

3.01 CLEARING OF THE SITE

- A. The site of the work shall be cleared of all trees, shrubs, paving and objectionable material which interfere with the prosecution of the proposed work. Trees and shrubs which will not interfere with construction shall be protected from damage. Clearing shall be considered as an incidental item of excavation.

3.02 EXCAVATION

A. General:

- 1. Perform excavation described of whatever substance encountered to the dimensions and depths specified or shown on the drawings. Undercutting will not be permitted, except when ordered by the ENGINEER. Material suitable for backfill shall be stockpiled near the site. Rock or other material undesirable for backfill shall be spoiled outside the area in a neat manner, as directed by the ENGINEER. Where it is necessary to cut roots projecting into an excavation or where it is necessary to trim branches for equipment clearance, all severed root ends or cuts to branches over 1/2-inch diameter shall be treated with an asphalt base pruning paint. Backfill over exposed roots as soon as possible.

B. Rock:

- 1. Where encountered in the trench bed, rock shall be excavated to a depth of 1/4 of the pipe diameter below the bottom of the pipe but in no case less than 4-inches. All undercut trench excavation shall be backfilled and tamped with materials as specified in the following paragraphs under Unstable Subgrade.

C. Unstable Subgrade:

1. In the event that unsuitable material is encountered at or below the excavation depth specified or shown on the drawings, the ENGINEER shall be notified. Such material shall be removed and replaced with suitable material. Methods and materials used for replacement shall be one of the following as directed by the ENGINEER in writing.

a. Suitable earth or sand, compacted in the trench. Materials shall be furnished as a part of the Bid Proposal item covering excavation and backfill.

b. Gravel or crushed limerock, compacted in the trench and paid for under the appropriate item.

c. Existing materials, stabilized after removal and then replaced and compacted in the trench at no additional cost to the OWNER.

2. The ENGINEER shall determine the methods and materials to be used, based upon the condition of the excavation, the pipe structure to be supported, and the availability and character of stabilizing materials.

D. Trenches:

1. Keep pipe laying operation as close to the excavation operation as possible during the prosecution of the work. The ENGINEER reserves the right to stop the excavation at any time when, in his opinion, the excavation is opened too far in advance of the pipe laying.

2. Pipe trenches shall be only of sufficient width to provide a free working space on each side of the pipe. To prevent excess pressure on the pipe, the maximum width of trench at the top of the pipe and at the bottom of the trench shall not be greater than 2-feet more than the greatest exterior diameter of the pipe. If this maximum width is exceeded, it shall be the CONTRACTOR's responsibility to provide, at no additional cost to the OWNER, such additional bedding or select backfill materials as the ENGINEER may require. The excavation below the spring line shall be made to conform as near as possible to the shape of the lower third of the pipe. To protect the pipe lines from unusual stresses, all work shall be done in open trenches. Excavation shall be made for bells of all pipes and of sufficient depth to permit access to the joint for construction and inspections. In no case will the bells be used to support the body of the pipe.

3. In order to avoid existing utilities, at times it may be necessary for the pipe to be laid deeper than the minimum cover specified in the preceding paragraph. At such time the CONTRACTOR will not be allowed extra compensation for additional excavation involved.

4. In case excavation has been made deeper than necessary, a layer of concrete, fine gravel or other material satisfactory to the ENGINEER shall be placed, at no extra cost, to secure a firm foundation for the lower third of each pipe. Where possible, excavated material shall be placed so as not to interfere with public travel. Bridging shall be provided to afford necessary access to public or private premises. Bridging shall be considered as part of the excavation operation and shall be supplied at no additional cost to the OWNER.

E. Structural: (For inlets, manholes, and similar structures)

1. Remove sufficient material to allow proper space for erecting and removing forms. The elevations of the bottoms of footings, if shown on the drawings, shall be considered as approximate only, and the ENGINEER may order, in writing, such changes in dimensions or elevations of footings as may be deemed necessary to secure a satisfactory foundation. Excavation for structures shall be sufficient to leave at least 12-inches in the clear between their outer surfaces and the embankment or timber that may be used to protect them. Backfill of earth under structures will not be permitted. Excess excavation for structures shall be filled with thoroughly compacted sand, gravel, or concrete at the expense of the CONTRACTOR.
2. After excavation for a structure is completed, the CONTRACTOR shall notify the ENGINEER to that effect. No concrete or reinforcing steel shall be placed until the ENGINEER has approved the depth of the excavation and the character of the foundation material.

F. Sheet piling and Shoring:

1. The CONTRACTOR shall provide all trench and structural bracing, sheet piling or shoring necessary to construct and protect the excavation, existing utilities, structures and private property of all types and as required for the safety of the employees. Sheet piling shall be removed or cut off by the CONTRACTOR during backfilling operations as directed by the ENGINEER. Removal of shoring for structures shall be done in such a manner as not to disturb or mar finished masonry or concrete surfaces.

3.03 DRAINAGE

A. Grading shall be controlled in the vicinity of excavations so that the surface of the ground will be properly sloped to prevent water from running into trenches or other excavated areas. Any water which accumulates in the excavations shall be removed promptly by well point or by other means satisfactory to the ENGINEER in such a manner as to not create a nuisance to adjacent property or public thoroughfare. Trenches shall be kept dry while pipe is being laid. Bridging of dewatering pipe shall be provided where necessary. Pumps and engines for well point systems shall be operated with mufflers, and at a minimum noise level suitable to a residential area. The CONTRACTOR will not be allowed to discharge water into the OWNER's storm drainage system without the written approval of the ENGINEER. Approval will be subject to the condition that the storm sewer be returned to its original condition.

B. The CONTRACTOR is responsible for carrying the water to the nearest ditch or body of water and for obtaining the necessary permission to use same. The CONTRACTOR shall be financially responsible for any nuisance created due to carrying off water from his drainage system.

3.04 BACKFILL

A. Trenches:

1. Trenches shall be backfilled immediately after the pipe is laid unless other protection for the pipe line is provided. Clean earth, sand, crushed limerock or other material

approved by the ENGINEER shall be used for backfill. Backfill material shall be selected, deposited and compacted (simultaneously on both sides of the pipe) so as to eliminate the possibility of lateral displacement of the pipe. Backfill material shall be solidly tamped around the pipes in layers to a level at least 1-foot above the top of the pipe. Each layer shall be compacted to a maximum thickness of 6-inches.

2. In unpaved areas, the remainder of the backfill shall be deposited and then compacted by puddling, water flooding or mechanical tampers. Mechanical tamping of layers in unpaved areas shall be to a maximum thickness of 12-inches. In areas to be paved or repaved, the entire depth of backfill shall be deposited in layers and compacted by hand or mechanical tampers to a maximum thickness of 6-inches. Compaction shall be carried out to achieve a density of at least 98% of the maximum density as determined by AASHTO, Method T-180. Under areas to be paved, puddling may be used for backfill consolidation after tamping to 1-foot over the pipe, as specified, provided the method is first approved by the ENGINEER and the density requirements are met.

3. In areas to be paved, density tests for determination of the specified compaction shall be made by a testing laboratory and spaced one in every 300-feet of trench cut. It is the intent of this specification to secure a condition where no further settlement of trenches will occur. When backfilling is completed, the roadway base for pavement replacement may be placed immediately. It will be the responsibility of the CONTRACTOR to restore the surface to the original grade wherever settlement occurs.

B. Structural:

1. After completion of foundation footings and walls and other construction below the elevation of the final grades, and prior to backfilling, forms shall be removed and the excavation shall be cleared of all trash and debris. Material for backfilling shall consist of the excavation, borrow sand or other approved materials, and shall be free of trash, lumber or other debris. Backfill shall be placed in horizontal layers not in excess of 9-inches in thickness, and have a moisture content such that a density may be obtained to prevent excessive settlement or shrinkage. Each layer shall be compacted by hand or approved machine tampers with extreme care being exerted not to damage pipe or structures. Backfill shall be placed and compacted evenly against the exposed surfaces to prevent undue stress on any surface.

3.05 RESTORATION OF SURFACE IMPROVEMENTS

A. Roadways, including shoulders, alleys and driveways of shell, limerock, stabilized soil or gravel, grass plots, sod, shrubbery, ornamental trees, signs, fences, or other surface improvements on public or private property which have been damaged or removed in excavating, shall be restored to conditions equal to or better than conditions existing prior to beginning work. Restoration of shoulders shall consist of sodding, seeding and mulching, or stabilizing with limerock as selected by the ENGINEER. The cost of doing this work shall be included in the cost of the various applicable items.

B. Materials for unpaved roadways, road shoulders, alleys, or drive-ways, shall be compacted to a minimum of 98% of the maximum density as determined by AASHTO, Method T-180. The cost of this work and furnishing new materials shall be included in the

cost of the applicable items of work as no separate payment will be made, unless a separate bid item is provided.

3.06 FINE GRADING

A. Finished areas around structures shall be graded smooth and hand raked and shall meet the elevations and contours shown on the drawings. Lumber, earth clods, rocks and other undesirable materials shall be removed from the site.

3.07 DISPOSAL OF MATERIAL

A. Such portions of the excavated materials as needed and as suitable, shall be used for backfilling and grading about the completed work to the elevations as shown on the drawings or as directed. Excavated material in excess of the quantity required for this purpose shall be disposed of by the CONTRACTOR. The CONTRACTOR shall leave the earth over the trenches or other excavations in a neat and uniform condition acceptable to the OWNER.

3.08 TESTS

A. The CONTRACTOR shall furnish facilities for making all density tests and make such restorations as may be necessary due to test operations. All density tests on backfill or base replacement will be made by a commercial testing laboratory employed by the OWNER and at such locations as may be recommended by the ENGINEER. The CONTRACTOR shall pay for all tests where the densities, as determined by the specified tests, fall below the required minimums (failed tests).

END OF SECTION

SECTION 02500 PAVING

PART 1 - GENERAL

1.01 DESCRIPTION

This Section provides paving requirements (by reference) and base and curbing requirements for the roadway resurfacing project.

1.02 QUALITY ASSURANCE

CONTRACTOR shall be responsible for employing an independent testing laboratory to prepare required design mixes and to monitor his quality control procedures. CONTRACTOR shall be responsible for all asphalt plant testing.

CONTRACTOR shall provide a certificate that all materials and workmanship provided by him conform to Contract Requirements.

OWNER will retain an independent testing laboratory to field verify quality of materials used in paving work.

Where the "Standard Specifications" require that materials be from a source approved by the Department of Transportation, CONTRACTOR may provide proof of such source approval or he may employ an independent testing laboratory to perform necessary sampling and testing and to certify that all source meets requirements for Department approval.

1.03 REFERENCE STANDARDS

The "Standard Specifications" referred to in this Section are the Florida Department of Transportation, Standard Specifications for Road and Bridge Construction. The most current edition shall be used unless a specific edition is referred to. Those paragraphs in the "Standard Specifications" referring to Measurement and Payment are not applicable to work under this contract.

References to AASHTO shall mean the American Association of State Highway and Transportation Officials.

1.04 SUBMITTALS

Submit Certificate of Compliance with specified requirements in duplicate for OWNER's and ENGINEER's file.

Design mixes, complete with back-up data, shall be submitted before paving begins in quadruplicate for use by OWNER, ENGINEER, Quality Control Laboratory and field inspector.

1.05 JOB CONDITIONS

Alignment and Elevations. Establish and maintain alignment and elevations as shown or specified.

Weather Limitations. Conform to weather limitations specified for each component of the paving system.

PART 2 - MATERIALS AND EQUIPMENT

2.01 STABILIZED SUBGRADE

Materials for use in constructing the stabilized subgrade shall conform to the requirements of Section 160 of the “Standard Specifications”.

2.02 MATERIALS FOR CRUSHED CONCRETE BASE COURSE

The minimum percentage of carbonate of calcium and magnesium in the crushed concrete material shall be 60. The maximum percentage of water-sensitive clay mineral shall be 3. Determination shall be at the option of the ENGINEER.

Crushed concrete material shall not contain cherty or other extremely hard pieces, or lumps, balls, or pockets of sand or clay size material in sufficient quantity as to be deleterious to the proper bonding, finishing, or strength of the crushed concrete base.

2.03 MATERIALS FOR ASPHALTIC CONCRETE MIXTURES

Materials for use in asphaltic concrete mixtures shall conform to the requirements listed in “Standard Specifications”, of Florida Department of Transportation.

The use of recycled asphaltic concrete may be allowed, given that the mix design submitted by the Contractor which is intended to be used on this project, conform to the technical provisions (based on Florida Department of Transportation, unless stated otherwise) for the type of mix specified in the drawings, bid or other sections of the specifications.

CONTRACTOR shall employ an independent testing laboratory to test materials and prepare a design mix for the type of mix to be used on the project and to monitor plant asphalt production for quality control, as specified by OWNER.

The asphaltic concrete manufacturing plant, used for the asphaltic concrete mixture, shall be a maximum of fifty (50) miles from the project site.

2.04 MATERIALS FOR PRIME AND TACK COATS FOR BASE COURSES

Materials used for prime and tack coats shall conform to the requirements of Section 300 of the “Standard Specifications”, Latest Edition.

2.05 CONCRETE CURB AND CURB AND GUTTER

Concrete for use in concrete curb and gutter shall be non structural concrete conforming to the requirements of Section 520 of the “Standard Specifications”.

PART 3 - EXECUTION

3.01 INSPECTION

Examine areas where pavements are to be constructed. Ensure that clearing and grubbing has been satisfactorily completed. Verify that subgrade has been constructed to proper elevations and that fill in embankment has been properly compacted.

3.02 STABILIZED SUBGRADE

The stabilized subgrade shall be constructed in accordance with the requirements of Section 160 of the “Standard Specifications”, Latest Edition, for a Type B Stabilized Subgrade.

At least 3-inches (loose measurement) of a suitable commercial or local stabilizing material, as described in the “Standard Specifications”, Section 914, shall be mixed into the subgrade for stabilization in accordance with the “Standard Specifications”, Sections 160-1, 3 and 8. The Limerock Bearing Ratio (LBR) shall be 40. Density tests will be paid for by the OWNER except that all retests required due to failure to meet specifications shall be paid for by the CONTRACTOR.

After the subgrade has been prepared, it shall be kept free from ruts, depressions and any damage resulting from the hauling or handling of tools and equipment.

3.03 CRUSHED CONCRETE BASE COURSE

Samples of base course material shall be supplied by the CONTRACTOR at his expense, and all materials shall be approved by the ENGINEER prior to use in the work. Additional samples of base course materials shall be furnished during construction as required by the ENGINEER.

The material shall be transported to the point where it is to be used, over material previously placed, and dumped on the end of the preceding spread. No hauling shall be done over the subgrade.

At least 97% (by weight) of the material shall pass a 3 ½-inch sieve and the material shall be graded uniformly down to dust. The fine materials shall consist entirely of dust or fracture. All crushing or breaking-up which might be necessary in order to meet such size requirements shall be done before the material is placed on the road. The base shall be bladed and shaped to conform to the typical sections shown on the Drawings. The base shall then be compacted by rolling with a combination of steel wheel and rubber tired rollers until an average density of 98% of the maximum density obtainable under AASHTO Method T-180 is reached. The base shall have an average LBR of not less than 100. The LBR value of material produced at a particular source shall be determined in accordance with an approved quality control procedure.

3.04 ASPHALTIC CONCRETE PAVING

Asphaltic concrete mixtures for use in leveling and surface courses shall be prepared, placed, compacted and finished in compliance with “Standard Specifications”, Latest Edition.

3.05 PRIME AND TACK COATS

Equipment for application, preparation of surfaces, weather limitations, methods and rates of application shall conform to the requirements of section 300-3 through 300-7 of the “Standard Specifications”, Latest Edition.

3.07 CONCRETE CURB AND CURB AND GUTTER

Concrete curb and curb and gutter shall be constructed in compliance with the requirements of Section 520 of the “Standard Specifications”, Latest Edition.

3.08 STREET RECONSTRUCTION

Where street reconstruction is indicated on the Drawings it shall require complete removal of street surface and base and replacement with materials to the limits shown on the Drawings. If existing base and surface contain strips of concrete or asphaltic base used in prior street repairs these materials shall be completely removed and disposed of by the CONTRACTOR. Where curb and gutter removal is called for on the Drawings, complete removal and disposal shall be accomplished by the CONTRACTOR.

After removal of base material the subgrade shall be tested for bearing value as specified. If the subgrade does not have adequate bearing value it shall be stabilized in accordance with Section 160 of the “Standard Specifications” Latest Edition. Materials removed from existing base may be used in stabilizing subgrade with the approval of the ENGINEER. No separate payment will be made for stabilizing the subgrade.

END OF SECTION

SECTION 02605
PRECAST CONCRETE MANHOLES AND STRUCTURES

PART 1 GENERAL

1.01 SCOPE OF WORK

- A. Furnish all labor, materials and equipment required and install precast concrete stormwater manholes, stormwater structures, frames and covers, access hatches, manhole rungs, ladders and appurtenances as shown on the Drawings and as specified herein.

1.02 RELATED WORK

- A. Excavation and backfill is included in Section 02200 and 02222.
- B. Drainage structures and piping are included in Section 02720.

1.03 SUBMITTALS

- A. Submit to the ENGINEER, in accordance with Section 01300, shop drawings, product data, materials of construction, and details of installation. Submittals shall include at least the following:
 - 1. Base sections, riser sections, eccentric and concentric conical top sections, flat slab tops, grade rings with notarized certificate indicating compliance with ASTM C478.
 - 2. Pipe connection to manhole.
 - 3. Manhole rungs, including method of installation and notarized certificate indicating compliance with pull-out resistance test specified herein.
 - 4. Manhole frame and cover with notarized certificate indicating compliance with ASTM A48, Class 30.
 - 5. Method of repair for minor damage to precast concrete sections.
 - 6. Building brick with notarized certificate indicating compliance with ASTM C62.
- B. Samples
- C. Design Data
 - 1. Precast concrete structures:
 - a. Six copies of sectional plan(s) and elevations showing dimensions and reinforcing-steel placement.

- b. Six copies of structural calculations including assumptions.
- c. Six copies of concrete design mix.

D. Test Reports

1. Precast concrete structures:

- a. Six copies of concrete test cylinder reports from an approved testing laboratory certifying conformance with this Section.

E. Certificates

F. Manufacturers Installation (or Application) Instructions

G. Statement of Qualifications

H. Manufacturer's Field Report

I. Project Record Documents

J. Operation and Maintenance Data

K. Warranties

1.04 REFERENCE STANDARDS

A. American Society for Testing and Materials (ASTM)

- 1. ASTM A48 - Standard Specification for Gray Iron Castings.
- 2. ASTM A615 - Standard Specification for Deformed and Plain Billet-Steel Bars for Concrete Reinforcement.
- 3. ASTM C32 - Standard Specification for Sewer and Manhole Brick (Made from Clay or Shale).
- 4. ASTM C33 - Standard Specification for Concrete Aggregates.
- 5. ASTM C62 - Standard Specification for Building Brick (Solid Masonry Units Made from Clay or Shale)
- 6. ASTM C 150 - Standard Specification for Portland Cement
- 7. ASTM C207 - Standard Specification for Hydrated Lime for Masonry Purposes
- 8. ASTM C443 - Standard Specification for Joints for Circular Concrete Sewer and Culvert Pipe, Using Rubber Gaskets

9. ASTM C478 - Standard Specification for Precast Reinforced Concrete Manhole Sections
10. ASTM D4101 - Standard Specification for Propylene Plastic Injection and Extrusion Materials.

B. American Concrete Institute (ACI)

1. ACI 318 - Building Code Requirements for Reinforced Concrete
2. ACI 350R - Environmental Engineering Concrete Structures

C. American Association of State Highway and Transportation Officials (AASHTO)

1. Standard Specifications for Highway Bridges

D. Occupational Safety and Health Administration (OSHA)

- E. Where reference is made to one of the above standards, the revision in effect at the time of bid opening shall apply.

1.05 QUALITY ASSURANCE

- A. All material shall be new and unused.
- B. Materials' quality, manufacturing process and finished sections are subject to inspection and approval by ENGINEER or other OWNER representative. Inspection may be made at place of manufacture, at work site following delivery, or both.
- C. Materials will be examined for compliance with ASTM standards, this Section and approved manufacturer's drawings. Additional inspection criteria shall include: appearance, dimensions(s), blisters, cracks and soundness.
- D. Materials shall be rejected for failure to meet any requirements specified herein. Rejection may occur at place of manufacture, at work site, or following installation. Mark for identification rejected materials and remove from work site immediately. Rejected materials shall be replaced at no cost to OWNER.
- E. Repair minor damage to precast concrete sections by approved method, if repair is authorized by ENGINEER.

PART 2 PRODUCTS

2.01 GENERAL

- A. Reference to a manufacturer's name and model or catalog number is for the purpose of establishing the standard of quality and general configuration desired.

- B. Like items of materials/equipment shall be the end products of one manufacturer in order to provide standardization for appearance, operation, maintenance, spare parts and manufacturer's service.
- C. Provide lifting lugs or holes in each precast section for proper handling.

2.02 PRECAST CONCRETE MANHOLE SECTIONS

- A. Precast concrete base sections, riser sections, transition top sections, flat slab tops and grade rings shall conform to ASTM C478 and shall be in accordance with FDOT standards.
 - 1. Top section shall be eccentric cone where cover over pipe exceeds 4-ft. Top section shall be a flat slab where cover over top of pipe is 4-ft or less. Top section shall be a plastic lined flat slab where manhole riser sections are to be plastic lined.
 - 2. Base, riser and transition top sections shall have tongue and groove joints.
 - 3. Sections shall be cured by an approved method.
 - 4. Precast concrete sections shall be shipped after concrete has attained 3000 psi compressive strength.
 - 5. Design precast concrete base, riser, transition top, flat slab top and grade ring for a minimum H-20 loading plus earth load. Calculate earth load with a unit weight of 130 pcf.
 - 6. Mark date of manufacture, name and trademark of manufacturer on the inside of each precast section.
 - 7. Construct and install precast concrete base as shown on the Drawings and specified in FDOT standards.
 - 8. Provide integrally cast knock-out panels in precast concrete manhole sections at locations, and with sizes shown on Drawings. Knock-out panels shall have no steel reinforcing.

2.03 PRECAST CONCRETE STRUCTURES

- A. Refer to FDOT Standards for inside dimensions, headroom requirements and minimum thickness of concrete.
- B. Manufacturer shall notify ENGINEER at least 5 working days prior to placing concrete during manufacturing process. ENGINEER may inspect reinforcing steel placement prior to placing concrete.
- C. Structural design calculations and Drawings shall be prepared and stamped by a professional engineer registered in Florida.

D. Design Criteria

1. Precast concrete

- a. Minimum compressive strength shall be 5,000 psi at 28 days.
- b. Maximum water-to-cement ratio shall be 0.40 by weight.
- c. Minimum cement content shall be 600 lbs of cement per cubic yard of concrete.

2. Manufactured products

- a. Conform to ACI 318 and ACI 350R.
- b. Analyze walls and slabs using accepted engineering principals.
- c. When "fy" exceeds 40,000 psi, "z" (ACI 318) shall not exceed 95,000 psi. "fs" shall not exceed 50 percent of "fy".
- d. Design products to support their own weight, weight of soil at 120 pcf, and a live load equal to AASHTO HS-20 applied to top slab.
- e. Cast base slab and walls together to form a monolithic base section.
- f. Design structure walls for a water pressure of 90 psf. Originate pressure diagram at finished ground surface. Include lateral pressure from vehicles in accordance with AASHTO.
- g. Consider discontinuities in structure produced by openings and joints. Provide additional reinforcing around openings. Frame openings to carry full design loads to support walls.
- h. Prevent flotation, with ground water level at finished ground surface, by dead weight of structure and soil load above structure. Do not consider skin friction, soil friction, or weight of equipment in structure.
- i. Locate horizontal wall joints 18-in minimum from horizontal centerline of wall openings.
- j. Design structure with a minimum number of joints. Maximum number of structure sections, including top slab, shall be four.
- k. Provide lifting hooks for top slab.
 - 1. Locate access openings, wall sleeves and pipe penetrations as shown on Drawings.
- m. Wall sleeves shall be provided by the precast concrete manufacturer.

2.04 BRICK MASONRY

- A. Bricks shall be sound, hard, uniformly burned, regular and uniform in shape and size. Underburned or salmon brick shall not be acceptable. Only whole brick shall be used.
 - 1. Bricks for channels and shelves shall conform to ASTM C32, Grade SS except that the mean of five tests for absorption shall not exceed 8 percent and no individual brick exceed 11 percent.
 - 2. Bricks for raising manhole frames to finished grade shall conform to ASTM C62.
- B. Mortar shall be composed of 1 part portland cement, 2 parts sand, and hydrated lime not to exceed 10-lbs to each bag of cement. Portland cement shall be ASTM C150, Type II; hydrated lime shall conform to ASTM C207.
- C. Sand shall be washed, cleaned, screened, well graded with all particles passing a No.4 sieve and conform to ASTM C33.

2.05 JOINTING PRECAST MANHOLE SECTIONS AND STRUCTURES

- A. Seal tongue and groove joints of precast manhole and structure sections with either rubber O-ring gasket or preformed flexible joint sealant. O-ring gasket shall conform to ASTM C443. Preformed flexible joint sealant shall be Kent Seal No.2 by Hamilton-Kent; Ram-Nek by K. T. Snyder Company or equal.
- B. Completed joint shall withstand 15 psi internal water pressure without leakage or displacement of gasket or sealant.

2.06 PIPE CONNECTIONS TO MANHOLE

- A. Connect pipe to manhole in the following ways:
 - 1. Grout in place - Precast manhole section shall have a formed, tapered circular opening larger than the pipe outside diameter. Grout shall be non-shrink and waterproof equal to Hallemite, Waterplug or Embeco. Plastic pipe shall have a waterstop gasket secured to pipe with a stainless steel clamp.
 - 2. Flexible sleeve - Integrally cast sleeve in precast manhole section or install sleeve in a formed or cored opening. Fasten pipe in sleeve with stainless steel clamp(s). Coat stainless steel clamp(s) with bituminous material to protect from corrosion. Flexible sleeve shall be Lock Joint Flexible Manhole Sleeve; Kor-N-Seal connector; PSX Press-Seal Gasket or equal.
 - 3. Compression gasket - Integrally cast compression gasket in precast manhole section. Insert pipe into compression gasket. Compression gasket shall be A-Lok or equal.

2.07 DAMPPROOFING

- A. Dampproofing shall be Hydrocide 648 by Sonneborn Building Products; Dehydratine 4 by A. C. Horn Inc; RIW Marine Liquid by Toch Brothers or equal.

PART 3 EXECUTION

3.01 INSTALLATION

A. Manhole and Structure Installation.

1. Manhole and structure shall be constructed to the dimensions shown on the Drawings and as specified in FDOT standards. Protect all work against flooding and flotation. Construct cast-in-place bases in accordance with the requirements of Division 3 and the details shown on the Drawings.
2. Place manhole base on a bed of 12-in screened gravel as shown on the Drawings. Set manhole base grade so that a maximum grade adjustment of 8-in is required to bring the manhole frame and cover to final grade.
 - a. Use precast concrete grade rings or brick and non-shrink mortar to adjust manhole frame and cover to final grade.
3. Set precast concrete barrel sections and structures plumb with a 1/4-in maximum out of plumb tolerance allowed. Seal joints of precast barrel sections with either a rubber O-ring set in a recess or preformed flexible joint sealant in sufficient quantity to fill 75 percent of the joint cavity. Fill the outside and inside joint with non-shrink mortar and finished flush with the adjoining surfaces. Caulk the inside of any leaking barrel section joint with lead wool or non-shrink grout to the satisfaction of the ENGINEER.
4. Allow joints to set for 14 hours before backfilling unless a shorter period is specifically approved by the ENGINEER.
5. Plug holes in the concrete barrel sections required for handling with a non-shrinking grout or non-shrinking grout in combination with concrete plugs. Finish flush on the inside.
6. Cut holes in precast sections to accommodate pipes prior to setting manhole sections in place to prevent jarring which may loosen the mortar joints.
7. Backfill carefully and evenly around manhole sections.

B. Manhole Pipe Connections

1. Construct manhole pipe connections, including pipe stubs, as specified above. Close or seal pipe stubs for future connections with a gasketed watertight plug.

C. Manhole Rung Installation

1. Aluminum Manhole Rungs

- a. Grout aluminum manhole rungs into precast sections, on 12-in centers. Preform holes in riser and cone sections for rungs during casting. Holes for rungs shall be 1-1/8-inch in diameter and a minimum of 3-1/2-in deep.
- b. Grout rungs into precast sections immediately after casting and placing in the curing area, or immediately after coring holes for manhole rungs into base section. Fill holes with grout consisting of Portland Type II cement and mortar sand in a 1 to 1/2 ratio mixed to a putty consistency.
- c. Paint those parts of the rungs which are embedded with a heavy coating of zinc chromate or other approved paint.

2. Steel Reinforced Polypropylene Plastic Manhole Rungs

- a. Preform holes for manhole rungs during casting of the riser and cone sections, using tapered form pins specifically made for preforming manhole rung holes.
- b. Drive manhole rungs into preformed holes after concrete has developed a compressive strength of 3,000 psi.
- c. Alternatively, cast manhole rungs into riser and cone sections when concrete is placed.
- d. Drilling holes for manhole rungs may be used to accommodate field conditions when approved by the ENGINEER. Drill holes of diameter, spacing and depth required by manhole rung manufacturer.

3. Pull-out resistance test

- a. All manhole rung installation methods shall withstand a pull-out resistance test of 1,500 pounds.

D. Brickwork

1. Mix mortar only in such quantity as may be required for immediate use. Use mortar before initial set has taken place. Mortar shall be used within 1-1/2 hours and shall be constantly worked with hoe or shovel until used. Anti-freeze mixtures shall not be included in the mortar. Install masonry when the outside temperature is above 40 degrees F unless provisions are made to protect the mortar, bricks and finished work from frost by heating and enclosing the work with tarpaulins or other suitable material. ENGINEER's decision regarding the adequacy of protection against freezing shall be final.
2. Construct channels and shelves of brick and concrete as shown on the Drawings and as specified in FDOT standards. Brick lined channels shall correspond in shape with

the lower half of the pipe. Set shelf elevation at crown of highest pipe and slope 1-in/ft to drain toward the flow through channel. Construct brick surfaces exposed to sewage flow with nominal 2-in by 8-in face exposed (i.e. bricks on edge).

E. Setting Manhole Frame and Cover

1. Set manhole covers and frames in a full mortar bed. Utilize bricks or precast concrete grade rings, a maximum of 8-in thick, to assure frame and cover are set to the finished grade. Set manhole frame and cover to final grade prior to placement of permanent paving.

F. Dampproofing

1. Paint outer surfaces of precast and cast-in-place manholes and structures with two coats of bituminous dampproofing at the rate of 30 to 60 sq ft per gallon, in accordance with manufacturer's instructions.

3.02 LEAKAGE TESTS

- A. Test each manhole for leakage. ENGINEER shall observe each test. Perform exfiltration test as described below:
- B. Assemble manhole in place; fill and point all lifting holes and exterior joints within 6-ft of the ground surface with an approved non-shrinking mortar. Test prior to placing the shelf and invert and before filling and pointing the horizontal joints below 6-ft of depth. Lower ground water table below bottom of the manhole for the duration of the test. Plug all pipes and other openings into the manhole and brace to prevent blow out.
- C. Fill manhole with water to the top of the cone section. If the excavation has not been backfilled and no water is observed moving down the surface of the manhole, the manhole is satisfactorily water-tight. If the test, as described above is unsatisfactory as determined by the ENGINEER, or if the manhole excavation has been backfilled, continue the test. A period of time may be permitted to allow for absorption. Following this period, refill manhole to the top of the cone, if necessary and allow at least 8 hours to pass. At the end of the test period, refill the manhole to the top of the cone again, measuring the volume of water added. Extrapolate the refill amount to a 24-hour leakage rate. The leakage for each manhole shall not exceed one gallon per vertical foot for a 24-hour period. If the manhole fails this requirement, but the leakage does not exceed three gallons per vertical foot per day, repairs by approved methods may be made as directed by the ENGINEER. If leakage due to a defective section of joint exceeds three gallons per vertical foot per day, the manhole shall be rejected. Uncover the rejected manhole as necessary and to disassemble, reconstruct or replace it as directed by the ENGINEER. Retest the manhole and, if satisfactory, fill and paint the interior joints.
- D. No adjustment in the leakage allowance will be made for unknown causes such as leaking plugs, absorptions, etc. It will be assumed that all loss of water during the test is a result of leaks through the joints or through the concrete.
- E. An infiltration test may be substituted for an exfiltration test if the ground water table is above the highest joint in the manhole. If there is no leakage into the manhole as

determined by the ENGINEER, the manhole will be considered water-tight. If the ENGINEER is not satisfied, testing shall be performed as described hereinbefore.

F. Leakage Tests for Structures

1. The ENGINEER will visually inspect structure(s) for possible leaks before backfilling of structures is allowed. Seal all joints to the satisfaction of the ENGINEER.
2. The ENGINEER may require an exfiltration test as described for manholes on any structure for which he/she deems the test appropriate.

3.03 CLEANING

- A. Thoroughly clean all new manholes of all silt, debris and foreign matter of any kind, prior to final inspections.

END OF SECTION

SECTION 02611
REINFORCED CONCRETE PIPE FOR GRAVITY SERVICE

PART 1 - GENERAL

1.01 DESCRIPTION OF WORK

- A. This section covers materials and methods of installation of Reinforced Concrete Pipe for non-pressure or gravity service in Piped Utility Systems.

1.02 HANDLING AND STORAGE

- A. Pipe, fittings, and accessories shall be loaded and unloaded by lifting with hoists or skidding in order to avoid shock or damage. Under no circumstances shall such material be dropped. Pipe handled on skidways shall not be rolled or skidded against pipe on the ground. Slings, hooks or pipe tongs shall be padded and used in such a manner as to prevent damage to the exterior surface or internal lining of the pipes.
- B. Materials, if stored, shall be kept safe from damage. The interior of all pipe, fittings, and other appurtenances shall be kept free from dirt or foreign matter at all times.
- C. Gaskets for joints shall be placed in a cool location out of direct sunlight. Gaskets shall not come in contact with petroleum products. Gaskets shall be used on a first-in, first-out basis.
- D. Inspection:
1. Pipe and appurtenances shall be inspected at the point of delivery. Material found to be defective due to manufacture or damage in shipment shall be rejected. Tests as specified in the applicable material standard may be performed to ensure conformance with the standard.

PART 2 - PRODUCTS

2.01 ROUNDED PIPE

- A. Pipe shall be cast vibrated, machine-made or flat bed concrete pipe that is designed, manufactured, cured, tested and marked in accordance with the requirements of ASTM Designation C-76. Pipe shall be equivalent to Class III, unless otherwise noted on plans, and Wall B or C of the proper strength for the depth of cover required. Pipe shall be manufactured in lengths no longer than 16-feet nor shorter than 8-feet, except that shorter lengths as required at closures or junctions of structures will be permitted. Pipe with elliptical reinforcing shall be adequately marked to prevent improper placement in the trench. Lift holes or eyes may be provided in each pipe for the purpose of handling.
- B. Joints shall be of either a bell and spigot or double spigot and sleeve design using round rubber gaskets. The joint shall be so designed and fabricated that when the pipe is laid it

shall be self-centering, and when the joint completed, the gasket will be enclosed on all four surfaces. The gasket shall not be required to support the weight of the pipe, but shall keep the joint tight under all normal conditions of service, including expansion, contraction and earth settlement.

- C. Joints and gaskets shall conform to the requirements of ASTM C443.

2.02 ELLIPTICAL PIPE

- A. Pipe shall be cast vibrated, machine made or flat bed elliptically shaped concrete pipe designed, manufactured, cured, tested and marked in accordance with ASTM C507.
- B. Pipe shall be of the proper strength for the depth of cover involved and shall be manufactured in lengths not longer than 16-feet nor shorter than 8-feet, except that shorter lengths as required at closures or junctions with structures will be permitted.
- C. Pipe designed for placement with the major axis horizontal shall be designated as "Vertical Elliptical" and shall be so marked.
- D. Joints for elliptical pipe shall be cold adhesive, pre-formed plastic gaskets conforming to Standard Specifications for Road and Bridge Construction of Florida Department of Transportation, Section 942, paragraph 942-2.

2.03 EXTERNAL CONCRETE JOINT WRAP

All concrete pipe joints and pipe connections to structures shall be wrapped with an approved filter fabric joint wrap product. Joint material and installation shall be in accordance with Section 430 of the FDOT Standard Specifications, latest edition.

PART 3 - EXECUTION

3.01 UNDERGROUND STRUCTURES AND CONFLICTS

- A. Prior to excavation, investigation shall be made to the extent necessary to determine the location of existing underground structures and conflicts. Care shall be exercised to avoid damage to existing structures. When obstructions that are not shown on the drawings are encountered during the progress of work and interfere so that an alteration of the plans is required, the Engineer will alter the drawings or order a deviation in line and grade or arrange for removal, relocation, or reconstruction of the obstructions. When crossing existing pipelines or other structure, alignment and grade shall be adjusted as necessary, with the approval of the Engineer to provide clearance as required by federal, state or local regulations or as deemed necessary by the Engineer to prevent future damage or contamination of either structure.

3.02 ALIGNMENT AND GRADE

- A. The pipelines shall be laid and maintained to the lines and grades established by the drawings and specifications, with manholes, service connections, fittings, and appurtenances at the required locations unless otherwise approved by the Engineer.

3.03 TRENCH CONSTRUCTION

- A. The trench shall be excavated to the required alignment, depth, and width. Trench preparation shall proceed in advance of pipe installation for only as far as necessary to allow proper pipe installation. The width of the trench at the top of the pipe shall be ample to permit the pipe to be laid and joined properly and allow the backfill to be placed as specified. Trenches shall be of such extra width, when required, to permit the placement of timber supports, sheeting, bracing and appurtenances.
- B. Holes for the bells shall be provided at each joint but shall not be larger than necessary for joint assembly and assurance that the pipe barrel will lie flat on the trench bottom. Other than noted previously, the trench bottom shall be true and even in order to provide support for the full length of the pipe barrel, except that slight depression may be provided to allow withdrawal of pipe slings or other lifting tackle.
- C. When excavation of rock is encountered, all rock shall be removed to provide a clearance of at least 6-inches below and on each side of all pipe for pipe sizes 24-inches or smaller, and 9-inches for pipe sizes 30-inches and larger. When excavation is completed, a bed of sand, crushed stone, or earth that is free from stones, large clods, or frozen earth, shall be placed on the bottom of the trench to the previously mentioned depths, leveled, and tamped. These clearances and bedding procedures shall also be observed for pieces of concrete or masonry and other debris or subterranean structures, such as masonry walls, piers, or foundations that may be encountered during excavation. This installation procedure shall be followed when gravel formation containing loose boulders greater than 8-inches in diameter are encountered. In all cases, the specified clearances shall be maintained between the bottom of all pipe and appurtenances and any part, projection, or point or rock, boulder, or stones of sufficient size and placement which, in the opinion of the Engineer could cause a fulcrum point.
- D. Should the trench pass over a sewer or other previous excavation, the trench bottom shall be sufficiently compacted to provide support equal to that of the native soil or conform to other regulatory requirements in a manner that will prevent damage to the existing installation.
- E. When the subgrade is found to be unstable or to include ashes, cinders, refuse, organic material, or other unsuitable material, such material shall be removed, to a minimum of at least 3-inches, or to the depth ordered by the Engineer and replaced under the directions of the Engineer with clean, stable backfill material. The bedding shall be consolidated and leveled in order that the pipe may be installed as specified.
- F. When the bottom of the trench or the subgrade is found to consist of material that is unstable to such a degree that, in the judgment of the Engineer, it cannot be removed, a foundation for the pipe and/or appurtenance shall be constructed using piling, timber, concrete, or other materials at the direction of the Engineer.

- G. Pipe cutting for the insertion of fittings, or closure pieces shall be done in neat, workmanlike manner without creating damage to the pipe or lining.

END OF SECTION

**SECTION 02720
DRAINAGE STRUCTURES AND PIPING**

PART 1 - GENERAL

1.01 DESCRIPTION OF WORK

- A. The extent of drainage structures and piping is shown on the drawings.
- B. Related Work Specified Elsewhere:

Section 02200 - Earthwork.

Section 02222 - Trenching, Backfilling and Compacting.

Section 02611 - Reinforced Concrete Pipe for Gravity Service

1.02 SUBMITTALS

- A. Submit shop drawings of precast manholes, inlets, grating, frames and lids, and pipe.
- B. Submit cut sheets 24-hours in advance of pipe excavation for ENGINEER approval.

1.03 QUALITY ASSURANCE

- A. All material shall be new and unused.
- B. Materials' quality, manufacturing process and finished sections are subject to inspection and approval by ENGINEER or other OWNER representative. Inspection may be made at place of manufacture, at work site following delivery, or both.
- C. Materials will be examined for compliance with ASTM standards, this Section and approved manufacturer's drawings. Additional inspection criteria shall include: appearance, dimensions(s), blisters, cracks and soundness.
- D. Materials shall be rejected for failure to meet any requirements specified herein. Rejection may occur at place of manufacture, at work site, or following installation. Mark for identification rejected materials and remove from work site immediately. Rejected materials shall be replaced at no cost to OWNER.
- E. Repair minor damage to precast concrete sections by approved method, if repair is authorized by ENGINEER.

PART 2 - PRODUCTS

2.01 GENERAL

- A. Reference to a manufacturer's name and model or catalog number is for the purpose of establishing the standard of quality and general configuration desired.

- B. Like items of materials/equipment shall be the end products of one manufacturer in order to provide standardization for appearance, operation, maintenance, spare parts and manufacturer's service.
- C. Provide lifting lugs or holes in each precast section for proper handling.

2.02 PRECAST CONCRETE MANHOLE SECTIONS

- A. Precast concrete base sections, riser sections, transition top sections, flat slab tops and grade rings shall conform to ASTM C478 and shall be in accordance with FDOT standards.
 - 1. Top section shall be eccentric cone where cover over pipe exceeds 4-ft. Top section shall be a flat slab where cover over top of pipe is 4-ft or less. Top section shall be a plastic lined flat slab where manhole riser sections are to be plastic lined.
 - 2. Base, riser and transition top sections shall have tongue and groove joints.
 - 3. Sections shall be cured by an approved method.
 - 4. Precast concrete sections shall be shipped after concrete has attained 3000 psi compressive strength.
 - 5. Design precast concrete base, riser, transition top, flat slab top and grade ring for a minimum H-20 loading plus earth load. Calculate earth load with a unit weight of 130 pcf.
 - 6. Mark date of manufacture, name and trademark of manufacturer on the inside of each precast section.
 - 7. Construct and install precast concrete base as shown on the Drawings and specified in FDOT standards.
 - 8. Provide integrally cast knock-out panels in precast concrete manhole sections at locations, and with sizes shown on Drawings. Knock-out panels shall have no steel reinforcing.

2.03 PRECAST CONCRETE STRUCTURES

- A. Refer to FDOT Standards for inside dimensions, headroom requirements and minimum thickness of concrete.
- B. Manufacturer shall notify ENGINEER at least 5 working days prior to placing concrete during manufacturing process. ENGINEER may inspect reinforcing steel placement prior to placing concrete.
- C. Structural design calculations and Drawings shall be prepared and stamped by a professional engineer registered in Florida.
- D. Design Criteria

1. Precast concrete

- a. Minimum compressive strength shall be 5,000 psi at 28 days.
- b. Maximum water-to-cement ratio shall be 0.40 by weight.
- c. Minimum cement content shall be 600 lbs of cement per cubic yard of concrete.

2. Manufactured products

- a. Conform to ACI 318 and ACI 350R.
- b. Analyze walls and slabs using accepted engineering principals.
- c. When "fy" exceeds 40,000 psi, "z" (ACI 318) shall not exceed 95,000 psi. "fs" shall not exceed 50 percent of "fy".
- d. Design products to support their own weight, weight of soil at 120 pcf, and a live load equal to AASHTO HS-20 applied to top slab.
- e. Cast base slab and walls together to form a monolithic base section.
- f. Design structure walls for a water pressure of 90 psf. Originate pressure diagram at finished ground surface. Include lateral pressure from vehicles in accordance with AASHTO.
- g. Consider discontinuities in structure produced by openings and joints. Provide additional reinforcing around openings. Frame openings to carry full design loads to support walls.
- h. Prevent flotation, with ground water level at finished ground surface, by dead weight of structure and soil load above structure. Do not consider skin friction, soil friction, or weight of equipment in structure.
- i. Locate horizontal wall joints 18-in minimum from horizontal centerline of wall openings.
- j. Design structure with a minimum number of joints. Maximum number of structure sections, including top slab, shall be four.
- k. Provide lifting hooks for top slab.
 - 1. Locate access openings, wall sleeves and pipe penetrations as shown on Drawings.
- m. Wall sleeves shall be provided by the precast concrete manufacturer.

2.04 BRICK MASONRY

- A. Bricks shall be sound, hard, uniformly burned, regular and uniform in shape and size. Underburned or salmon brick shall not be acceptable. Only whole brick shall be used.

1. Bricks for channels and shelves shall conform to ASTM C32, Grade SS except that the mean of five tests for absorption shall not exceed 8 percent and no individual brick exceed 11 percent.
 2. Bricks for raising manhole frames to finished grade shall conform to ASTM C62.
- B. Mortar shall be composed of 1 part portland cement, 2 parts sand, and hydrated lime not to exceed 10-lbs to each bag of cement. Portland cement shall be ASTM C150, Type II; hydrated lime shall conform to ASTM C207.
- C. Sand shall be washed, cleaned, screened, well graded with all particles passing a No.4 sieve and conform to ASTM C33.

2.05 JOINTING PRECAST MANHOLE SECTIONS AND STRUCTURES

- A. Seal tongue and groove joints of precast manhole and structure sections with either rubber O-ring gasket or preformed flexible joint sealant. O-ring gasket shall conform to ASTM C443. Preformed flexible joint sealant shall be Kent Seal No.2 by Hamilton-Kent; Ram-Nek by K. T. Snyder Company or equal.
- B. Completed joint shall withstand 15 psi internal water pressure without leakage or displacement of gasket or sealant.

2.06 MANHOLE FRAMES AND COVERS

- A. Manhole frames and covers shall be in accordance with FDOT Standard Index No. 201 for the type of manhole or inlet required. Covers shall have 2" raised letter identification: "Storm Sewer" cast into top.

2.07 PIPE CONNECTIONS TO MANHOLE

- A. Connect pipe to manhole in the following ways:
1. Grout in place - Precast manhole section shall have a formed, tapered circular opening larger than the pipe outside diameter. Grout shall be non-shrink and waterproof equal to Hallemite, Waterplug or Embeco. Plastic pipe shall have a waterstop gasket secured to pipe with a stainless steel clamp.
 2. Flexible sleeve - Integrally cast sleeve in precast manhole section or install sleeve in a formed or cored opening. Fasten pipe in sleeve with stainless steel clamp(s). Coat stainless steel clamp(s) with bituminous material to protect from corrosion. Flexible sleeve shall be Lock Joint Flexible Manhole Sleeve; Kor-N-Seal connector; PSX Press-Seal Gasket or equal.
 3. Compression gasket - Integrally cast compression gasket in precast manhole section. Insert pipe into compression gasket. Compression gasket shall be A-Lok or equal.

2.08 EXTERNAL CONCRETE JOINT WRAP

All concrete pipe joints and pipe connections to structures shall be wrapped with an approved filter fabric joint wrap product. Joint material and installation shall be in accordance with Section 430 of the FDOT Standard Specifications, latest edition.

2.09 DAMPPROOFING

A.. Dampproofing shall be Hydrocide 648 by Sonneborn Building Products; Dehydratine 4 by A. C. Horn Inc; RIW Marine Liquid by Toch Brothers or equal.

2.10 PIPING

A.. Reinforced Concrete Pipe (RCP)

1. RCP pipe shall comply with the requirements of ASTM Designation C-76, as specified in Section 02611, Reinforced Concrete Pipe for Gravity Service.

B. High Density Polyethylene Pipe (HDPE):

1. HDPE pipe shall be smooth interior walled corrugated polyethylene pipe conforming to AASHTO M 294 and minimum cell classification 335420C as specified in ASTM D 3350.

Subject to compliance with requirements, HDPE manufacturers include, but are not limited to, the following:

- a. Advanced Drainage Systems (ADS), Inc.
- b. Hancor, Inc.

PART 3 - EXECUTION

3.01 INSTALLATION

A. Manhole and Structure Installation.

1. Manhole and structure shall be constructed to the dimensions shown on the Drawings and as specified in FDOT standards. Protect all work against flooding and flotation. Construct cast-in-place bases in accordance with the requirements of Division 3 and the details shown on the Drawings.
2. Place manhole base on a bed of 12-in screened gravel as shown on the Drawings. Set manhole base grade so that a maximum grade adjustment of 8-in is required to bring the manhole frame and cover to final grade.
 - a. Use precast concrete grade rings or brick and non-shrink mortar to adjust manhole frame and cover to final grade.
3. Set precast concrete barrel sections and structures plumb with a 1/4-in maximum out of plumb tolerance allowed. Seal joints of precast barrel sections with either a

rubber O-ring set in a recess or preformed flexible joint sealant in sufficient quantity to fill 75 percent of the joint cavity. Fill the outside and inside joint with non-shrink mortar and finished flush with the adjoining surfaces. Caulk the inside of any leaking barrel section joint with lead wool or non-shrink grout to the satisfaction of the ENGINEER.

4. Allow joints to set for 14 hours before backfilling unless a shorter period is specifically approved by the ENGINEER.
5. Plug holes in the concrete barrel sections required for handling with a non-shrinking grout or non-shrinking grout in combination with concrete plugs. Finish flush on the inside.
6. Cut holes in precast sections to accommodate pipes prior to setting manhole sections in place to prevent jarring which may loosen the mortar joints.
7. Backfill carefully and evenly around manhole sections.

B. Manhole Pipe Connections

1. Construct manhole pipe connections, including pipe stubs, as specified above. Close or seal pipe stubs for future connections with a gasketed watertight plug.

C. Brickwork

1. Mix mortar only in such quantity as may be required for immediate use. Use mortar before initial set has taken place. Mortar shall be used within 1-1/2 hours and shall be constantly worked with hoe or shovel until used. Anti-freeze mixtures shall not be included in the mortar. Install masonry when the outside temperature is above 40 degrees F unless provisions are made to protect the mortar, bricks and finished work from frost by heating and enclosing the work with tarpaulins or other suitable material. ENGINEER's decision regarding the adequacy of protection against freezing shall be final.
2. Construct channels and shelves of brick and concrete as shown on the Drawings and as specified in FDOT standards. Brick lined channels shall correspond in shape with the lower half of the pipe. Set shelf elevation at crown of highest pipe and slope 1-in/ft to drain toward the flow through channel. Construct brick surfaces exposed to sewage flow with nominal 2-in by 8-in face exposed (i.e. bricks on edge).

D. Setting Manhole Frame and Cover

1. Set manhole covers and frames in a full mortar bed. Utilize bricks or precast concrete grade rings, a maximum of 8-in thick, to assure frame and cover are set to the finished grade. Set manhole frame and cover to final grade prior to placement of permanent paving.

E. Dampproofing

1. Paint outer surfaces of precast and cast-in-place manholes and structures with two coats of bituminous dampproofing at the rate of 30 to 60 sq ft per gallon, in accordance with manufacturer's instructions.

3.02 LEAKAGE TESTS

- A. Test each manhole for leakage. ENGINEER shall observe each test. Perform exfiltration test as described below:
- B. Assemble manhole in place; fill and point all lifting holes and exterior joints within 6-ft of the ground surface with an approved non-shrinking mortar. Test prior to placing the shelf and invert and before filling and pointing the horizontal joints below 6-ft of depth. Lower ground water table below bottom of the manhole for the duration of the test. Plug all pipes and other openings into the manhole and brace to prevent blow out.
- C. Fill manhole with water to the top of the cone section. If the excavation has not been backfilled and no water is observed moving down the surface of the manhole, the manhole is satisfactorily water-tight. If the test, as described above is unsatisfactory as determined by the ENGINEER, or if the manhole excavation has been backfilled, continue the test. A period of time may be permitted to allow for absorption. Following this period, refill manhole to the top of the cone, if necessary and allow at least 8 hours to pass. At the end of the test period, refill the manhole to the top of the cone again, measuring the volume of water added. Extrapolate the refill amount to a 24-hour leakage rate. The leakage for each manhole shall not exceed one gallon per vertical foot for a 24-hour period. If the manhole fails this requirement, but the leakage does not exceed three gallons per vertical foot per day, repairs by approved methods may be made as directed by the ENGINEER. If leakage due to a defective section of joint exceeds three gallons per vertical foot per day, the manhole shall be rejected. Uncover the rejected manhole as necessary and to disassemble, reconstruct or replace it as directed by the ENGINEER. Retest the manhole and, if satisfactory, fill and paint the interior joints.
- D. No adjustment in the leakage allowance will be made for unknown causes such as leaking plugs, absorptions, etc. It will be assumed that all loss of water during the test is a result of leaks through the joints or through the concrete.
- E. An infiltration test may be substituted for an exfiltration test if the ground water table is above the highest joint in the manhole. If there is no leakage into the manhole as determined by the ENGINEER, the manhole will be considered water-tight. If the ENGINEER is not satisfied, testing shall be performed as described hereinbefore.
- F. Leakage Tests for Structures
 1. The ENGINEER will visually inspect structure(s) for possible leaks before backfilling of structures is allowed. Seal all joints to the satisfaction of the ENGINEER.
 2. The ENGINEER may require an exfiltration test as described for manholes on any structure for which he/she deems the test appropriate.

3.03 CLEANING

- A. Thoroughly clean all new manholes of all silt, debris and foreign matter of any kind, prior to final inspections.

END OF SECTION

SECTION 02801
RESTORATION OF SURFACE IMPROVEMENTS

PART 1 - GENERAL

1.01 DESCRIPTION OF WORK

The work includes the restoration of driveways, lawn areas, trees and plants, roadways, sprinkler systems, walks and any other existing improvement affected by the proposed work.

This section includes furnishing equipment, labor and materials, and performing all necessary and incidental operations to perform the required work.

1.02 QUALITY ASSURANCE

Standards. Florida Grades and Standards for Nursery Plants, Part 1:

Irrigation Contractor Qualifications. Irrigation Competency Card is required for contractor or sub-contractor doing any irrigation repair, including relocation of heads, lines or valves, or any new irrigation work.

PART 2 - MATERIALS AND EQUIPMENT

2.01 SOD

Sod used for restoration shall match the existing sod in the area. St. Augustine sod shall be replaced with St. Augustine Floratam. In areas without irrigation, Argentina Bahia sod shall be used, unless otherwise directed by the Engineer/Landscape Architect.

Sod shall have well matted roots.

The sod shall be sufficiently thick to secure a dense stand of live grass, with a minimum thickness of two-inches. The sod shall be live, fresh and uninjured at the time of planting. It shall be planted as soon as possible after being dug and shall be shaded and kept moist from the time it is dug until it is planted.

The sod shall be commercial size rectangles measuring 12-inches by 24-inches or larger, except where 6-inch strip sodding is called for on the drawings.

Sod shall be planted as soon as possible after being harvested and shall be shaded and kept moist from the time of harvesting until it is planted.

The source of the sod may be inspected and approved by the Engineer/Architect prior to construction.

2.02 PLANTS

Existing damaged plants shall be replaced by plants of equal type, quality and size whenever possible. All new plants shall be sound, healthy, vigorous and free from defects, decay, disfiguring, bark abrasions, plant diseases, insect pests, their eggs or larvae. The new plants shall be approved by the Engineer/Landscape Architect before placing.

Existing plants may be removed, preserved, and replaced at the Contractors option, in which case, the plants shall be handled and maintained by approved nursery staff.

Plants shall be watered and cared for until new growth appears. Dead and dying plants shall be immediately replaced.

Plants used shall be in accordance with the standards for Florida No. 1 or better, as given in the current "Grades and Standards for Nursery Plants," State of Florida, Department of Agriculture, or their equal as approved by the Engineer/Landscape Architect.

Plants shall conform to the sizes indicated by the Owner.

2.03 MULCH

Mulch for all planter areas shall be shredded cypress or eucalyptus, clean, bright and free from weeds, moss, sticks, and other debris.

2.04 WATER

The water used in the performance of this Contract shall be of drinking water quality, clean and free from injurious amounts of oil, acid, alkali, organic matter, or any substance which might be harmful to plant growth or obnoxious to traffic.

2.05 PLANTING MIXTURE

The planting mixture, when required, shall consist of a thorough mixture of 40% peat and 60% sand. The peat shall be Florihome peat or equivalent and the sand shall be clean and free from debris of any kind.

2.06 FERTILIZER

Fertilizer shall be granular 8-8-8, or equivalent.

Commercial fertilizers shall comply with the State fertilizer laws.

Fertilizer may, at the discretion of the Engineer/Architect, upon satisfactory evidence of its feasibility from the manufacturer, be applied in liquid form.

2.07 ASPHALTIC CONCRETE

Asphaltic concrete for surface and base course applications shall be Type S-9.5 as specified in the Florida Department of Transportation's Standard Specifications for Road and Bridge Construction and shall be in accordance with the project specifications and plans.

2.08 PORTLAND CEMENT CONCRETE

Portland cement concrete used in the performance of this Contract shall have a compressive strength of 3000 psi at 28 days and shall conform to the requirements of Section 03300.

PART 3 - EXECUTION

3.01 LANDSCAPING RESTORATION

All grass areas disturbed by construction shall be restored with the same type of sod as was existing prior to disturbance.

Lawn Areas. Any lawn area affected by the required work shall be restored to a condition equal or better than the conditions existing before the commencement of work.

Balled Plants. Plants where required shall be adequately balled with firm natural balls of soil, sized as set forth in "Grades and Standards". Balls shall be firmly wrapped with burlap or equally approved strong cloth. No balled plant will be planted if the ball is cracked or broken before or during the process of planting.

Option. Plants may be furnished as container grown instead of balled if all other requirements are met.

Preparation of Plant Pits. All plant pits shall be circular in outline and have vertical sides. Tree pits shall be two feet wider than the width of the ball and one foot deeper than the depth of the ball. Shrubs that are either B&B or in 3 gallon and under containers shall have pits that are one foot wider than the width of the plant ball and 6-inches deeper than the depth of the ball.

Setting Plants. All plants except as otherwise specified, shall be centered in pits. Deep planting shall be avoided and unless otherwise specified, plants shall be set at such a level that after settlement they will bear the same relation to the required grade as they have to the natural grade before being transplanted.

Balled and burlapped plants and palms shall be placed on 6-inches to 12-inches of tamped planting mixture and adjusted so as to be at the proper level. The rope and burlap shall be cut away and the burlap folded down to the bottom of the pit. Very large B&B plants shall remain wrapped until fully backfilled and then just the upper portion of the burlap shall be removed. Backfill of planting mix shall be placed halfway up the pit and then water tamped. After this water has drained away, backfill around the edge of the pit to form a saucer and fill area three times with water.

Water. Water to be used initially during plant installation shall be furnished by the Contractor. The existing irrigation system, where damaged, shall be promptly repaired after the installation of the plants.

Sod Placement. The provisions for the preparation of the area to be sodded shall include scarifying and loosening the soil and application of fertilizer. Sodding shall not be performed when weather and soil conditions are, in the Engineer's opinion, unsuitable for proper results.

The sod shall be placed on the prepared surface with edges in close contact, and shall be firmly and smoothly embedded by light tamping with appropriate tools.

Where sodding is used in drainage ditches or ponds, the setting of the pieces shall be staggered, such as to avoid a continuous seam along the line of flow. Along the edges of such staggered areas, the offsets of individual strips shall not exceed 6-inches.

In order to prevent erosion caused by vertical edges at the outer limits, the outer pieces of sod shall be tamped so as to produce a featheredge effect.

On areas where the sod may slide, due to height and slopes, it shall be pegged, with pegs driven through the sod blocks into firm soil and at intervals as shown on the drawings or as directed by the Engineer/Architect.

Any pieces of sod which, after placing, show appearance of extreme dryness shall be removed from the work.

The sod shall be kept in a moist condition after planting and for the duration of the Contract.

Maintenance. Contractor shall maintain the planted areas in a satisfactory condition until final acceptance of the project. Such maintenance shall include mowing, edging, weed control, watering, filling, leveling and repairing of any washed or eroded areas as may be necessary.

3.02 PAVEMENT REPLACEMENT

Asphalt pavement shall be removed by saw cutting on a straight line with edges as vertical as possible. Concrete pavement or asphalt surfaced concrete shall be removed by cutting with a concrete saw in as straight a line and vertically as possible.

Prior to replacing concrete or asphalt pavement replacement, a limerock base shall be laid. The base for concrete pavement shall be six (6) inches of compacted thickness, and that for asphalt pavement shall be twelve (12) inches of compacted thickness for City roadways. The base course for each shall be compacted in two equal layers to a minimum of 98% of the maximum density as determined by AASHTO, Method T-180. The Owner will have tests made by an independent testing laboratory to verify compaction results.

Non-asphalt pavement replacement shall be replaced of like material and thickness. Asphalt or built-up asphalt pavement replacement shall be replaced with like material or concrete as directed by the Engineer/Architect. Where asphalt or built-up asphalt pavement is replaced by concrete,

the concrete shall have a minimum of six (6) inches in thickness and be reinforced with 6 by 6 No. 6 gage welded wire fabric. Where the pavement replacement is of like material, it shall be replaced in thickness equal to or better than that existing at the time of removal.

Unless the base is sealed or other temporary paving applied over driveway areas to be repaved, pavement shall be replaced not later than three weeks after completion of backfill.

3.03 CURB REMOVAL AND REPLACEMENT

Curb removal and replacement required in the construction of this work shall be done by the Contractor. Reasonable care shall be exercised in removing the curb, and the Contractor shall either stockpile or dispose of this material as directed by the Engineer/Architect. Curb shall be replaced of like material in a manner and condition equal to or better than that existing at the time of removal.

3.04 TESTS

The Contractor shall furnish facilities for making all density tests and make such restorations as may be necessary due to test operations. All density tests on backfill or base replacement will be made by a commercial testing laboratory employed by the Owner and at such locations as may be recommended by the Engineer/Architect. If the densities as determined by the specified tests fall below the required minimums, the Contractor shall pay for all retests.

END OF SECTION

SECTION 02930 GRASSING

PART 1 - GENERAL

1.01 DESCRIPTION OF WORK

- A. The extent of grassing consists of supplying and planting grass seed and/or sod in the locations shown on the drawings and in those areas where construction activity has damaged or destroyed the ground cover.
- B. The grassing work shall include, but not be limited to, supplying all labor, materials, and equipment necessary to perform seeding, sodding, fertilizing, liming when specified, mulching, watering, mowing, and clean-up.

1.02 QUALITY ASSURANCE

- A. Seeds shall meet the requirements of the State Department of Agriculture and Consumer Services and all applicable State laws.
- B. The Engineer/Architect reserves the right to test, reject or approve all materials before application.

1.03 DELIVERY, STORAGE, AND HANDLING

- A. Deliver grass seed in original containers showing analysis of seed mixture, percentage of pure seed, year of production, net weight, date of packaging, and location of packaging. Damaged packages will not be accepted.
- B. Deliver fertilizer in water proof bags showing weight, chemical analysis, and name of manufacturer.
- C. The Contractor shall, at the time of delivery, furnish the Engineer/Architect invoices of all materials received in order that the minimum application rate of materials may be determined. Failure to supply invoices at the time of delivery will warrant that payment for those items be delayed until proper submittal of invoices are obtained and the minimum application rates of material can be verified.
- D. Mixtures of different types of seed called for in these specifications shall be mixed in the proper proportions at the site of the work in the presence of the Engineer/Architect or his representative.

PART 2 - PRODUCTS

2.01 SEED

- A. Unless otherwise provided for on the drawings, the Contractor shall conform to the following seed schedule. The total pounds of seed per acre shall be the sum total shown for all the varieties of seed opposite the schedule number.

SEEDING SCHEDULE

Schedule Number	Common Name of Seed	Rate Lbs. Acre	Planting Dates
1.	Pensacola Bahia (scarified)	90	March 15-
	Bermuda Common (50% hulled)	25	October 15
2.	Pensacola Bahia (scarified)	100	October 16 -
	Bermuda Common (50% hulled)	35	March 14
	Annual Rye Grass	10	
	Rye Grain	30	

- B. The Bermuda seed shall be an equal mixture of hulled and unhulled seed.
- C. The Pensacola Bahia seed shall be scarified seed, having a minimum active germination of 40 percent and a total germination of 85 percent.
- D. Quick-growing type grass seed shall be a species approved by the Engineer/Architect which will provide an early ground cover during the particular season when planting is done and will not later compete with permanent grass.

CHOOSE TYPE OF SOD AS APPROPRIATE.

A. FOR PROJECTS INVOLVING COUNTY OR DEPARTMENT OF TRANSPORTATION (DOT) ROAD RIGHTS-OF-WAY, SPECIFY EITHER PENSACOLA BAHIA OR ARGENTINE BAHIA. GENERALLY DOT SPECIFIES PENSACOLA; HOWEVER, ARGENTINE IS LESS SCRAGGLY AND IS MORE AESTHETICALLY PLEASING.

B. FOR PROJECTS INVOLVING SODDING ADJACENT TO EXISTING GRASS, SPECIFY THE SAME TYPE AS THE EXISTING GRASS.

2.02 SOD

- A. Sod shall be [Centipede] [Pensacola Bahia] [Argentine Bahia] [Bermuda] [St. Augustine] with well matted roots.
- B. The sod shall be commercial size rectangles measuring 12-inches by 24-inches or larger, except where 6-inch strip sodding is called for on the drawings.
- C. The sod shall be sufficiently thick to secure a dense stand of live grass, with a minimum thickness of 2-inches. The sod shall be live, fresh, and uninjured at the time of planting. It shall have a soil mat of sufficient thickness adhering firmly to the roots to withstand all necessary handling. It shall be reasonably free of weeds and other grasses.
- D. Sod shall be planted as soon as possible after being harvested and shall be shaded and kept moist from the time of harvesting until it is planted.
- E. The source of the sod may be inspected and approved by the Engineer/Architect prior to construction.

2.03 MULCH

A. Dry Mulch:

- 1. Dry mulch shall be straw or hay, consisting of oat, rye, or wheat straw, or of Pangola, Peanut, Coastal Bermuda or Bahia grass hay. Only undeteriorated mulch which can readily be cut into the soil shall be used.

B. Manufactured Mulch:

- 1. Manufactured mulches may consist of jute, cotton, or other fiber materials, plastic sheeting, netting, chemical adhesive soil stabilizers, or other approved coverings. Manufactured mulch shall only be used when specifically called for on the drawings and shall be as approved by the Engineer/ Architect.

CHOOSE ONE FERTILIZER AS APPROPRIATE. THE APPLICATION RATES THAT ARE INDICATED IN PARAGRAPH 3.02 ARE WRITTEN FOR DOT SPECIFICATIONS WHICH USE A FERTILIZER CHEMICAL DESIGNATION OF 12-8-8. ON APPLICATIONS NOT INVOLVING HIGHWAY RIGHTS-OF-WAY, SPECIFY 16-4-8, 20-5-10, OR THAT DESIGNATED IN A SOIL ANALYSIS REPORT. ADJUST APPLICATION RATES AS INDICATED IN THE INSTRUCTIONS FOR PARAGRAPH 3.02 OR AS INDICATED ON THE SOIL ANALYSIS REPORT. ANALYSIS OF SOILS MAY BE OBTAINED BY SUBMITTAL OF SAMPLES TO VOLUSIA COUNTY AGRICULTURAL DEPARTMENT 258-7000

2.04 FERTILIZER

- A. The fertilizer shall be a commercial granular type with a chemical designation of [12-8-8] [16-4-8] [20-5-10] []
- B. The numerical designations for fertilizer indicate the minimum percentages (respectively) of (1) total nitrogen, (2) available phosphoric acid, and (3) water-soluble potash, contained in the fertilizer.
 - 1. At least 50 percent of the phosphoric acid shall be from a normal super phosphate or an equivalent source which will provide a minimum of two units of sulfur.
 - 2. The amount of sulfur shall be indicated on the quantitative analysis card attached to each bag or container.
- C. Commercial fertilizers shall comply with the State fertilizer laws.
- D. Fertilizer may, at the discretion of the Engineer/Architect, upon satisfactory evidence of its feasibility from the manufacturer, be applied in liquid form.

2.05 LIME

- A. Lime shall be agricultural grade, ground limestone minimum 80 percent passing No. 8 sieve, calcium carbonate equivalent minimum 80 percent and shall conform to the requirements of the State Department of Agriculture and Consumer Affairs.

2.06 WATER

- A. The water used in the grassing operations may be obtained from any approved spring, pond, lake, stream, or municipal water system.
- B. The water shall be free of excess and harmful chemicals, acids, alkalis, or any substance which might be harmful to plant growth or obnoxious to traffic.
- C. Salt water shall not be used.

2.07 GRAVEL BED

- A. In the locations shown on the drawings, provide a 3-inch deep bed of river-run gravel of rounded particles ranging in size from 1/2-inch to 2-inches. Gravel shall be as obtained from the vicinity of Montgomery, Alabama, or Chattahoochee, Florida, or equal.
- B. Where gravel is not kept in place by walls or sidewalk, an edging strip shall be used. The edging strip shall be of 1" x 6" cypress, and extend 1/2-inch above the gravel surface.

PART 3 - EXECUTION

3.01 GENERAL

- A. Grassing operations will not be permitted when wind velocities exceed 15 miles per hour. Grassing will be accomplished only when the soil is moist and in proper condition to induce growth. No grassing shall be done when the ground is frozen, unduly wet, or otherwise not in a tillable condition.
- B. Before acceptance of the seeding performed for the establishment of permanent vegetation, the Contractor will be required to produce a satisfactory stand of perennial grass whose root system shall be developed sufficiently to survive dry periods and winter weather and be capable of reestablishment in the spring.

3.02 GRASSING BY SEEDING

A. Sequence of Operations:

- 1. The several operations involved in the work shall proceed in the following sequence: grading, fertilizing (and/or application of lime) and preparation of the ground, spreading of the mulch, seeding, cutting in mulch, and rolling.

B. Preparation of Area to be Seeded:

- 1. The ground over which the seed is to be sown shall be prepared by disk-harrowing and thoroughly pulverizing the soil to a depth of 4-inches. The prepared soil shall be loose and reasonably smooth. The area shall be reasonably free of large clods, roots, and other material which will interfere with the work or subsequent mowing and maintenance operations.

THE FOLLOWING APPLICATION RATES ARE APPLICABLE WITH A CHEMICAL DESIGNATION OF 12-8-8 FOR DOT AND COUNTY RIGHTS-OF-WAY. WHEN 16-4-8 CHEMICAL DESIGNATION IS USED, CHANGE THE APPLICATION RATE TO 275 LBS. PER ACRE. WHEN 20-5-10 CHEMICAL DESIGNATION IS USED, CHANGE THE APPLICATION RATE TO 220 LBS. PER ACRE. WHEN FERTILIZER IS APPROVED TO BE APPLIED IN LIQUID FORM, INCREASE THE FREQUENCY OF APPLICATION BY A FACTOR OF 2. APPLICATION OF LIME IS RECOMMENDED ONLY FOR EXTREMELY ACID SOILS.

C. Application of Fertilizer:

- 1. The fertilizer (and/or lime) shall be spread uniformly in one or more applications as specified below.
 - a. An initial application of 500 lbs. per acre.

2. Unless otherwise directed, a second application of 500 lbs. per acre shall be applied within 90 calendar days after the initial application on projects which have not been accepted prior to this time.
3. Unless otherwise directed, a third application of 500 lbs. per acre shall be applied within 270 to 360 calendar days after the initial application on projects which have not been accepted prior to this time.
4. Lime shall be spread at a minimum uniform rate of 250 lbs. per acre and thoroughly mixed with the soil to a depth of 4-inches.

D. Dry Mulching:

1. Approximately 2-inches, loose thickness, of the dry mulch material shall be applied uniformly over the area to be seeded. After the area has been seeded, the mulch material shall be cut into the soil so as to produce a loose mulched thickness of 3- to 4-inches. Care shall be exercised that the materials are not cut too deeply into the soil.
- E. While the soil is still loose and moist, the seed shall be scattered uniformly over the area to be grassed. The application rates of the various types of seed shall be as described in Paragraph 2.01.

F. Rolling:

1. Immediately after completion of the seeding, the entire grassed or mulched area shall be rolled with a cultipacker, traffic roller, or other suitable equipment. At least two trips over the entire area will be required.

G. Watering:

1. The seeded areas shall be watered so as to provide optimum growth conditions for the establishment of the grass. The period for maintaining such moisture conditions shall not be less than two weeks after planting.

3.03 GRASSING BY HYDRO-SEEDING

A. General:

1. This method of grassing generally consists of distributing materials over the area to be grassed by spraying a slurry composed of water, seed, fertilizer, and mulch (wood cellulose fiber mulch for hydro-seeding applications).

B. Ground Preparation:

1. The provisions for the preparation of the seeding areas and for the subsequent maintaining of the moisture condition shall be as specified in Paragraphs 3.02 B, C and G.

C. Equipment:

1. Equipment used in hydro-seeding shall have a built-in agitation system with an operating capacity sufficient to agitate, suspend, and homogeneously mix a slurry of the specified amount of fiber, fertilizer, seed, and water. The slurry distribution lines shall be large enough to prevent stoppage. The discharge line shall be equipped with a set of hydraulic spray nozzles which will provide even distribution of the slurry on the various areas to be grassed. The slurry tank shall have a minimum capacity of 1,000 gallons.

D. Application:

1. Wood cellulose fiber mulch shall be applied at the rate of 1,500 lbs. per acre in a mixture of seed, fertilizer, and water. The seed, fertilizer, mulch, and water shall be combined into the slurry tank for distribution of all ingredients in one operation. The materials shall be combined in a manner recommended by the mulch manufacturer. The slurry mixture shall be so regulated that the amounts and rates of application shall result in a uniform application of all materials at rates not less than the amounts specified herein. Using the color of the mulch as a guide, the equipment operator shall spray the prepared seed-bed with a uniform visible coat. The slurry shall be applied in a sweeping motion, in an arched stream, so as to fall like rain, allowing the mulch fibers to build upon each other until an even coat is achieved.

3.04 SODDING

A. Ground Preparation:

1. The provisions for the preparation of the area to be sodded shall include scarifying and loosening the soil and application of fertilizer as described in Paragraphs 3.02 B. and C.

B. Inclement Weather and Unsuitable Conditions:

1. Sodding shall not be performed when weather and soil conditions are, in the Engineer/Architect's opinion, unsuitable for proper results.

C. Sod Placement:

1. The sod shall be placed on the prepared surface with edges in close contact, and shall be firmly and smoothly embedded by light tamping with appropriate tools.
2. Where sodding is used in drainage ditches or ponds, the setting of the pieces shall be staggered, such as to avoid a continuous seam along the line of flow. Along the edges of such staggered areas, the offsets of individual strips shall not exceed 6-inches.
3. In order to prevent erosion caused by vertical edges at the outer limits, the outer pieces of sod shall be tamped so as to produce a featheredge effect.
4. On areas where the sod may slide, due to height and slopes, it shall be pegged, with pegs driven through the sod blocks into firm soil and at intervals as shown on the drawings or as directed by the Engineer/Architect.

5. Any pieces of sod which, after placing, show appearance of extreme dryness shall be removed from the work.

D. Watering:

1. The sod shall be kept in a moist condition after planting and for the duration of the Contract. Water shall not be applied between the hours of 8:00 A.M. and 4:00 P.M.

3.05 MAINTENANCE

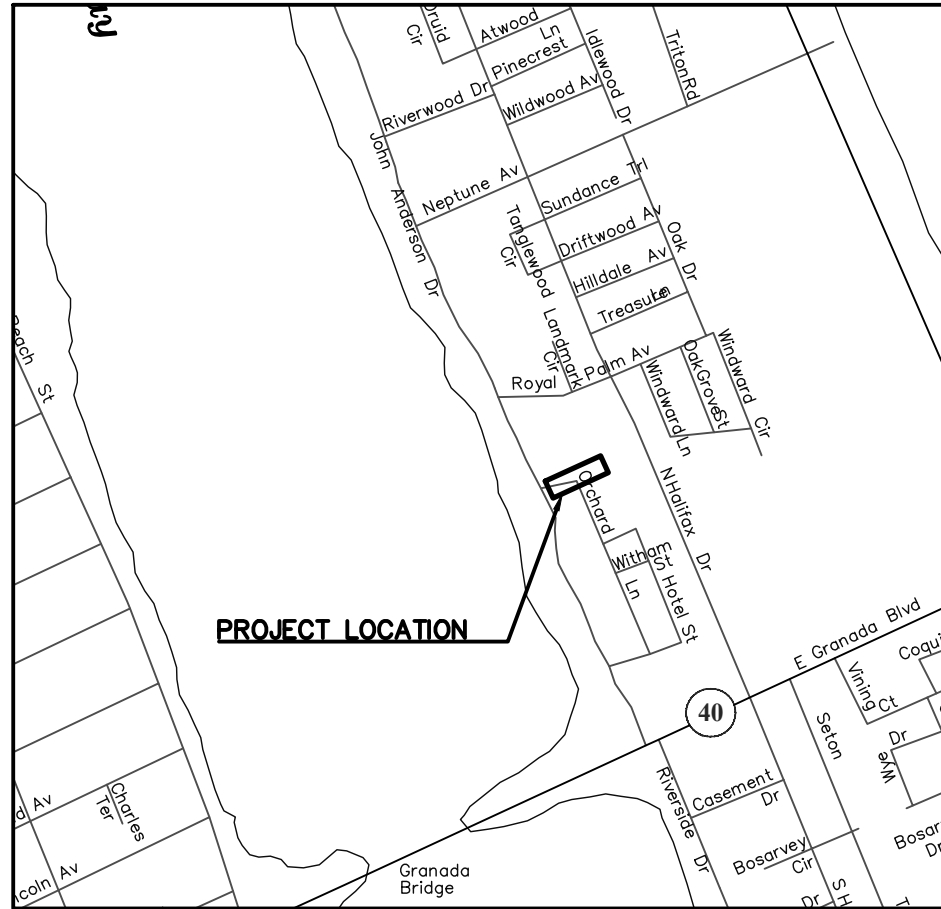
- A. The Contractor shall, at his expense, maintain the planted areas in a satisfactory condition until final acceptance. Such maintenance shall include watering, filling, leveling, and repairing of any washed or eroded areas and additional seed, fertilizer, and mulch or sod applied to areas where a satisfactory stand of grass has not been achieved.
- B. Immediately prior to final inspection, the Contractor shall mow and remove clippings from the areas grassed under this Contract.

END OF SECTION

CITY OF ORMOND BEACH

ORCHARD LANE STORMWATER DRAINAGE IMPROVEMENTS

BID NO.: 2026-06



SITE LOCATION MAP



SHEET	DESCRIPTION
1	COVER SHEET & PROJECT LOCATION MAP
2	GENERAL NOTES
3	STORM WATER NOTES
4	PLAN
5	PROFILE & CROSS-SECTION
6	DETAILS

MAYOR

JASON LESLIE

COMMISSIONERS

LORI TOLLAND, ZONE 1
TRAVIS SARGENT, ZONE 2

KRISTIN DEATON, ZONE 3
HAROLD BRILEY, ZONE 4

CITY MANAGER

JOYCE SHANAHAN

IN ORDER TO ENSURE THAT NEW DEVELOPMENTS WITHIN THE CITY ARE CONSTRUCTED SUBSTANTIALLY IN ACCORDANCE WITH CITY REGULATIONS AND THE APPROVED DRAWINGS "AS-BUILT" DRAWINGS ARE REQUIRED:

THE FOLLOWING INFORMATION IS REQUIRED ON ALL PAVING AND DRAINAGE "AS-BUILT" DRAWINGS:

- PAVEMENT AND CURB WIDTHS SHALL BE VERIFIED AND DIMENSIONED FOR EACH STREET AT EACH BLOCK. ALL RADII AT INTERSECTIONS SHALL BE VERIFIED AND DIMENSIONED. THIS INFORMATION TO CLEARLY INDICATE IT AS AS BEING "AS-BUILT" INFORMATION.
- ROADWAY ELEVATIONS SHALL BE RECORDED AT ALL GRADE CHANGES OR OTHER INTERVALS AS NEEDED ALONG ALL STREETS. STREET CENTERLINE AND CURB INVERT ELEVATIONS SHALL BE RECORDED AS NOTED. THE "AS-BUILT" CENTERLINE PROFILE OF ALL STREETS SHALL ALSO BE SHOWN ON THE PLAN AND PROFILE SO IT MAY BE COMPARED TO THE EXISTING AND DESIGNED PROFILE GRADE LINES. ALL STREET CENTERLINES ON "AS-BUILTS" SHALL BE LABELED WITH STREET NAME AND RIGHT-OF-WAY WIDTH ON EVERY PAGE.
- STORM DRAINAGE STRUCTURES SHALL BE LOCATED AND/OR DIMENSIONED FROM CENTERLINES OR LOT LINES AS APPROPRIATE.
- STORM DRAINAGE PIPE INVERT AND STRUCTURE TOP AND BOTTOM ELEVATIONS SHALL BE RECORDED AND CLEARLY DENOTED AS "AS-BUILT" INFORMATION. DESIGN ELEVATIONS SHALL BE CROSSED OUT AND "AS-BUILT" INFORMATION WRITTEN NEXT TO IT.
- STORM DRAINAGE PIPE MATERIAL, LENGTH, AND SIZE SHALL BE MEASURED AND/OR VERIFIED. THIS INFORMATION TO CLEARLY INDICATE IT AS BEING "AS-BUILT" INFORMATION.
- ALL APPLICABLE TOPOGRAPHIC INFORMATION, PERTINENT TO THE ON SITE DRAINAGE SYSTEM SUCH AS DITCHES, LAKES, CANALS, ETC. THAT ARE DEEMED APPROPRIATE BY THE CITY SHALL BE NOTED. NORMALLY, RECORDING ELEVATIONS EVERY 100 FEET AT THE TOP OF BANK AND TOE OF SLOPE WILL BE REQUIRED. MEASUREMENTS SHALL BE TAKEN AND RECORDED IN ORDER TO ACCURATELY TIE DOWN THESE FEATURES TO THE ROADWAY CENTERLINES AND TO PLAT LINES. WHENEVER POSSIBLE, CONTOUR LINES SHALL BE UTILIZED TO GRAPHICALLY DESCRIBE THESE TOPOGRAPHIC FEATURES.
- RETENTION AREAS SHALL HAVE THEIR TOP-OF-BANK AND BOTTOM ELEVATIONS RECORDED. ACTUAL MEASUREMENTS SHALL BE TAKEN AND DIMENSIONS RECORDED OF THE SIZE OF ALL RETENTION AREAS. MEASUREMENTS SHALL BE DONE FROM TOP-OF-BANK TO TOP-OF-BANK WITH SIDE SLOPES INDICATED. SEPARATE CALCULATIONS SHALL BE SUBMITTED TO INDICATE REQUIRED AND PROVIDED RETENTION VOLUMES.
- STORM DRAINAGE SWALE CENTERLINES SHALL BE LOCATED AND ELEVATIONS OF FLOW LINE SHALL BE RECORDED EVERY 100 FEET.
- ANY SPECIAL FEATURES SUCH AS CONCRETE FLUMES, LAKE BANKS, WALLS, FENCING, ETC., WHICH WERE A PART OF THE APPROVED CONSTRUCTION DRAWINGS SHOULD ALSO BE LOCATED AND DIMENSIONED.
- ACTUAL MATERIALS USED AND ELEVATIONS AND DIMENSIONS OF OVERFLOW WEIR STRUCTURES AND SKIMMERS SHALL BE NOTED ON THE "AS-BUILT".

THE FOLLOWING INFORMATION IS REQUIRED ON ALL WATER AND SEWER "AS-BUILT" DRAWINGS:

- SANITARY SEWER MANHOLES SHALL BE VERIFIED AND DIMENSIONED FROM STREET CENTERLINES OR LOT LINES AS APPROPRIATE. ALL RIM AND INVERT ELEVATIONS SHALL BE VERIFIED AND RECORDED. THIS INFORMATION TO CLEARLY INDICATE IT AS BEING "AS-BUILT" INFORMATION.
- SANITARY SEWER LINE LENGTHS, SIZES, MATERIAL, SLOPE, ETC., SHALL BE VERIFIED AND RECORDED. THIS INFORMATION TO CLEARLY INDICATE IT AS BEING "AS-BUILT" INFORMATION.

- SEWER LATERALS SHALL BE VERIFIED AND RECORDED AT THEIR CLEAN-OUT LOCATIONS. STATIONING AND OFFSET DISTANCES SHALL BE MEASURED FROM DOWNSTREAM MANHOLES TOWARDS UPSTREAM MANHOLES.
- LIFT STATIONS AND FORCE MAINS SHALL BE VERIFIED AND DIMENSIONED FROM STREET CENTERLINES OR LOT LINES AS APPROPRIATE. FORCE MAIN DEPTH AND LOCATION INCLUDING VALVES WILL BE PROVIDED AND TIED TO PERMANENT ABOVE GRADE FEATURES EVERY 500 FEET. DIMENSIONAL AND ELEVATION INFORMATION INDICATED ON THE APPROVED PLAN SHALL BE VERIFIED AND RECORDED. THIS INFORMATION TO CLEARLY INDICATE IT AS BEING "AS-BUILT" INFORMATION. BURIED ELECTRICAL SERVICE LINE SHALL BE CLEARLY DIMENSIONED, LOCATED AND LABELED.
- CURB CUTS OR METAL TABS, USED TO MARK SEWER LATERALS, WATER SERVICES AND WATER VALVES, SHALL BE VERIFIED FOR PRESENCE AND ACCURACY OF LOCATION.
- WATER MAIN LINES SHALL BE DIMENSIONED OFF THE BACK OF CURB OR EDGE OF PAVEMENT IF NO CURB IS PRESENT. WATER MAIN LINE MATERIAL, SIZE, LENGTH AND DEPTH PLACED SHALL ALSO BE NOTED. THIS INFORMATION TO CLEARLY INDICATE IT AS BEING "AS-BUILT" INFORMATION.
- WATER VALVES, TEES, ALL SERVICES, BLOW - OFFS AND FIRE HYDRANTS SHALL BE LOCATED BY TYING THEM TO SANITARY SEWER MANHOLES. STATIONING AND OFFSET DISTANCES SHALL BE MEASURED FROM DOWNSTREAM MANHOLES TO UPSTREAM MANHOLES.

THE FOLLOWING INFORMATION IS GENERAL REQUIREMENTS OF ALL "AS-BUILT" DRAWINGS:

- FOR PERPENDICULAR CROSSINGS OF STORM WATER, SANITARY SEWER, POTABLE WATER, OR RECLAIMED WATER, THE "AS-BUILT" PLANS SHALL CLEARLY INDICATE WHICH UTILITIES ARE LOCATED OVER OR UNDER OTHER UTILITIES, AS NECESSARY.
- WHEN STORM WATER, POTABLE WATER, RECLAIMED WATER, OR SANITARY SEWER IMPROVEMENTS ARE LOCATED WITHIN AN EASEMENT, THE "AS-BUILT" SHALL ACCURATELY DEPICT THE LOCATION OF THE EASEMENT ITSELF AS WELL AS THE EXACT LOCATION OF THE IMPROVEMENTS WITHIN THE EASEMENT. THIS IS REQUIRED IN ORDER TO VERIFY THAT THE IMPROVEMENTS HAVE BEEN PROPERLY LOCATED AND TO ENSURE THAT FUTURE SUBSURFACE EXCAVATION TO PERFORM REMEDIAL REPAIR CAN BE ACCOMPLISHED WITHOUT DISTURBANCE BEYOND THE EASEMENT. SUCH DOCUMENTATION AND THE ASSOCIATED PROPOSED EASEMENT DOCUMENT WITH LEGAL DESCRIPTION SHALL BE SUBMITTED FOR CITY REVIEW AND APPROVAL PRIOR TO RECORDING OF SAID EASEMENT. UPON CITY APPROVAL, THE EASEMENT SHALL BE RECORDED VIA A SEPARATE LEGAL INSTRUMENT AND SHALL NOT BE INCLUDED AS PART OF HOMEOWNER COVENANTS AND RESTRICTIONS.
- SUBMIT CERTIFIED PAPER PRELIMINARY "AS-BUILT" (24"x36") WITH REQUEST FOR FINAL INSPECTION. SUBMIT 3 SETS SHOWING WATER FACILITIES, 3 SETS WITH SEWER FACILITIES, AND 3 SETS WITH PAVING AND DRAINAGE FACILITIES. PRELIMINARY "AS-BUILT" MAY BE SUBMITTED IN DIGITAL FORMAT. FOLLOWING FINAL INSPECTION AND COMMENTS, THE CONTRACTOR SHALL REVISE AS-BUILTS TO ADDRESS CITY COMMENTS AND SUBMIT 3 SETS CERTIFIED FINAL "AS-BUILTS" ALONG WITH 1 SET CERTIFIED MYLARS AND 1 CD-ROM CONTAINING AUTO-CAD FILES AND PDF VERSIONS SHOWING ALL "AS-BUILT" SHEETS. ALL "AS-BUILT" DRAWINGS SHALL BE CERTIFIED BY A REGISTERED LAND SURVEYOR AND ENGINEER OF RECORD. ALL DIGITAL FILES SHALL HAVE A DIGITAL SIGNATURE OF SURVEYOR AND/OR ENGINEER OF RECORD.
- INDICATE VERTICAL DATUM REFERENCE ON ALL SHEETS.
- CAD FILE OF "AS-BUILTS" SHALL BE IN STATE PLANE COORDINATES; FILE SHOULD INCLUDE REFERENCE TO PROJECTION. (FLORIDA EAST, NAD83)
- ALL "AS-BUILT" DRAWINGS SHALL BE PREPARED BY A FLORIDA REGISTERED LAND SURVEYOR USING THE FINAL APPROVED SITE DESIGN PREPARED BY THE ENGINEER OF RECORD. LINE WEIGHTS, LINETYPES, AND ANNOTATION SHALL BE MANAGED IN A MANNER THAT CLEARLY DISTINGUISHES DESIGN INFORMATION FROM "AS-BUILT" INFORMATION.
- ALL "AS-BUILT" SHEETS SHALL INCLUDE A TITLE BLOCK AND CLEARLY STATE PROJECT NAME, PROJECT SURVEYOR, DATE OF FIELD WORK, AS WELL AS PROJECT CERTIFICATION BLOCK FROM THE ENGINEER OF RECORD.

NOTE: REFERENCES TO WATER SHALL MEAN BOTH POTABLE AND RECLAIMED WATER.

GENERAL NOTES:

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF ORMOND BEACH'S LAND DEVELOPMENT CODE REQUIREMENTS, AND THE STANDARD CONSTRUCTION DETAILS AND CONSTRUCTION SPECIFICATIONS (SCDCS). AN ENGINEERING PERMIT AND TREE REMOVAL PERMIT IS REQUIRED PRIOR TO STARTING CONSTRUCTION.
- NO LAND SHALL BE CLEARED, EXCAVATED OR FILLED AND NO STRUCTURE SHALL BE ERECTED, REPAIRED OR DEMOLISHED WITHOUT PROPER PERMIT(S) AS REQUIRED BY THE CITY OF ORMOND BEACH.
- NOTIFY THE CITY OF ORMOND BEACH AT COMDEV@ORMONDBEACH.ORG 48 HOURS PRIOR TO THE START OF CONSTRUCTION.
- ANY CONSTRUCTION CHANGES TO APPROVED PLANS SHALL BE SUBMITTED TO THE CITY OF ORMOND BEACH FOR APPROVAL PRIOR TO PERFORMING THE WORK.
- ROAD CONSTRUCTION AND PIPE INSTALLATION COMPACTION AND DENSITY TESTING SHALL CONFORM TO THE CITY OF ORMOND BEACH'S MINIMUM REQUIREMENTS. CERTIFIED COPIES OF TEST REPORTS SHALL BE SUBMITTED TO THE CITY INSPECTOR AND THE CITY'S ENGINEERING DIVISION.
- A PRE-PAVING UTILITY INSPECTION MUST BE REQUESTED AND COMPLETED PRIOR TO THE PAVING OF ALL ROADS, STREETS, AND PARKING AREAS.
- A FINAL INSPECTION, TO BE CONDUCTED BY THE CITY OF ORMOND BEACH, SHALL BE PERFORMED ON ALL CONSTRUCTION. THE DESIGN ENGINEER SHALL NOTIFY THE CITY OF ORMOND BEACH AT COMDEV@ORMONDBEACH.ORG WHEN REQUESTING A FINAL INSPECTION.
- THREE COMPLETE SETS OF AS-BUILT DRAWINGS (5 FOR SUBDIVISIONS) ARE REQUIRED TO BE SUBMITTED TO THE CITY OF ORMOND BEACH PRIOR TO REQUESTING A FINAL INSPECTION. AS-BUILT DRAWINGS MAY BE SUBMITTED IN DIGITAL FORMAT WITH DIGITAL SIGNATURE OF SURVEYOR AND/OR ENGINEER OF RECORD.
- THE CITY HAS A CONTRACTOR FOR ROLL OFF SERVICE. NO OTHER CONTRACTOR SHALL BE PERMITTED TO PROVIDE THIS SERVICE. VERIFY COMPANY UNDER CONTRACT WITH THE CITY.
- CONSTRUCTION SITES THAT DISTURB ONE ACRE OR MORE WILL BE REQUIRED TO SEEK COVERAGE UNDER THE GENERIC PERMIT FOR STORM WATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES. IN ACCORDANCE WITH THIS REQUIREMENT, A STORM WATER POLLUTION PREVENTION PLAN (SWPP) MUST BE SUBMITTED TO THE CITY OF ORMOND BEACH AT COMDEV@ORMONDBEACH.ORG PRIOR TO CONSTRUCTION TO BE IN COMPLIANCE WITH THE PERMIT.
- CONTRACTOR WILL FOLLOW REQUIRED WASTE MANAGEMENT PRACTICES
- SEEDING OR SODDING SHALL BE INITIATED FOR EROSION AND SEDIMENT CONTROL ON DISTURBED AREAS AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED.
- ANY FIELD MODIFICATIONS OR DEVIATIONS TO THIS CONSTRUCTION PLAN REQUIRES WRITTEN APPROVAL BY BOTH THE ENGINEER OF RECORD AND THE CITY OF ORMOND BEACH.



STANDARD CONSTRUCTION DETAIL
REQUIREMENTS FOR "AS-BUILT" DRAWINGS

INDEX

M-1A

MAY 2020



STANDARD CONSTRUCTION DETAIL
REQUIREMENTS FOR AS BUILT DRAWINGS

INDEX

M-1B

MAY 2020



STANDARD CONSTRUCTION DETAIL
GENERAL CONSTRUCTION NOTES

INDEX

M-2

MAY 2020

NO.	DATE	REVISIONS	BY

City of Ormond Beach
Engineering Division

JASON LESLIE, MAYOR
JOYCE SHANAHAN, CITY MANAGER

ALEX SCHUMANN, P.E. CITY ENGINEER

ORCHARD LANE STORMWATER
DRAINAGE IMPROVEMENTS

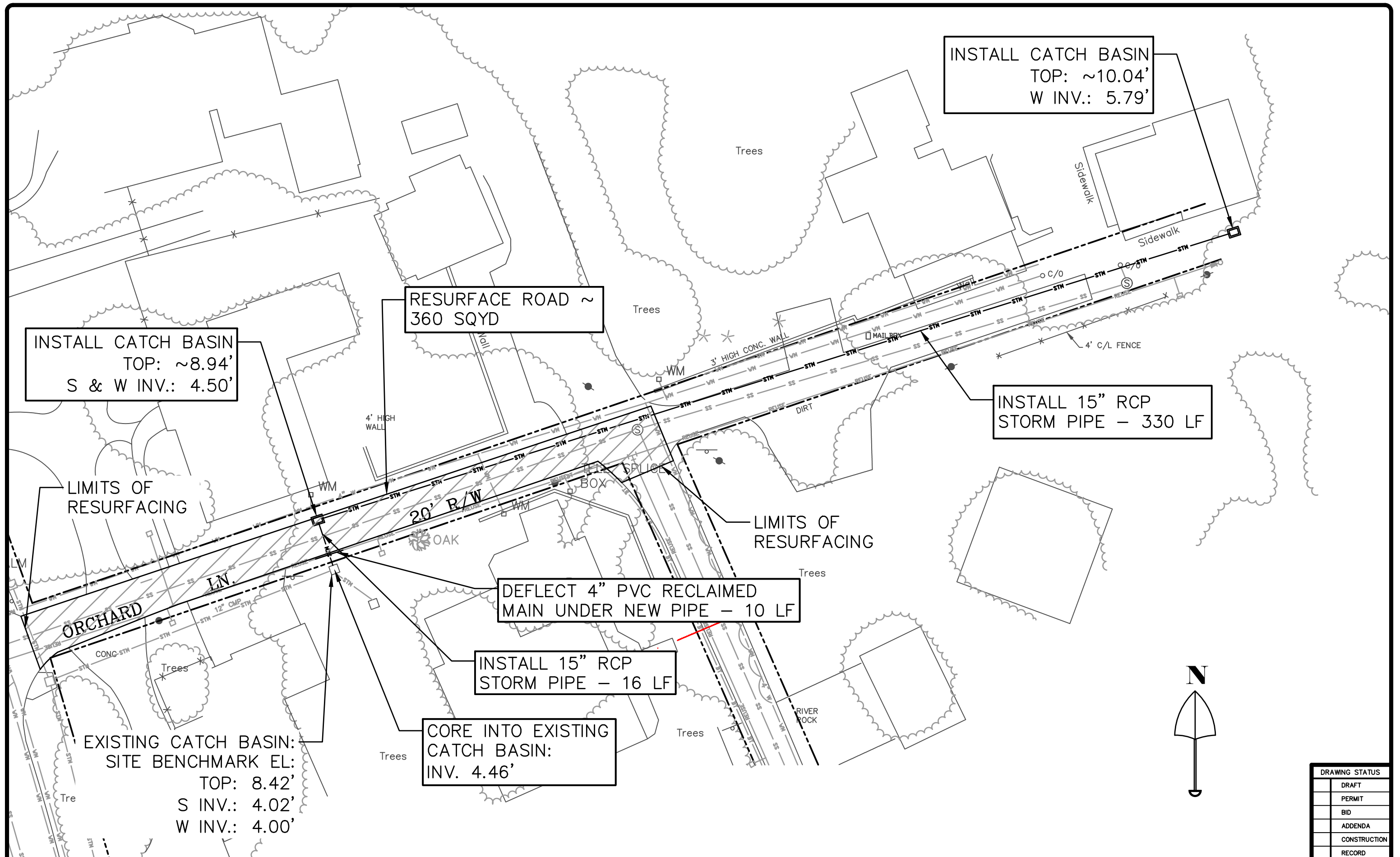
GENERAL NOTES

DATE:	9/16/25	PROJECT NO.:	
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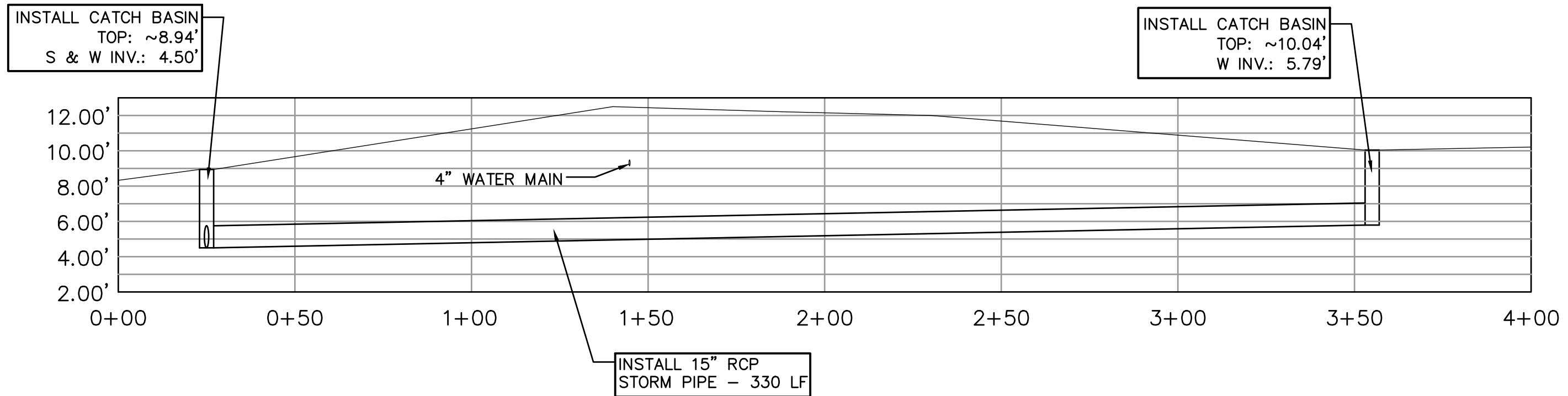
1. CONSTRUCTION STANDARDS FOR ALL DRAINAGE SYSTEM COMPONENTS SHALL CONFORM TO THE LATEST EDITION OF THE "FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" AND AS SPECIFIED HEREIN. 2. ALL STORM WATER PIPES AND STRUCTURES SHALL BE INSTALLED ON A FIRM FOUNDATION WITH ALL UNSUITABLE MATERIAL (MUCK, ROCK, COQUINA, ETC.) REMOVED AND REPLACED WITH CLEAN GRANULAR MATERIAL. 3. DEWATERING SHALL BE PROVIDED TO KEEP GROUNDWATER ELEVATION A MINIMUM OF 6 INCHES BELOW THE COMPONENT BEING INSTALLED. 4. ALL PIPES AND STRUCTURES SHALL BE PLACED TRUE TO LINES AND GRADES AS DEPICTED ON THE APPROVED PLANS. 5. ALL PIPE JOINTS SHALL BE PROPERLY HONED AND FILTER FABRIC LINED USING A METHOD TO HOLD THE FABRIC IN PLACE DURING BACKFILL. 6. BACKFILL AND COMPACT TO THE SPRING-LINE (CENTER OF PIPE) ELEVATION AND REQUEST CITY INSPECTION AND APPROVAL BEFORE CONTINUING. 7. ALL WORK COVERED WITHOUT CITY INSPECTION WILL BE REQUIRED TO BE EXCAVATED AND INSPECTED AT THE CONTRACTOR'S EXPENSE. 8. TRENCHES SHALL BE BACKFILLED AND COMPACTED WITH CLEAN GRANULAR MATERIAL IN MAX 6" LIFTS WITH A MINIMUM COMPACTION OF 98 PERCENT (AASHTO-T180) IN PAVED AREAS AND 95 PERCENT (AASHTO-T180) IN UNPAVED AREAS. 9. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT TRENCH COMPACTION TESTS AT POINTS 1' ABOVE THE PIPE AND AT A MAX. 1' VERTICAL INTERVALS TO FINISH GRADE, AT A MAXIMUM SPACING OF 100 FEET, AND TO FURNISH COPIES OF TEST REPORTS PROMPTLY TO THE CITY'S INSPECTOR. 10. ALL STORM SEWER PIPE SHALL BE REINFORCED CONCRETE (RCP), HIGH DENSITY POLYETHYLENE (HDPE), POLYVINYL CHLORIDE (PVC) OR ALUMINUM CORRUGATED METAL PIPE (ACMP), AS SHOWN ON THE PLANS. 11. STORM DRAINAGE PIPES WITHIN PUBLIC RIGHT-OF-WAY SHALL BE A MINIMUM OF FIFTEEN (15) INCH RCP DIAMETER OR EQUIVALENT. 12. STORM INLETS, MANHOLES, AND CATCH BASINS SHALL BE EITHER POURED IN PLACE OR PRECAST REINFORCED CONCRETE. STRUCTURES SHALL BE REQUIRED AT EACH CHANGE OF PIPE SIZE OR CHANGE IN PIPE DIRECTION.			13. STORM INLETS SHALL BE SPACED IN SUCH A MANNER AS TO ACCEPT ONE HUNDRED (100) PERCENT OF THE DESIGN STORM RUNOFF. 14. WET DETENTION PONDS SHALL BE EIGHT (8) FEET MINIMUM TO TWELVE (12) FEET MAXIMUM DEPTH BELOW THE DESIGN LOW OR NORMAL WATER STAGE. 15. MAXIMUM DISTANCES BETWEEN INLETS AND/OR JUNCTION BOXES:<table><tr><th>PIPES SIZE (INCHES)</th><th>LENGTH OF RUN (FEET)</th></tr><tr><td>15</td><td>150</td></tr><tr><td>18</td><td>300</td></tr><tr><td>24 OR GREATER</td><td>400</td></tr></table> 16. ALL SWALES, DITCHES, AND DRY RETENTION POND SIDE SLOPES SHALL BE NO STEEPER THAT 4:1 (H:V) AND SHALL BE SODDED. 17. ALL RETENTION POND BACKSLOPES SHALL BE NO STEEPER THAN 3:1 (H:V) AND SHALL BE SODDED. 18. NORMAL ROADSIDE SWALES SHALL BE CONSTRUCTED TO A MAXIMUM DEPTH OF 18" BELOW THE OUTSIDE EDGE OF PAVEMENT OR CONCRETE CURB. 19. CONCRETE EROSION CONTROL MUST BE PROVIDED WHERE SWALES OR CULVERTS INTERCEPT DRAINAGE DITCHES. 20. A MINIMUM ONE FOOT (1') FREEBOARD ABOVE THE DESIGN HIGH WATER ELEVATION IS REQUIRED AT ALL POINTS AROUND WET RETENTION PONDS. 21. A MINIMUM SIX INCH (6") FREEBOARD ABOVE THE DESIGN HIGH WATER ELEVATION IS REQUIRED AT ALL POINTS AROUND DRY RETENTION PONDS. 22. POND INFLOW SHALL GENERALLY BE CONSTRUCTED WITH REINFORCED CONCRETE AND SHALL BE SUBJECT TO THE APPROVAL OF THE CITY. 23. OUTLET STRUCTURES ARE REQUIRED ON ALL PONDS. ALL OUTLET STRUCTURES SHALL BE PERMANENT CONCRETE OVERFLOW WEIRS OR CONCRETE OUTLET CONTROL STRUCTURES. NO SODDED WEIRS OR OTHER NON-PERMANENT OVERFLOW STRUCTURES SHALL BE ALLOWED. 24. SOIL EROSION CONTROL MEASURES SATISFACTORY TO THE CITY, SHALL BE EMPLOYED DURING CONSTRUCTION AND UPON COMPLETION OF THE POND. 25. THE CITY MAY REQUEST THAT THE DEVELOPER SUBMIT A REPORT BY A QUALIFIED HYDROLOGIST ON THE IMPACT THE POND WILL HAVE ON NEIGHBORING WATER TABLE ELEVATIONS BOTH DURING CONSTRUCTION AND AFTER POND COMPLETION. THE CITY MAY REQUIRE GROUNDWATER MONITORING DURING THE POND EXCAVATION.			PIPES SIZE (INCHES)	LENGTH OF RUN (FEET)	15	150	18	300	24 OR GREATER	400	26. ADEQUATE MAINTENANCE ACCESS AS APPROVED BY THE CITY SHALL BE PROVIDED AROUND THE ENTIRE PERIMETER OF ALL PONDS AND ASSOCIATED OUTFALLS DISCHARGING INTO AND OUT OF PONDS. 27. IN GENERAL, ALL RETENTION/DETENTION PONDS MUST BE CONSTRUCTED PRIOR TO ANY ROAD, PARKING LOT, OR BUILDING CONSTRUCTION COMMENCING OR AS CURRENT PERMIT CONDITIONS DICTATE. 28. THE CONTRACTOR SHALL BE RESPONSIBLE TO OBTAIN ANY DEWATERING PERMITS THAT MAY BE REQUIRED. 29. CULVERTS CROSSING RIGHT-OF-WAYS SHALL EXTEND FROM RIGHT-OF-WAY LINE TO RIGHT-OF-WAY LINE UNDER THE ROADWAY. 30. ALL STORM WATER DISCHARGE FROM RETENTION/DETENTION PONDS ARE REQUIRED TO BE CHANNЕLED INTO DEFINED DRAINAGE PATHS TO EXISTING WATER BODIES, WETLANDS, DITCHES, ETC. 31. THE CITY OF ORMOND BEACH REQUIRES THE DEVELOPER TO TELEWISE ANY AND ALL STORM SEWER PIPE SYSTEMS IN THE PRESENCE OF THE CITY INSPECTOR BY A REPUTABLE COMPANY THAT ENGAGES IN THIS TYPE OF WORK. THE DVD SHALL BE IN HIGH QUALITY STANDARD RESOLUTION USING A CAMERA WITH SUITABLE LIGHTING TO ALLOW A CLEAR FOCUSED PICTURE OF THE ENTIRE INSIDE PIPE CIRCUMFERENCE. THE DVD SHALL BE NON-STOP WITH AUDIO DESCRIBING WHAT IS BEING VIEWED. COPIES OF DVD SHALL BE SUBMITTED IN DVD FORMAT ACCOMPANIED BY WRITTEN LOGS DESCRIBING THE CONDITION OF THE LINES AT LEAST FORTY-EIGHT (48) HOURS PRIOR TO REQUESTING FINAL INSPECTIONS. ANY DEFECTS NOTED SHALL BE CORRECTED PRIOR TO ACCEPTANCE BY THE CITY OR ISSUANCE OF CERTIFICATE OF OCCUPANCY. 32. IN ACCORDANCE WITH SECTION 3-58(F) ALL WET DETENTION PONDS SHALL INCLUDE AN AERATION FOUNTAIN TO ENSURE PROPER WATER QUALITY, ENHANCE MAINTENANCE, AND IMPROVE AESTHETICS. PONDS SHALL BE DESIGNED TO APPEAR NATURAL AND NON-GEOMETRIC.		
PIPES SIZE (INCHES)	LENGTH OF RUN (FEET)															
15	150															
18	300															
24 OR GREATER	400															
	STANDARD CONSTRUCTION DETAIL	INDEX		STANDARD CONSTRUCTION DETAIL	INDEX		STANDARD CONSTRUCTION DETAIL	INDEX								
	STORM DRAINAGE CONSTRUCTION NOTES	ST-1A		STORM DRAINAGE CONSTRUCTION NOTES	ST-1B		STORM DRAINAGE CONSTRUCTION NOTES	ST-1C								
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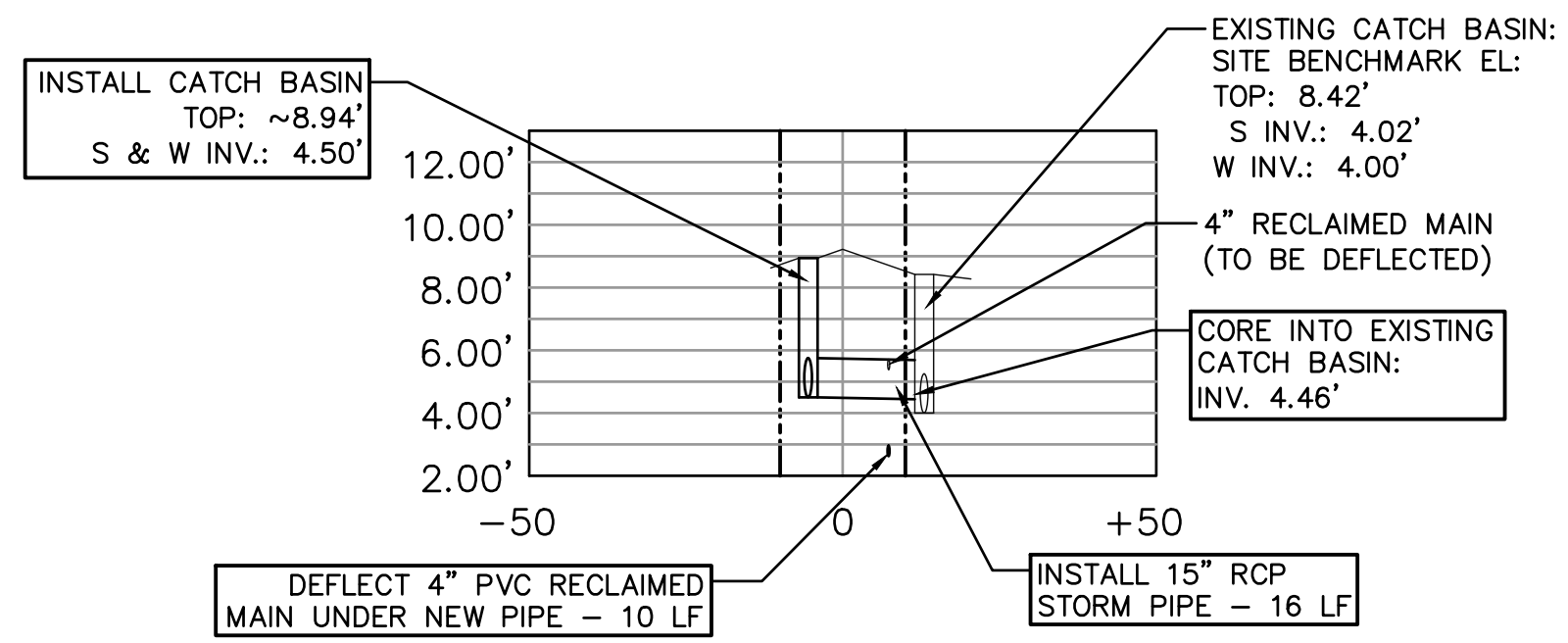


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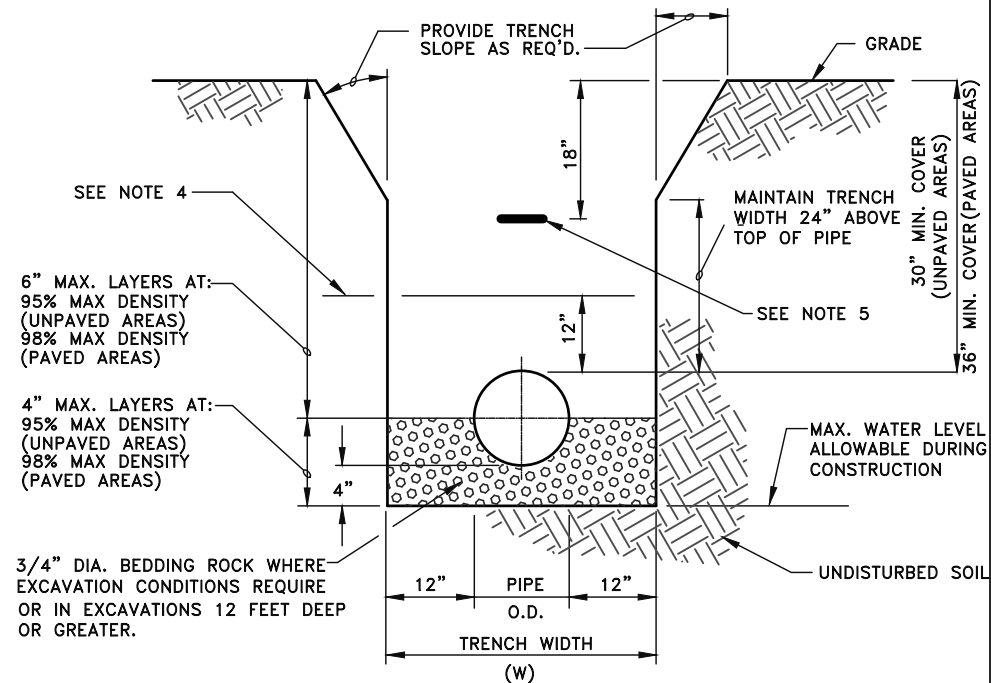


PROFILE
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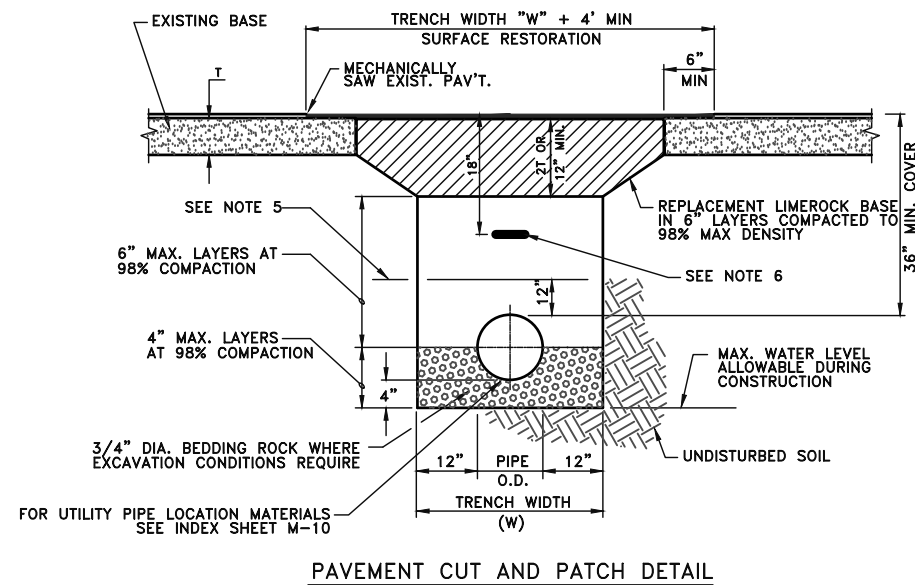
CROSS-SECTION
SCALE: H=1"=30' V=1"=6'

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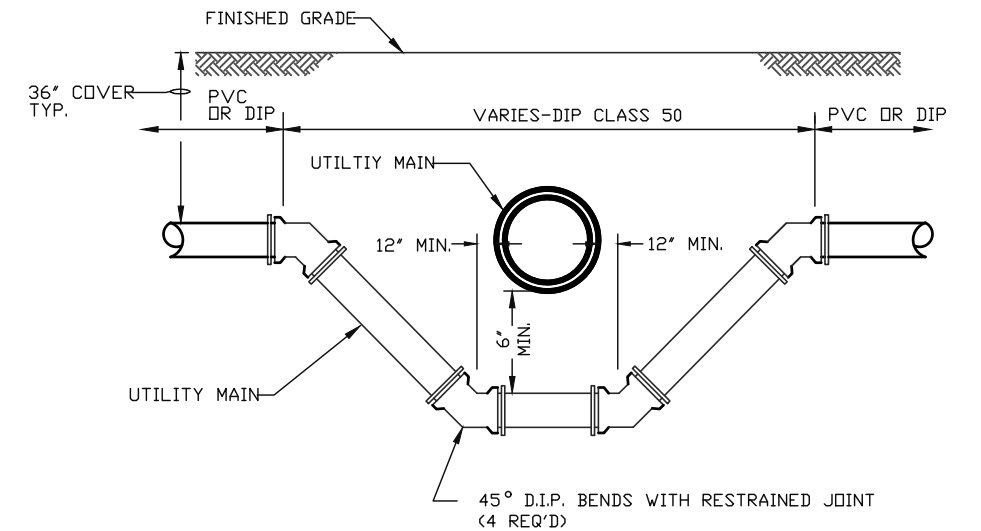
- NOTES:

1. WHERE SOIL CONDITIONS CAN NOT BE MAINTAINED AS SHOWN ABOVE, PROVIDE APPROVED METHOD OF CONSTRUCTION.
2. SHEETING WILL BE REQUIRED AS DETERMINED IN THE FIELD.
3. COMPACTION PERCENTAGES SHOWN REFER TO A.A.S.H.T.O. T-180. PROVIDE COPIES OF CERTIFIED TEST REPORTS TO CITY INSPECTOR.
4. MECHANICAL COMPACTION NOT ALLOWED BELOW THIS LEVEL.
5. INSTALL METALLIC TAPE OVER FULL LENGTH OF PIPE.



NOTES:

1. WHERE SOIL CONDITIONS CAN NOT BE MAINTAINED AS SHOWN ABOVE, PROVIDE APPROVED METHOD OF CONSTRUCTION.
2. SHEETING WILL BE REQUIRED AS DETERMINED IN THE FIELD.
3. NEW SURFACING MATERIALS SHALL BE CONSISTENT WITH EXISTING AND SHALL HAVE LAPPED & FEATHERED JOINTS (1 1/2" MIN. THK.)
4. COMPACTION PERCENTAGES SHOWN REFER TO A.A.S.H.T.O. T-180. PROVIDE COMPACTION TEST REPORTS TO CITY INSPECTOR.
5. MECHANICAL COMPACTION NOT ALLOWED BELOW THIS LEVEL.
6. INSTALL METALLIC TAPE OVER FULL LENGTH OF PIPE.
7. EIGHT INCHES (8") OF HIGH EARLY-STRENGTH CONCRETE MAY BE SUBSTITUTED FOR LIMEROCK UPON APPROVAL BY CITY ENGINEER.



- NOTES: 1. ABOVE DETAIL TO BE UTILIZED IF CONTRACTOR CANNOT MAINTAIN 6' CLEAR BETWEEN MAINS BY DEFLECTING PIPE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
2. MAINTAIN 12" BELOW A POTABLE WATER MAIN.



STANDARD CONSTRUCTION DETAIL
PIPE INSTALLATION
NTS

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M-9

MAY 2020



STANDARD CONSTRUCTION DETAIL
PAVEMENT CUT AND PATCH
NTS

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R-8
MAY 2020



STANDARD CONSTRUCTION DETAIL
PIPE CROSSING
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RW-8
JUNE 2023

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NO.	DATE	REVISIONS	BY

City of Ormond Beach
Engineering Division

JASON LESLIE, MAYOR
JOYCE SHANAHAN, CITY MANAGER

ALEX SCHUMANN, P.E. CITY ENGINEER

ORCHARD LANE STORMWATER DRAINAGE IMPROVEMENTS

DETAILS

DATE:	9/16/25
SCALE:	
DRAWN BY:	MC

PROJECT NO.:
FILE NAME:
SHEET: 6 of 6



City of Ormond Beach
City Commission Agenda
Staff Report

Agenda Date	November 4, 2025	Item No	7.R.
Section	CONSENT AGENDA	Category	Consent - Disposition Item
Subject	2026 City of Ormond Beach Legislative Action Agenda		
Recommended Action	Staff recommends approval of the 2026 legislative initiatives.		
Strategic Goal	Governance - Advocate Ormond Beach's Goals and Priorities and promote related regional action through active participation in intergovernmental relations and partner agencies.		
Department Staff Contact	Economic Development Brian Rademacher, Economic Development Director		

Summary

The City's legislative priority for Fiscal Year 2026 focuses on its continued commitment to improving water quality and infrastructure resiliency. Following discussions with Doug Bell of Metz Husband & Daughton, who represents the City in legislative affairs, water quality is anticipated to remain a key focus in the upcoming legislative session. These types of projects are expected to be strong candidates for state funding opportunities. The City is seeking appropriations for two utility infrastructure projects that will enhance reclaimed water delivery, ensure wastewater service reliability, and support compliance with regulatory mandates.

Halifax River Force Main and Reclaim Utility Crossing

Sub-Aqueous Reclaimed Water Main Crossing

The recent expansion of the City of Ormond Beach's reclaimed water distribution system to residents on the North and South Peninsula has significantly increased demand. During periods of high usage, some customers have experienced reduced delivery pressures. Currently, a single sub-aqueous crossing connects the peninsula to the mainland reclaimed water facility.

This project proposes the construction of a new 16" reclaimed water main across the Halifax River. This new crossing will create a looped system, improve service reliability, and allow for future expansion to the remaining 600 properties on the South Peninsula. It also supports the goals of Senate Bill 64, which mandates the elimination of treated wastewater effluent discharges to water bodies within the next decade.

The cost of construction of this project is \$2,900,000. The city is requesting \$750,000.

Sub-Aqueous Sanitary Sewer Force Main Crossing

The City's existing sanitary sewer force main crossing near Granada Boulevard is a ductile iron pipe installed in 1981. It is now at the end of its intended service life. Replacing this aging infrastructure is essential to maintain uninterrupted wastewater service for beachside customers.

This project proposes the installation of a new force main to provide critical redundancy and ensure continued service in the event of a failure in the existing line. This upgrade is vital for maintaining public health standards and protecting the Halifax River from potential environmental impacts.

The cost of construction of this project is \$2,550,000. The city is requesting \$625,000.

These shovel-ready projects are aligned with state water quality priorities and are essential to the City's long-term infrastructure strategy. The City respectfully requests legislative support for these appropriations to advance utility upgrades that will protect the environment, improve service delivery, and ensure system resiliency for years to come.

Financial Impact

The identified project is included in the City's capital improvement plan. If funding is secured through the legislative session, it will allow the City to consider additional high-priority water quality initiatives — maximizing impact and expanding the reach of our environmental investments.

Citizen Impact

The legislative action agenda seeks to improve water quality and resiliency. Advocacy and any funding made available for projects will have a positive impact on the citizens of Ormond Beach.

Attachments

1. Ormond Beach 2025 Legislative Priorities



CITY OF ORMOND BEACH LEGISLATIVE PRIORITIES

STATE OF FLORIDA - 2026



HALIFAX RIVER FORCE MAIN AND RECLAIM UTILITY CROSSING

1 *Sub-Aqueous Reclaimed Water Main Crossing*

The recent expansion of the City of Ormond Beach's reclaimed water distribution system to residents on the North and South Peninsula has significantly increased demand. During periods of high usage, some customers have experienced reduced delivery pressures. Currently, a single sub-aqueous crossing connects the peninsula to the mainland reclaimed water facility.

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Estimated Cost: \$2,900,000 Legislative Request: \$750,000





Sub-Aqueous Sanitary Sewer Force Main Crossing

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This project proposes the installation of a new force main to provide critical redundancy and ensure continued service in the event of a failure in the existing line. This upgrade is vital for maintaining public health standards and protecting the Halifax River from potential environmental impacts.

Estimated Cost: \$2,550,000 Legislative Request: \$625,000



OUR WHY

These shovel-ready projects are aligned with state water quality priorities and are essential to the City's long-term infrastructure strategy. The City respectfully requests legislative support for these appropriations to advance utility upgrades that will protect the environment, improve service delivery, and ensure system resiliency for years to come.



City of Ormond Beach
City Commission Agenda
Staff Report

Agenda Date	November 4, 2025	Item No	8.A.
Section	FIRST READING OF ORDINANCES	Category	First Reading of Ordinances
Subject	Fiscal Year 2024-2025 Budget Amendments		
Recommended Action	Staff recommends approval of the amendments to the FY 2024-2025 annual budget.		
Strategic Goal	Governance - Other		
Department Staff Contact	Finance Kelly McGuire, Finance Director		

Summary

Request to amend the Fiscal Year (FY) 2024-2025 budget by \$33,667,643 with a final budget amount of \$165,644,511. The net budget amount is \$137,623,035 and represents the budget amount without duplicate entries (transfers and departmental charges required by Generally Accepted Accounting Principles GAAP) required to comply with state budget requirements (such as transfers among funds).

The attachment provides details regarding the proposed amendment of the FY 2024-25 budget. A summary of the amendments is as follows:

Description	Amount
Project budgets reappropriated from FY 2023-24	\$14,669,468
Emergency & Unanticipated Repairs (primarily related to Hurricane Milton)	\$6,198,345
Contract Settlement (Solid Waste Hauler)	\$1,000,000
Water & Wastewater Bond Projects	\$11,749,830
Police Premium Taxes received above budgeted amount	\$50,000

Financial Impact

The amendments will increase the budget to \$165,644,511.

Citizen Impact

The budget amendments are required to comply with local and state budgetary requirements.

Attachments

1. 25-33 Budget Amendments (P25-0133G)
2. Attachment A Amendments
3. Budget Amendment

ORDINANCE NO. 2025-33

AN ORDINANCE AMENDING THE ANNUAL BUDGET FOR FISCAL YEAR 2024-2025 BY AMENDING THE GENERAL FUND (001); DOWNTOWN REDEVELOPMENT TRUST FUND (104); STORMWATER UTILITY FUND (107); AIRPORT FUND (108); ECONOMIC DEVELOPMENT FUND (110); PENSION CONTRIBUTION PASS THROUGH FUND (113); FINANCING DEBT SERVICE FUND (205); BEACHFRONT PARK BOND FUND (220); CAPITAL IMPROVEMENTS FUND (301); EQUIPMENT RENEWAL & REPLACEMENT FUND (302); PUBLIC SAFETY VEHICLE & EQUIPMENT FUND (305); TRANSPORTATION IMPROVEMENTS FUND (308); FACILITIES RENEWAL & REPLACEMENT FUND (317); WATER AND WASTEWATER FUND (401); VEHICLE REPLACEMENT FUND (408); RENEWAL & REPLACEMENT FUND (409); WATER SYSTEM IMPACT FEE FUND (434); WASTEWATER SYSTEM IMPACT FEE FUND (435); 2024 WATER & WASTEWATER BOND FUND (446); SOLID WASTE FUND (460) AND THE GENERAL LIABILITY FUND (504); AND SETTING FORTH AN EFFECTIVE DATE.

WHEREAS, the City Commission desires to amend the annual budget for Fiscal Year 2024-2025 by amending the General Fund (001); Downtown Redevelopment Trust Fund (104); Stormwater Utility Fund (107); Airport Fund (108); Economic Development Fund (110); Pension Contribution Pass Through Fund (113); Financing Debt Service Fund (205); Beachfront Park Bond Fund (220); Capital Improvements Fund (301); Equipment Renewal & Replacement Fund (302); Public Safety Vehicle & Equipment Fund (305); Transportation Improvements Fund (308); Facilities Renewal & Replacement Fund (317); Water and Wastewater Fund (401); Vehicle Replacement Fund (408); Renewal & Replacement Fund (409); Water System Impact Fee Fund (434); Wastewater System Impact Fee Fund (435); 2024 Water & Wastewater Bond Fund (446);

Solid Waste Fund (460) and the General Liability Fund (504); as more particularly set forth on the Attachment “A” attached hereto and incorporated herein by reference, now therefore,

BE IT RESOLVED BY THE CITY COMMISSION OF THE CITY OF ORMOND BEACH, FLORIDA, THAT:

SECTION ONE. The City Commission hereby amends the 2024-2025 Fiscal Year annual budget as set forth on Attachment “A” attached hereto.

SECTION TWO. This Ordinance shall take effect immediately upon second reading.

PASSED UPON at the first reading of the City Commission, this 4th day of November, 2025.

PASSED UPON at the second and final reading of the City Commission, this 18th day of November, 2025.

JASON LESLIE
Mayor

ATTEST:

SUSAN CARROLL DAUDERIS
City Clerk

ALL FUNDS SUMMARY			
Attachment A	Original		Revised
	Budget	Amendments	Budget
Description	FY 2024-25	FY 2024-25	FY 2024-25
General Fund (001)	49,185,112	1,207,163	50,392,275
Special Revenue Funds:			
Downtown Redevelopment Trust Fund (104)	1,822,138	2,524,466	4,346,604
Ormond Crossings Trust Fund (106)	346,798	-	346,798
Stormwater Utility Fund (107)	3,434,247	2,268,990	5,703,237
Airport Fund (108)	369,418	445,500	814,918
Local Law Enforcement Trust Fund (109)	-	-	-
Economic Development Fund (110)	-	2,300,000	2,300,000
State Law Enforcement Trust Fund (112)	-	-	-
Pension Contribution Pass Through Fund (113)	1,300,000	50,000	1,350,000
Recreation Facility Fee Fund (115)	57,225	-	57,225
Total Special Revenue Funds	7,329,826	7,588,956	14,918,782
Debt Service Funds:			
Financing Debt Service Fund (205)	660,000	30,000	690,000
2010 Beachfront Park Bond Fund (220)	346,322	10,000	356,322
Total Debt Service Funds	1,006,322	40,000	1,046,322
Capital Improvement Funds:			
Capital Improvements Fund (301)	4,999,383	209,100	5,208,483
Equipment Renewal & Replacement Fund (302)	407,000	116,200	523,200
Public Safety Vehicle & Equipment Fund (305)	888,000	799,891	1,687,891
Transportation Improvements Fund (308)	2,159,976	267,395	2,427,371
Recreational Impact Fee Fund (310)	100,000	-	100,000
Local Road Impact Fee Fund (316)	50,000	-	50,000
Facilities Renewal & Replacement Fund (317)	879,126	1,150,724	2,029,850
Stormwater Impact Fee Fund (318)	50,000	-	50,000
Leisure Services Capital Fund (322)	954,116	-	954,116
Total Capital Improvement Funds	10,487,601	2,543,310	13,030,911
Water and Wastewater Funds:			
Water and Wastewater Fund (401)	26,307,887	75,000	26,382,887
Vehicle Replacement Fund (408)	850,000	127,000	977,000
Renewal & Replacement Fund (409)	12,346,951	497,095	12,844,046
Water/Wastewater Consolidated Debt Service Fund (414)	4,924,000	-	4,924,000
West Ormond Reuse Impact Fee Fund (433)	-	-	-
Water System Impact Fee Fund (434)	700,000	4,554,000	5,254,000
Wastewater System Impact Fee Fund (435)	675,000	1,430,000	2,105,000
2024 Water & Wastewater Bond Fund (446)	-	11,749,830	11,749,830
Total Water and Wastewater Funds	45,803,838	18,432,925	64,236,763
Solid Waste Fund (460)	13,407,304	3,000,000	16,407,304
Workers Compensation Fund (502)	1,851,612	-	1,851,612
General Liability Fund (504)	2,905,253	855,289	3,760,542
TOTAL BUDGET APPROPRIATION	131,976,868	33,667,643	165,644,511
Less: Interfund Transfers	(17,984,692)	(1,049,610)	(19,034,302)
Fleet Operations (Internal Service Charges)	(1,900,237)	(145,000)	(2,045,237)
Engineering (Internal Service Charges)	(1,329,783)	-	(1,329,783)
Consolidated Insurance Fund (Internal Service Charges)	(4,756,865)	(855,289)	(5,612,154)
TOTAL NET BUDGET	106,005,291	31,617,744	137,623,035

FY 2024-25 Budget Amendments

Fund	Description	Revenue Amount	Expenditure Amount	Commission Action
General Fund				
Revenues				
	Miscellaneous Revenue-Tree Fund	108,000		
	Fund Balance	1,099,163		
		<u>1,207,163</u>		
Expenditures				
	Transfer to Fund 301-Median Landscaping Upgrades		108,000	Reso 2025-72 5/20/25
	Transfer to Fund 317-Magic Forest Playground Milton Repairs		65,000	Reso 2025-65 3/4/25
	Transfer to Fund 317-BPOS-Senior Center Milton Repairs		2,815	
	Transfer to Fund 317-Mold Remediation		10,000	Senior Center Mold
	Transfer to Fund 317-Tennis Courts Milton Repairs		75,000	Reso 2025-36 1/21/25
	Transfer to Fund 317-Nova Community Center Activity Room Floor		65,000	Reso 2025-66 3/4/25 (Emergency Repairs)
	Transfer to Fund 301-Police/EOC Design Phase I		558,000	Reso 2025-29 1/21/25
	Building Inspections Operating Account		(45,000)	Transfer to Capital Fund
	Transfer to Fund 301-Building Inspection Furnishings		45,000	Transfer to Capital Fund
	Parks Repairs-Hurricane Milton		78,348	
	Transfer to Fund 305-Public Safety Vehicle Fund		105,000	Vehicles for new fire positions (2)
	Public Safety Vehicle Repairs		140,000	
			<u>1,207,163</u>	
CRA				
Revenues				
	Use of Fund Balance	2,524,466		
		<u>2,524,466</u>		
Expenditures				
	Cassen Park Construction		2,524,466	Reso. 2024-207 12/3/24 & 2025-45 2/4/25 & Geotech Work Auth
			<u>2,524,466</u>	
Stormwater				
Revenues				
	Use of Fund Balance	2,268,990		
		<u>2,268,990</u>		
Expenditures				
	Rio Storm Drain Pipe		134,000	Reso 2025-43 1/21/25
	OBSC Drainage		870,185	Reso 2025-115 7/22/25
	Fleming Avenue Stormwater Improvements		1,264,805	Reso 2025-56 2/18/25 & Reso 2024-49 3/19/24
			<u>2,268,990</u>	
Airport				
Revenues				
	Use of Fund Balance	127,800		
	FAA	148,500		
	FDOT	169,200		
		<u>445,500</u>		
Expenditures				
	Civil Air Patrol Building Utilities		24,000	
	Rehab Taxiway Bravo Apron		165,000	Reso 2024-140 9/4/24
	Airport Access Infrastructure		120,000	Reso 2024-69 6/4/24
	Access Gates		136,500	Reso 2025-58 2/18/25
			<u>445,500</u>	
Economic Development Fund				
Revenues				
	State of Florida	1,623,426		
	FDOT	615,815		
	Use of Fund Balance	60,759		
		<u>2,300,000</u>		
Expenditures				
	Business Park Drive Phase II Construction		2,300,000	Reso 2024-44 3/19/24
			<u>2,300,000</u>	

FY 2024-25 Budget Amendments

<u>Fund</u>	<u>Description</u>	<u>Revenue Amount</u>	<u>Expenditure Amount</u>	<u>Commission Action</u>
Pension Pass Thru				
Revenues				
	State Premium Tax	50,000		
		<u>50,000</u>		
Expenditures				
	Police Premium Tax		50,000	
			<u>50,000</u>	
Debt Service Fund				
Revenues				
	Use of Fund Balance	30,000		
		<u>30,000</u>		
Expenditures				
	General Government Debt Interest		30,000	
			<u>30,000</u>	
2010 General Obligation Bond				
Revenues				
	Use of Fund Balance	10,000		
		<u>10,000</u>		
Expenditures				
	General Government Debt Interest		10,000	
			<u>10,000</u>	
General Capital Improvements				
Revenues				
	Use of Fund Balance	40,305		
	Transfer from General Fund-Police EOC	558,000		
	Transfer from General Fund-Median Landscaping Upgrades	108,000		
	Transfer from General Fund-Building Inspection Furnishings	45,000		
	Transfer from Transportation-Division Avenue North Sidewalk	15,795		
	Bond Proceeds	(558,000)		
		<u>209,100</u>		
Expenditures				
	Median Landscaping Upgrades		108,000	Reso 2025-72 5/20/25
	Division Avenue North Sidewalk		56,100	Reso 2025-106 7/22/25
	Building Inspection Furnishings		45,000	
			<u>209,100</u>	

FY 2024-25 Budget Amendments

<u>Fund</u>	<u>Description</u>	<u>Revenue Amount</u>	<u>Expenditure Amount</u>	<u>Commission Action</u>
General Capital Vehicle/Equipment				
Revenues				
	Use of Fund Balance	116,200		
		<u>116,200</u>		
Expenditures				
	Streets Tractor #472		73,000	Damaged
	Inspector Vehicles (#154, 160)		6,000	Additional funding based on actual cost
	Pickup #530		26,000	Additional funding based on actual cost
	Dump Truck #252		11,200	Reso 2025 94 5/20/25
			<u>116,200</u>	
Public Safety				
Revenues				
	Use of Fund Balance	460,336		
	HMGP Grant	173,555		
	Transfer from Fund 001-General Fund	105,000		
	Transfer from Fund 504-General Liability Fund	61,000		
		<u>799,891</u>		
Expenditures				
	JAG 24 Project---30552102.505110 License Plate Reader		10,100	Reso#24-178
	EOC Satelite Phones		18,000	Carryforward from FY 2024-25
	Patrol Vehicle P41		61,000	Damaged
	AED Opiod Grant		54,385	4/15/2025 Resolution 2025-82 \$54385
	Brush Truck		289,000	Carryforward from FY 2024-25
	Fire Inspector & Battalion Captain Vehicles		105,000	New positions authorized in FY 2024-25 budget
	Fire Station 92 & 93 Generators		231,406	Reso 2025-129 8/5/25
	Harley Davidson		31,000	Pre-order for FY 2025-26
			<u>799,891</u>	
Transportation				
Revenues				
	Use of Fund Balance	267,395		
		<u>267,395</u>		
Expenditures				
	Transportation Consulting		30,000	Reappropriation from FY 2023-24
	Main Trail Bridge Assessment		3,750	Emergency procurement
	Street Lighting		8,000	Street Lighting
	Crowd control measures		195,000	Emergency procurement
	Transfer to General Capital		15,795	Reso 2025-106 7/22/25 Division Ave. North Sidewalk
	Year End Purchase Order Carryforward		14,850	
			<u>267,395</u>	
Facilities R&R				
Revenues				
	Use of Fund Balance	309,459		
	Transfer from General Fund	217,815		
	Transfer from Fund 504-General Liability Fund	556,000		
	FEMA	67,450		
		<u>1,150,724</u>		
Expenditures				
	PAC Roof Repair		34,144	Reso. 2024-197
	NOVA Floor Demolition 317695		65,000	Reso 2025-66 3/4/25
	Fire Station 91 Electric Panel Repair		18,000	Emergency Repair
	Magic Forest Playground		105,000	Emergency Repair 2/4/25
	Tennis Court Reconstruction		600,000	Reso 2025-36 1/21/25
	Fire Station 92 Bay Floors		22,463	Carryforward from FY 2023-24
	Central Park I Playground		19,000	Carryforward from FY 2023-24
	OBSC Limitless Playground		42,000	Carryforward from FY 2023-24
	Engineering Department Roof		48,000	Carryforward from FY 2023-24
	Nova Sports Complex Shade Structure		73,200	Carryforward from FY 2023-24
	Miscellaneous Park Repairs under \$25,000		15,148	Carryforward from FY 2023-24
	BPOS Roof		17,020	FEMA-Milton
	Senior Center Roof		5,495	FEMA-Milton
	OBSC Pump Replacements		21,000	Emergency repair
	Senior Center Mold Remediation 317702		15,593	Mold Senior Center
	Senior Center HVAC Replacement 317706		9,663	
	Year End Purchase Order Carryforward		39,998	
			<u>1,150,724</u>	
WWW Operating				
Revenues				

FY 2024-25 Budget Amendments

<u>Fund</u>	<u>Description</u>	<u>Revenue Amount</u>	<u>Expenditure Amount</u>	<u>Commission Action</u>
	Use of Fund Balance	75,000		
		<u>75,000</u>		
Expenditures				
	PEP Tanks		75,000	
			<u>75,000</u>	
WWW Vehicles & Equipment				
Revenues				
	Transfer from Fund 504-General Liability	127,000		
		<u>127,000</u>		
Expenditures				
	Replace Truck damaged by fallen tree (Milton)		38,000	Reso 2025-43 1/21/25
	Utility Billing Vehicle		41,000	Emergency Procurement
	Vehicle for new Locate Position		48,000	Reappropriation from prior year
			<u>127,000</u>	
WWW Capital Impr.				
Revenues				
	Fund Balance	497,095		
		<u>497,095</u>		
Expenditures				
	Williamson Underground		497,095	RESO#2024-183
			<u>497,095</u>	
Water Impact Fee Fund				
Revenues				
	Use of Fund Balance	4,554,000		
		<u>4,554,000</u>		
Expenditures				
	Hudson Welfield		4,554,000	Reso 2024- 1/7/2025 & Reso 2025-53 2/18/25
			<u>4,554,000</u>	

FY 2024-25 Budget Amendments

<u>Fund</u>	<u>Description</u>	<u>Revenue Amount</u>	<u>Expenditure Amount</u>	<u>Commission Action</u>
Wastewater Impact Fee Fund				
Revenues				
	Fund Balance	1,430,000		
		<u>1,430,000</u>		
Expenditures				
	Riverside Drive Force Main Replacement		990,000	Reso 2025-54 2/18/25
	Halifax River Forcemain Crossing		440,000	Reso 2024-164
			<u>1,430,000</u>	
2024 Water & Wastewater Bonds				
Revenues				
	Use of Fund Balance (Bond Proceeds)	11,749,830		
		<u>11,749,830</u>		
Expenditures				
	SR40 & Airport Road Forcemain Loop Construction		4,525,370	Reso. 2024-199
	SR40 & Airport Road Forcemain Loop Construction Admin.		83,625	Res. 2024-211
	WRF UV Conversion Construction Admin.		7,140,835	Reso. 2024-149, 2024-150
			<u>11,749,830</u>	
Solid Waste				
Revenues				
	Fund Balance	1,000,000		
	FEMA	2,000,000		
		<u>3,000,000</u>		
Expenditures				
	Storm Debris Removal Milton		2,000,000	
	Contract Settlement and Renegotiation		1,000,000	Reso 2025-43 1/21/25
			<u>3,000,000</u>	
General Liability				
Revenues				
	Fund Balance	261,289		
	Reimbursement by Insurance	594,000		
		<u>855,289</u>		
Expenditures				
	Tranfer to Fund 408-Water & Wastewater Vehicle Fund		38,000	Vehicle damaged by fallen tree
	Transfer to Fund 317-Facilities R&R		556,000	Tennis Courts
	Lease Agreement for relocation of Legal Department		100,510	Reso 2025-43 1/21/25
	Prism Specialties for document restoration and digitization of files from the Ames Hc		99,779	Reso 2025-43 1/21/25
	Transfer to Fund 305-Public Safety Vehicle Fund		61,000	
			<u>855,289</u>	
		<u>33,667,643</u>	<u>33,667,643</u>	
		<u>165,644,511</u>	<u>165,644,511</u>	



City of Ormond Beach
City Commission Agenda
Staff Report

Agenda Date	November 4, 2025	Item No	8.B.
Section	FIRST READING OF ORDINANCES	Category	First Reading of Ordinances
Subject	General Employees' Pension Ordinance Amendment		
Recommended Action	The General Employees' Pension board reviewed the ordinance and unanimously recommends approval.		
Strategic Goal	Governance - Attract, develop, and support the best talent for Ormond Beach to be recognized as an Employer of Choice.		
Department Staff Contact	Finance Kelly McGuire, Finance Director		

Summary

The ordinance amendment establishes a defined pension benefit for full-time general employees hired on or after December 19, 2012, who formerly received a defined contribution 401a plan with a 9% City contribution. This change is consistent with the National Association of Government Employees Collective Bargaining Agreement presented as part of the consent agenda. However, the pension change will impact all general employees including non-bargaining professional and management staff.

The defined pension benefit is equal to 2.25% of the employees' final average compensation for each year of service beginning October 1, 2025.

Participation in the pension program requires a mandatory 4% employee contribution.

Financial Impact

Funding to implement the ordinance amendment is included in the FY 2025-26 budget. The cost is \$270,000 annually.

Citizen Impact

The ordinance amendment will assist the City in the recruitment and retention of skilled employees.

Attachments

1. 25-34 General Employees' Pension P25-0149G - Finance

ORDINANCE NO. 2025-34

AN ORDINANCE OF THE CITY OF ORMOND BEACH, FLORIDA, FURTHER AMENDING ARTICLE I, GENERAL EMPLOYEES' PENSION PLAN, OF CHAPTER 16, PENSIONS AND RETIREMENT, OF THE CODE OF ORDINANCES; AMENDING SECTION 16-6, BENEFIT AMOUNTS AND ELIGIBILITY; AMENDING SECTION 16-9, VESTING; PROVIDING FOR A BENEFIT MULTIPLIER FOR CREDITED SERVICE EARNED ON OR AFTER OCTOBER 1, 2025, FOR MEMBERS HIRED ON OR AFTER DECEMBER 19, 2012; PROVIDING FOR SEVERABILITY OF PROVISIONS; REPEALING ALL ORDINANCES IN CONFLICT HERewith AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the City and the bargaining representative for the general employees have agreed to increase the benefit multiplier for credited service earned on or after October 1, 2025, for members hired on or after December 19, 2012; and

WHEREAS, an amendment to the City's code of ordinances is required to provide for the changes agreed to by the bargaining parties; and

WHEREAS, the trustees of the City of Ormond Beach General Employees' Pension Plan have requested and approved the amendments provided herein as being in the best interests of the participants and beneficiaries and improving the administration of the Fund, and

WHEREAS, the City Commission has received and reviewed an actuarial impact statement related to this change and attached as such; and

WHEREAS, the City Commission deems it to be in the public interest to provide this change to the Pension Plan for its General Employees; now therefore,

BE IT ENACTED BY THE PEOPLE OF THE CITY OF ORMOND BEACH, FLORIDA, THAT:

SECTION ONE. Section 16-6, Benefit amounts and Eligibility, of Article I, General Employees' Pension Plan, of Chapter 16, Pensions and Retirement, of the City of Ormond Beach,

Florida, *Code of Ordinances*, is hereby further amended by amending section (b), *Normal retirement benefit*, to read as follows:

Sec. 16-6. Benefit amounts and eligibility.

- (a) *Normal retirement age and date.* A member's normal retirement age is the attainment of age 62 and the completion of five years of credited service or attainment of at least age 55 with a number of years of credited service when combined with age equals 85 years. Each member shall become 100 percent vested in his accrued benefit at normal retirement age. A member's normal retirement date shall be the first day of the month coincident with or next following the date the member retires from the city after attaining normal retirement age.
- (b) *Normal retirement benefit.* A member retiring hereunder on or after his normal retirement date shall receive a monthly benefit which shall commence on the first day of the month next following his retirement and be continued thereafter during the member's lifetime, ceasing upon death, except as otherwise provided in Section 16-10. For Members hired prior to December 19, 2012, the monthly retirement benefit shall be equal to 2.5 percent of a~~Average monthly compensation, for each year of times their~~Credited service. Effective October 1, 2025, for Members hired on or after December 19, 2012, the monthly retirement benefit shall be equal to 2.25 percent of their Average monthly compensation multiplied by their Credited service earned on or after October 1, 2025. Benefits shall be paid in arrears on the last day of the month.

[...]

SECTION TWO. Section 16-9, Vesting, of Article I, General Employees' Pension Plan, of Chapter 16, Pensions and Retirement, of the City of Ormond Beach, Florida, *Code of Ordinances*, is hereby further amended by adding subsection (3) to read as follows:

Sec. 16-9. - Vesting.

If a member terminates his employment with the city, either voluntarily or by discharge, and is not eligible for any other benefits under this system, the member shall be entitled to the following:

[...]

- (3) Effective October 1, 2025, all Members hired on or after December 19, 2012, shall be entitled to include all prior years of Credited service accrued as of such date for vesting and benefit eligibility purposes only. Notwithstanding, all such periods of Credited service accrued as of October 1, 2025, shall not be included for benefit calculation purposes and such Members' benefits shall be calculated in accordance with Sec. 16-6(b) herein.

SECTION THREE. All ordinances or parts of ordinances in conflict herewith be and the same are hereby repealed to the extent of such conflict.

SECTION FOUR. If any section, subsection, sentence, clause, phrase of this ordinance, or the particular application thereof shall be held invalid by any court, administrative agency, or other body with appropriate jurisdiction, the remaining section, subsection, sentences, clauses, or phrases under application shall not be affected thereby.

SECTION FIVE. That this Ordinance shall be effective upon passage; however, the provisions of this Ordinance that are specified to take effect as of a date certain shall take effect as of the date specified herein.

PASSED UPON at the first reading of the City Commission, this 4th day of November, 2025.

PASSED UPON at the second and final reading of the City Commission, this 18th day of November, 2025.

JASON LESLIE

Mayor

ATTEST:

SUSAN CARROLL DAUDERIS

City Clerk