



AGENDA
CITY OF ORMOND BEACH, FLORIDA
CITY COMMISSION MEETING
March 2, 2021
7:00 PM

Mayor Bill Partington

Zone 1 – Commissioner Dwight Selby

Zone 3 – Commissioner Susan Persis

Zone 2 – Commissioner Troy Kent

Zone 4 – Commissioner Rob Littleton

COMMISSION CHAMBERS

22 South Beach Street, Ormond Beach, FL 32174

Phone: 386-677-0311

Web: www.ormondbeach.org

***Please see page 4 of this agenda for information on meeting procedures
and public commenting information.***

- 1. CALL TO ORDER**
- 2. INVOCATION**
- 3. PLEDGE OF ALLEGIANCE**
- 4. AUDIENCE REMARKS - REGARDING ITEMS NOT ON THE AGENDA**
- 5. APPROVAL OF MINUTES**

A. Minutes from City Commission meeting – February 16, 2021

6. 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. **RESOLUTION NO. 2021-50:** A RESOLUTION AUTHORIZING THE EXECUTION OF A WORK AUTHORIZATION BETWEEN THE CITY OF ORMOND BEACH AND UNIVERSAL ENGINEERING SCIENCES, INC. FOR THE PROVISION OF BUILDING INSPECTION SERVICES ON AN AS-NEEDED BASIS; AUTHORIZING PAYMENT THEREFOR; AND SETTING FORTH AN EFFECTIVE DATE.

Staff Contact: Steven Spraker, Planning Director (386-676-3341)

- B. **RESOLUTION NO. 2021-51:** A RESOLUTION AUTHORIZING THE EXECUTION OF A COMMUNITY DEVELOPMENT SUBRECIPIENT AGREEMENT BETWEEN THE CITY OF ORMOND BEACH AND HALIFAX URBAN MINISTRIES, INC., REGARDING HOMELESSNESS PREVENTION SERVICES PROVIDED AT HOPE PLACE; AND SETTING FORTH AN EFFECTIVE DATE.

Staff Contact: *Loretta Moisio, Grants Coordinator (386-676-3315)*

- C. **RESOLUTION NO. 2021-52:** A RESOLUTION AUTHORIZING THE EXECUTION OF A LEASE AGREEMENT BETWEEN THE CITY AND THE CASEMENTS GUILD FOR THE CITY OF ORMOND BEACH, INC.; AND SETTING FORTH AN EFFECTIVE DATE.

Staff Contact: *Robert Carolin, Leisure Services Director (386-676-3279)*

- D. **RESOLUTION NO. 2021-53:** A RESOLUTION ACCEPTING THE PROPOSAL OF UNIFIRST CORPORATION REGARDING UNIFORM RENTAL AND CLEANING SERVICES; AUTHORIZING THE EXECUTION OF AN AGREEMENT AND PAYMENT THEREFOR; REJECTING ALL OTHER PROPOSALS; AND SETTING FORTH AN EFFECTIVE DATE.

Staff Contact: *Kevin Gray, Deputy Public Works Director (386-676-3577)*

- E. **RESOLUTION NO. 2021-55:** A RESOLUTION APPROVING AND RATIFYING THE EXECUTION OF A CONSENT ORDER BETWEEN THE CITY AND THE STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION; AUTHORIZING PAYMENT; AND SETTING FORTH AN EFFECTIVE DATE.

Staff Contact: *Shawn Finley, Public Works Director (386-676-3292)*

- F. **Invitation to Bid - WRF Chlorine Contact Improvements**

Staff Contact: *Shawn Finley, Public Works Director (386-676-3292)*

Disposition: Approve as recommended in the City Manager memorandum dated March 2, 2021.

7. PUBLIC HEARINGS

- A. **ORDINANCE NO. 2021-07:** AN ORDINANCE AMENDING PARAGRAPH C, OFFICIAL ZONING MAP, OF SECTION 2-01, ESTABLISHED, OF ARTICLE I, ESTABLISHMENT OF ZONING DISTRICTS AND OFFICIAL ZONING MAP, OF CHAPTER 2, DISTRICT AND GENERAL REGULATIONS, OF THE CITY OF ORMOND BEACH LAND DEVELOPMENT CODE, BY AMENDING THE OFFICIAL ZONING MAP TO REZONE A PORTION OF CERTAIN REAL PROPERTY TOTALING 0.32+ ACRES LOCATED AT 2341 WEST GRANADA BOULEVARD FROM VOLUSIA COUNTY A-2 (RURAL AGRICULTURE) TO ORMOND BEACH B-2 (NEIGHBORHOOD COMMERCIAL), AUTHORIZING REVISION OF

OFFICIAL ZONING MAP; REPEALING ALL INCONSISTENT ORDINANCES OR PARTS THEREOF; AND SETTING FORTH AN EFFECTIVE DATE. **(SECOND READING)**

Staff Contact: Steven Spraker, Planning Director (386-676-3341)

8. FIRST READING OF ORDINANCES

- A. **ORDINANCE NO. 2021-09:** AN ORDINANCE APPROVING THE FINAL PLAT FOR THE “ PINELAND P.R.D. SUBDIVISION – PHASES 4 & 5”, A PLANNED RESIDENTIAL DEVELOPMENT; ESTABLISHING CONDITIONS AND EXPIRATION DATE OF APPROVAL; AND SETTING FORTH AN EFFECTIVE DATE.

Staff Contact: Steven Spraker, Planning Director (386-676-3341)

9. SECOND READING OF ORDINANCES

- A. **ORDINANCE NO. 2021-08:** AN ORDINANCE AMENDING SECTION 5-1, DEFINITIONS, OF ARTICLE I, IN GENERAL, OF CHAPTER 5, ANIMALS AND FOWL, OF THE CITY OF ORMOND BEACH CODE OF ORDINANCES, BY ESTABLISHING A DEFINITION FOR “ADEQUATE SHELTER”; REPEALING ALL INCONSISTENT ORDINANCES OR PARTS THEREOF; AND SETTING FORTH AN EFFECTIVE DATE. **(SECOND READING)**

Staff Contact: Joyce Shanahan, City Manager (386-676-3200)

10. RESOLUTIONS

- A. **RESOLUTION NO. 2021-54:** A RESOLUTION AUTHORIZING THE EXECUTION OF AN IMPACT FEE PRESERVATION AGREEMENT BETWEEN THE CITY OF ORMOND BEACH AND J-5 LAND PARTNERS, LTD FOR PROPERTY AT 880 SOUTH ATLANTIC AVENUE, ORMOND BEACH, FLORIDA, AS PART OF THE DEMOLITION OF THE EXISTING BUILDING; PROVIDING RECORDATION; AND SETTING FORTH AN EFFECTIVE DATE.

Staff Contact: Steven Spraker, Planning Director (386-676-3341)

11. REPORTS, SUGGESTIONS, REQUESTS

12. ADJOURNMENT

*****PLEASE SEE THE FOLLOWING PAGE FOR MEETING PROCEDURES AND PUBLIC PARTICIPATION INFORMATION*****

MEETING PROCEDURES AND PUBLIC PARTICIPATION INFORMATION

In order to follow federal, state, and local guidelines regarding public gatherings, and to protect residents, staff, and elected officials due to the COVID-19 virus, physical access to this meeting will be restricted as outlined below. *Those interested in the meeting can also listen through electronic means and utilize the provided online or alternative commenting methods to participate.*

The following information is also available at www.ormondbeach.org/ccmtg.

How To Listen Live

The meeting audio will be streamed live online at www.ormondbeach.org/live. Any member of the public who wishes to listen to the meeting live can do so at that link. The recording of the meeting will be available the following day online at www.ormondbeach.org/ccrecordings.

Access Restrictions

Space will be limited due to social distancing and grouping guidelines. If you wish to listen to the meeting, or submit comments on agenda items, and are able to use the online options provided, you are encouraged to do so. This will help ensure that all those who wish to participate may be able to.

Members of the public wishing to attend the meeting in person are advised of the following guidelines:

- Those in attendance should practice social distancing when inside the building, entering the building, and exiting the building. The wearing of masks is encouraged.
- There will be limited designated socially distanced seating available in the Commission Chambers and in the atrium. *All those in attendance must sit only in the designated socially distanced seating.*
- If all available designated socially distanced seats are being utilized, overflow individuals will need to wait outside the building until space frees up.
- Those in attendance will be required to adhere to social distancing guidelines, including only sitting in designated socially distanced seating.

Public Comments

The City Commission welcomes public comment on agenda items. Those wishing to make comments on any item on the March 2, 2021 meeting agenda may do so via remote submission, as outlined below, or in person – following the guidelines stated herein.

Remote submissions of comments on an agenda item may be submitted the following ways:

- **Through an online form:** The form is available at www.ormondbeach.org/agendacomment. You will be asked to provide your name, address, and identify the agenda item you are commenting on.

- **By fax:** You may send your comment via fax to (386) 676-3330. Please provide your name, address, and identify the agenda item you are commenting on in your facsimile.
- **By written comment:** If you'd like to submit a written comment, rather than comment online, you may drop off a comment at the 2nd floor reception desk at City Hall during normal business hours. You may also send comment via U.S. mail to the City Clerk at 22 S. Beach Street, Ormond Beach, FL, 32174. Please make sure to clearly label your submission as an agenda item comment for the March 2 City Commission meeting agenda. Please provide your name, address, and identify the agenda item you are commenting on in your correspondence.

Agenda item comments submitted remotely through one of the above provided online or alternative means before **5:00 p.m. on Monday, March 1, 2021**, will be provided to the City Commission prior to the meeting and made part of the official meeting record. Comments on agenda items submitted after 5:00 p.m. on March 1, 2021, but before the conclusion of the Commission meeting, will be provided to the City Commission following the meeting.

Please note that the equivalent of three minutes of each submitted comment will be included in the record.

In-Person Commenting:

- Those wishing to make comments in-person will need to sign up with staff to do so **prior to the start of the meeting.** Requests to speak will not be accepted after the meeting begins.
- Individuals commenting in person must follow social distancing and other guidelines provided in the access restrictions portion of this page.
- Individuals commenting will be provided with three minutes to make their comments.

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.



For special accommodations, please notify the City Clerk's Office at least 72 hours in advance.
Phone: 386-677-0311



Help for the hearing impaired is available through the Assistive Listening System. Receivers can be obtained from the City Clerk's Office.

In accordance with the Americans with Disabilities Act (ADA), persons with a disability, such as a vision, hearing or speech impairment, or persons needing other types of assistance, and who wish to attend City Commission meetings or any other board or committee meeting may contact the City Clerk's Office in writing, or may call 386-677-0311 for information regarding available aids and services.

MINUTES
ORMOND BEACH CITY COMMISSION
HELD AT CITY HALL COMMISSION CHAMBERS

February 16, 2021	7:00 p.m.	Commission Chambers
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Present were: Mayor Bill Partington, Commissioners Dwight Selby, Troy Kent, Susan Persis, and Rob Littleton, City Manager Joyce Shanahan, Assistant City Manager Claire Whitley, City Attorney Randy Hayes, and City Clerk Colby Cilento.

A G E N D A

- 1. CALL TO ORDER
- 2. INVOCATION
- 3. PLEDGE OF ALLEGIANCE
- 4. PRESENTATIONS AND PROCLAMATIONS
 - A. ANNUAL AUDIT PRESENTATION FY 2019-20
Staff Contact: Kelly McGuire, Finance Director (386-676-3226)
- 5. AUDIENCE REMARKS - REGARDING ITEMS NOT ON THE AGENDA
- 6. APPROVAL OF MINUTES
 - A. Minutes from City Commission meeting – February 2, 2021
 - B. Minutes from City Commission meeting – February 8, 2021
- 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. **RESOLUTION NO. 2021-45:** A RESOLUTION PURSUANT TO CHAPTER 14, ARTICLE VIII, SECTION 14-98, LIENS, OF THE CITY OF ORMOND BEACH CODE OF ORDINANCES AUTHORIZING THE IMPOSITION OF A LIEN AGAINST THE REAL PROPERTY OWNED BY EQUITY TRUST COMPANY CUSTODIAN LOCATED AT 80 GROVE STREET, ORMOND BEACH, VOLUSIA COUNTY, FLORIDA FOR COSTS INCURRED BY THE CITY TO TERMINATE OR ABATE A SITE MAINTENANCE VIOLATION; AND SETTING FORTH AN EFFECTIVE DATE.
Staff Contact: Chris Mason, Neighborhood Improvement Manager (386-676-3352)
 - B. **RESOLUTION NO. 2021-46:** A RESOLUTION AUTHORIZING THE APPROVAL AND EXECUTION OF A PURCHASE AUTHORIZATION FOR THE PURCHASE OF ONE 2021 DODGE CHARGER PATROL VEHICLE UNDER FLORIDA SHERIFFS ASSOCIATION BID NO. FSA20-VEL28.0; DECLARING VEHICLE TO BE SURPLUS PROPERTY, AND AUTHORIZING THE DISPOSITION THEREOF; AND SETTING FORTH AN EFFECTIVE DATE.
Staff Contact: Kevin Gray, Deputy Public Works Director (386-676-3577)

- C. **RESOLUTION NO. 2021-47:** A RESOLUTION ACCEPTING A BID FROM JD WEBER CONSTRUCTION FOR CONSTRUCTION SERVICES REGARDING THE WILMETTE AVENUE STORMWATER PUMP STATION PROJECT, UNDER BID NO. 2021-05; AUTHORIZING THE EXECUTION OF A CONTRACT AND PAYMENT THEREFOR; REJECTING ALL OTHER BIDS; AND SETTING FORTH AN EFFECTIVE DATE.

Staff Contact: Shawn Finley, Public Works Director (386-676-3292)

- D. **Auto Renewal Contract - Ormond Beach Historical Society, Inc.**

Staff Contact: Robert Carolin, Leisure Services Director (386-676-3279)

Disposition: Approve as recommended in the City Manager memorandum dated February 16, 2021.

- E. **Auto Renewal Contract - Golden Eagle Associates**

Staff Contact: Robert Carolin, Leisure Services Director (386-676-3279)

Disposition: Approve as recommended in the City Manager memorandum dated February 16, 2021.

- F. **Auto Renew Contracts for Miscellaneous Crafts & Trades Services - As Needed**

Staff Contact: Robert Carolin, Leisure Services Director (386-676-3279)

Disposition: Approve as recommended in the City Manager memorandum dated February 16, 2021.

- G. **National League of Cities Innovation Ecosystems Grant Funding**

Staff Contact: Brian Rademacher, Economic Development Director (386-676-3266)

Disposition: Approve as recommended in the City Manager memorandum dated February 16, 2021.

8. PUBLIC HEARINGS

- A. **ORDINANCE NO. 2021-07:** AN ORDINANCE AMENDING PARAGRAPH C, OFFICIAL ZONING MAP, OF SECTION 2-01, ESTABLISHED, OF ARTICLE I, ESTABLISHMENT OF ZONING DISTRICTS AND OFFICIAL ZONING MAP, OF CHAPTER 2, DISTRICT AND GENERAL REGULATIONS, OF THE CITY OF ORMOND BEACH LAND DEVELOPMENT CODE, BY AMENDING THE OFFICIAL ZONING MAP TO REZONE A PORTION OF CERTAIN REAL PROPERTY TOTALING 0.32+ ACRES LOCATED AT 2341 WEST GRANADA BOULEVARD FROM VOLUSIA COUNTY A-2 (RURAL AGRICULTURE) TO ORMOND BEACH B-2 (NEIGHBORHOOD COMMERCIAL), AUTHORIZING REVISION OF OFFICIAL ZONING MAP; REPEALING ALL INCONSISTENT ORDINANCES OR PARTS THEREOF; AND SETTING FORTH AN EFFECTIVE DATE.

Staff Contact: Steven Spraker, Planning Director (386-676-3341)

9. FIRST READING OF ORDINANCES

- A. **ORDINANCE NO. 2021-08:** AN ORDINANCE AMENDING SECTION 5-1, DEFINITIONS, OF ARTICLE I, IN GENERAL, OF CHAPTER 5, ANIMALS AND FOWL, OF THE CITY OF ORMOND

BEACH CODE OF ORDINANCES, BY ESTABLISHING A DEFINITION FOR "ADEQUATE SHELTER"; REPEALING ALL INCONSISTENT ORDINANCES OR PARTS THEREOF; AND SETTING FORTH AN EFFECTIVE DATE.

Staff Contact: Joyce Shanahan, City Manager (386-676-3200)

10. RESOLUTIONS

- A. **RESOLUTION NO. 2021-48:** A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF ORMOND BEACH, FLORIDA APPROVING A PRELIMINARY PLAT FOR "ORMOND GATEWAY", A COMMERCIAL SUBDIVISION OF LAND; ESTABLISHING CONDITIONS AND EXPIRATION DATE OF APPROVAL; AND SETTING FORTH AN EFFECTIVE DATE.

Staff Contact: Steven Spraker, Planning Director (386-676-3341)

11. REPORTS, SUGGESTIONS, REQUESTS

12. ADJOURNMENT

Item #1 – Meeting Call to Order

Mayor Partington called the meeting to order at 7:00 p.m.

Item #2 – Invocation

Chaplain Sam Mercado, Advent Health, gave the invocation.

Item #3 – Pledge of Allegiance

Mayor Partington led the Pledge of Allegiance.

Item #4 – Presentations and Proclamations

Item #4A – Annual Audit Presentation FY 2019-20

Mr. Zach Chalifour, James Moore and Company, presented a PowerPoint presentation to the Commission detailing the city's annual audit for the fiscal year ending on September 30, 2020. He highlighted the details of the auditors' reports, the General Fund, and Pension Funds. He noted the city continued to remain in a strong financial position.

Commissioner Kent stated he was pleased to hear that the city was in a strong financial position, even with the city's prior implementation of a tax decrease for residents.

Commissioner Persis and Mayor Partington complimented Ms. Shanahan, staff, and James Moore and Company for their hard work in preparing the annual audit.

Mayor Partington discussed the Florida Retirement System's funding rate for their pension funds.

Item #5 – Audience Remarks

Mr. Jim Cameron, 126 East Orange Avenue, Senior Vice President of Government Relations, Daytona Regional Chamber of Commerce (Chamber), discussed an upcoming Virtual Volusia Days at The Capitol event taking place in March, 2021. He discussed the agenda for the event and the speakers who were scheduled to provide presentations.

Mayor Partington inquired when the times for the event would be announced; whereby, Mr. Cameron noted the event would take place from 8:00 a.m. to 12:00 p.m., but the specific timeslots for speakers and presentations would be released closer to the event.

Mayor Partington suggested Florida Economist Ms. Amy Baker be considered if the event was seeking an additional speaker; whereby, Mr. Cameron stated he would look into scheduling Ms. Baker at the event.

Mr. Josh Pringle, 1500 Crowne Ormond Lane, Chairman of the Neighborhood Improvement Advisory Board (NIAB), informed the Commission and members of the public that the NIAB would be holding a public meeting on February 18, 2021, at 6:00 p.m. He explained the board would be discussing options for distributing Community Block Development Grant (CBDG) funds and noted public participation was welcome.

Mayor Partington explained the city would receive their own CDBG allotment in the future when the city reached a certain population size.

Mr. Travis Sargent, 406 North Beach Street, discussed the Volusia County School Board's (VCSB) decision to move forward with condensing Osceola Elementary (Osceola) and Ortona Elementary (Ortona) at the Ortona site. He stated he believed the VCSB committed a Sunshine Law violation by failing to properly advertise their intent to discuss the closure of Osceola and noted he believed there was inadequate opportunity for public participation. He discussed the possibility of seeking counsel to pursue the Sunshine Law violation in court against the VCSB. He requested the City Commission keep their previously committed incentives to save the Osceola site available, in case the situation was readdressed in the future.

Commission Discussion

Mayor Partington noted he believed the resolution that approved the city's commitment to providing incentives for keeping the Osceola site did not have an expiration date. He stated he had attended the previous VCSB meeting and discussed the meeting in detail, noting he believed Ormond Beach residents were not treated properly. He explained the VCSB admitted to not providing proper notice of their discussion on closing Osceola. He discussed the legalities behind providing public notice. He inquired if the other members of the Commission were willing to keep the previously offered incentives available until the matter was resolved; whereby, members of the Commission approved.

Commissioner Selby stated he had watched the August 25, 2020, VCSB meeting where the decision was made to close the Osceola site. He explained the only item advertised on the VCSB agenda for that meeting was to discuss whether the new school should become a K-5 or K-8 school, not to close Osceola. He stated if legal action was going to be taken he believed it needed to be done promptly as the VCSB had already spent funds on preparation for the new school site at Ortona. He noted he was surprised to hear comments from the public claiming the City of Ormond Beach was attempting to purchase a school by offering incentives. He clarified the city was trying to use their resources to save the Osceola site.

Commissioner Persis stated she agreed with Commissioner Selby that action needed to be taken quickly. She noted she was also offended by comments made at the VCSB meeting claiming the city was trying to buy the school. She explained the city was attempting to save the Osceola due to the history behind it and the school's important meaning to the community.

Mayor Partington discussed the history behind Osceola and complimented the teachers that worked hard at the school. He noted accusations that the City of Ormond Beach was being a bully and was trying to buy the school were outrageous. He stated he felt the residents, teachers, and parents at Osceola had been ignored by the VCSB. He clarified VCSB member Mr. Carl Persis was the only member who fought to keep Osceola, but noted VCSB member Ms. Anita Burnette was new to the board. He discussed Sunshine Law violations and the process for legal cases involving the violations. He requested Mr. Hayes provide the Commission with options for moving forward during the Commission's closing comments later in the meeting. He stated he believed it would be better for the city to support the residents in filing legal action, rather than the city filing legal action themselves.

Item #6 – Approval of Minutes

Mayor Partington advised the minutes of the February 2, 2021, meeting and February 8, 2021, special meeting had been sent to the Commission for review and were posted on the city's website for public viewing. He asked for any corrections, additions, or

omissions. He stated that hearing no corrections, the minutes would stand approved as presented.

Item #7 – Consent Agenda

Mayor Partington 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 Selby moved, seconded by Commissioner Littleton, for approval of the consent agenda.

Call Vote:	Commissioner Selby	Yes
	Commissioner Kent	Yes
	Commissioner Persis	Yes
	Commissioner Littleton	Yes
Carried.	Mayor Partington	Yes

Comments on the Consent Agenda

Commissioner Selby discussed his support for Item 7G, which informed the City Commission of staff’s intention to apply for a funding opportunity available with the National League of Cities (NLC) Innovation Ecosystems Grant Program. He stated he had met with Pastor Floyd Narcisse from Historic New Bethel AME Church and noted Pastor Floyd was interested in assisting the African-American community in the creation of more minority-owned businesses. He explained he provided Pastor Floyd with Economic Development Director Mr. Brian Rademacher’s contact information.

Item #8 – Public Hearings

Mayor Partington opened the public hearings.

Item #8A – 2341 West Granada Boulevard (portion), Zoning Map amendment

City Clerk Colby Cilento read by title only:

ORDINANCE NO. 2021-07
AN ORDINANCE AMENDING PARAGRAPH C, OFFICIAL ZONING MAP, OF SECTION 2-01, ESTABLISHED, OF ARTICLE I, ESTABLISHMENT OF ZONING DISTRICTS AND OFFICIAL ZONING MAP, OF CHAPTER 2, DISTRICT AND GENERAL REGULATIONS, OF THE CITY OF ORMOND BEACH LAND DEVELOPMENT CODE, BY AMENDING THE OFFICIAL ZONING MAP TO REZONE A PORTION OF CERTAIN REAL PROPERTY TOTALING 0.32+ ACRES LOCATED AT 2341 WEST GRANADA BOULEVARD FROM VOLUSIA COUNTY A-2 (RURAL AGRICULTURE) TO ORMOND BEACH B-2 (NEIGHBORHOOD COMMERCIAL), AUTHORIZING REVISION OF OFFICIAL ZONING MAP; REPEALING ALL INCONSISTENT ORDINANCES OR PARTS THEREOF; AND SETTING FORTH AN EFFECTIVE DATE.

Mr. Steven Spraker, Planning Director, explained the item was a zoning map amendment to amend the property’s existing Volusia County zoning of Rural Agriculture (A-2) to Ormond Beach Neighborhood Commercial (B-2). He reviewed a PowerPoint presentation that displayed images of the property site. He noted the property had previously appeared before the Commission for a land use assignment. He stated the Planning Board and staff recommended approval.

Commissioner Selby noted on the map in Mr. Spraker’s presentation there were parcels above the discussed property and their boundaries were divided in half between Volusia County and the City of Ormond Beach. He inquired how the lots were split between both boundaries; whereby, Mr. Spraker noted the boundary line was created in the 1960s and explained the properties maintained their Volusia County land use and zoning.

Commissioner Selby and Mr. Spraker discussed the lots in further detail.

Mr. Spraker stated staff could contact the property owners regarding annexing into the city if the Commission wished for them to do so. He explained annexation usually

occurred based on the connection to utilities, and noted there were no city utilities for those properties to connect to.

Mayor Partington questioned if the discussed lots were platted in Volusia County before the city boundary was drawn; whereby, Mr. Spraker stated he was unsure and reiterated the boundary was determined in the 1960s.

Mr. Randy Hayes, City Attorney, provided a detailed history of city regulations that were enforced in prior years. He stated he suspected the discussed lots had originally been assigned Volusia County land use and zoning, and continued to maintain those assignments. He discussed the process of properties annexing into the city. He stated *Florida Statutes* did not require the city to assign land use and rezoning within a prescribed period of time.

Commissioner Kent discussed various changes that had occurred over the years throughout the City of Ormond Beach.

Mayor Partington noted no audience cards had been submitted on the item.

Commissioner Persis moved, seconded by Commissioner Selby, for approval of Ordinance No. 2021-07, on first reading, as read by title only.

Call Vote:	Commissioner Kent	Yes
	Commissioner Persis	Yes
	Commissioner Littleton	Yes
	Commissioner Selby	Yes
Carried.	Mayor Partington	Yes

Mayor Partington closed the public hearings.

Item #9 – First Reading of Ordinances

Item #9A – Adequate Shelter Definition - Code of Ordinances

City Clerk Colby Cilento read by title only:

ORDINANCE NO. 2021-08
AN ORDINANCE AMENDING SECTION 5-1, DEFINITIONS, OF ARTICLE I, IN GENERAL, OF CHAPTER 5, ANIMALS AND FOWL, OF THE CITY OF ORMOND BEACH CODE OF ORDINANCES, BY ESTABLISHING A DEFINITION FOR “ADEQUATE SHELTER”; REPEALING ALL INCONSISTENT ORDINANCES OR PARTS THEREOF; AND SETTING FORTH AN EFFECTIVE DATE.

Mayor Partington noted the Commission had received email comments from Ms. Debbie Darino in support of the item.

Commissioner Persis moved, seconded by Commissioner Selby, for approval of Ordinance No. 2021-08, on first reading, as read by title only.

Commissioner Persis discussed her support of the item and the importance of protecting animals.

Call Vote:	Commissioner Persis	Yes
	Commissioner Littleton	Yes
	Commissioner Selby	Yes
	Commissioner Kent	Yes
Carried.	Mayor Partington	Yes

Item #10 – Resolutions

Item #10A – Ormond Gateway, Preliminary Plat

City Clerk Colby Cilento read by title only:

RESOLUTION NO. 2021-48
A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF ORMOND BEACH, FLORIDA APPROVING A PRELIMINARY PLAT FOR

"ORMOND GATEWAY", A COMMERCIAL SUBDIVISION OF LAND;
ESTABLISHING CONDITIONS AND EXPIRATION DATE OF APPROVAL;
AND SETTING FORTH AN EFFECTIVE DATE.

Mr. Spraker reviewed a PowerPoint presentation that displayed an image of the property site, preliminary plat, and site plan for the item. He stated the property was comprised of three parcels and a former right-of-way that had been vacated. He noted the multiple parcels were planned to be developed into one master plan. He reviewed the preliminary plat for the property and noted the site had a Highway Tourist Commercial (B-7) zoning district, which required each lot be at least 20,000 square feet. He explained the parcels exceeded the minimum square footage requirement and included common stormwater areas, natural tree preservation, two historic trees that would be saved, preservation of the greenbelt buffer, and a common access aisle. He reviewed the site plan and stormwater systems. He noted each site plan would be presented on its own before the Site Plan Review Committee (SPRC). He explained if a site plan needed public hearing approval it would come back before the Commission. He stated the Planning Board and staff recommended approval.

Commissioner Selby inquired if the internal roads at the site would be dedicated to the city; whereby, Mr. Spraker noted they would not be and explained the roads were access aisles.

Mayor Partington noted no audience cards had been submitted on the item.

Commissioner Selby moved, seconded by Commissioner Littleton, for approval of Resolution No. 2021-48, as read by title only.

Call Vote:	Commissioner Littleton	Yes
	Commissioner Selby	Yes
	Commissioner Kent	Yes
	Commissioner Persis	Yes
Carried.	Mayor Partington	Yes

Item #11 – Reports, Suggestions, Requests

Upcoming Meetings

Ms. Joyce Shanahan, City Manager, stated staff was requesting to host a Parks and Recreation Master Plan Workshop on August 17, 2021, and January 18, 2022, to discuss updates to the Parks and Recreation Master Plan.

Project Updates

Ms. Shanahan provided updates on the MacDonald House restoration project.

Ms. Shanahan discussed the Wilmette Avenue pump station project previously approved on the consent agenda. She explained the project would be using grant funding from the Federal Emergency Management Agency (FEMA) that was issued for Hurricane Matthew. She discussed the project in further detail. She noted the project would be started and completed prior to expected storm events.

Ms. Shanahan discussed the Broadway Avenue and US Highway One Traffic Signal Mast Arm Project. She noted the city had a lap agreement with the Florida Department of Transportation (FDOT) to help facilitate the grant funds for the project.

Ms. Shanahan explained construction was complete on the Birthplace of Speed Park observation deck and the contractor was finalizing restoration.

Ms. Shanahan discussed the fitness station that had been installed at the South Ormond Neighborhood Center and noted the equipment was being heavily utilized.

Osceola Elementary

Mr. Hayes stated he would reach out to audience remarks speaker Mr. Sargent and provide suggestions on the Osceola/Ortona issue. He noted the decision to close Osceola had already been made by the VCSB and explained there was urgency on remedial action being taken. He stated he had taken a cursorial review of the material provided to the Commission regarding the Osceola/Ortona project. He reiterated he would discuss options moving forward with Mr. Sargent and provide support. He noted if any action moving forward required formal direction from the Commission, staff would come back to the Commission for approval.

Mayor Partington questioned who would be responsible for paying legal fees if a person prosecuted a government organization for a Sunshine Law; whereby, Mr. Hayes explained if the governmental organization being sued had lost, they would be responsible for paying the plaintiff's attorney fees.

Commissioner Kent stated there were negative remarks made against Ormond Beach at the VCSB meeting, as well as on a local radio show. He explained that he never was in favor of the idea of offering the VCSB funding incentives, due to the fact that the VCSB had the highest local tax rate. He stated while was not in favor of offering the board funds, he preferred to offer the incentives over losing the Osceola site. He discussed the negative impacts losing Osceola would have on the city. He explained he voted in favor of offering the incentives due to the fact that he disliked the outcome of losing Osceola more than offering the incentives.

Commissioner Persis discussed the strong efforts from her husband and VCSB member Mr. Carl Persis for saving the Osceola site. She stated losing Osceola would be a major disappointment for the city and noted she believed that the Commission needed to do anything they could to save the school. She thanked Mayor Partington and Ms. Shanahan for their efforts in trying to save Osceola.

Mayor Partington stated he looked forward to hearing what options there were moving forward with saving Osceola. He explained it was hard to understand how the decision by the VCSB was made and accepted since there was not a fair hearing for both sides.

Compliments and Thanks

Commissioner Littleton thanked Public Works Director Mr. Kevin Gray and city staff for their work.

Commissioner Persis complimented City Clerk Ms. Colby Cilento on her continued education and her new position at an academic library. She stated while Ms. Cilento would be missed at the city, she was proud of her for her hard work and outstanding achievements.

Mayor Partington noted a citizen had made him aware that Ormond Beach Firefighter Mikayla Laks was handing out fire hats and items to children at the Ormond Beach Cracker Barrel. He complimented Ms. Laks and thanked her.

Mayor Partington noted the Ormond Beach News Journal held a 40 under 40 award program that recognized persons for their professional achievements and volunteering efforts for their community. He stated the city's Public Information Officer Ms. Jenn Elston was nominated as a finalist to receive the award. He complimented Ms. Elston for helping senior citizens schedule COVID-19 vaccine appointments and congratulated her on her nomination.

Events

Commissioner Littleton noted he was looking forward to spending the next day with the Ormond Beach Fire Department.

Submerged Property

Commissioner Selby noted Mr. Jim Cooksey, along with a partner, owned a submerged piece of land that adjoined Cassen Park. He stated the property was available for lease, but noted Mr. Cooksey had stated the property was also for sale. He explained there was no price quoted for the property yet, but believed the City Commission should look into the land. He stated he was unsure what the development potential of the property was, but noted it was a fee-simple lot that was submerged with no road access or parking. He explained the property was located on the water and inquired what the zoning was for the lot; whereby, Mr. Spraker stated the zoning was Special Environmental.

Commissioner Selby discussed potential uses for the property. He noted the site had many hurdles until it could be monetized. He stated though the development potential may be limited, he felt the city may want to consider purchasing the lot as he believed the property may be affordable.

Mayor Partington noted he had also reviewed the submerged land with Mr. Cooksey. He discussed potential options that the lot could be utilized for. He stated there was only

one waterfront venue in Ormond Beach, and noted the discussed lot could potentially become another. He requested staff look into potential options for the site.

Ormond Memorial Art Museum and Gardens

Commissioner Persis and Mayor Partington discussed their excitement for the construction projects taking place at the Ormond Memorial Art Museum and Gardens.

Mayor Partington noted Commissioner Persis had discussed loose wires hanging on Halifax Drive near the Ormond Memorial Art Museum and Gardens at the prior City Commission Meeting. He requested staff look into options for moving the wires or placing them underground to assist in the appearance of the area.

Item #12 – Adjournment

The meeting was adjourned at 8:13 p.m.

APPROVED: March 2, 2021

BY: _____
Bill Partington, Mayor

ATTEST:

Colby J. Cilento, City Clerk



CITY OF ORMOND BEACH

City Manager • 22 S. Beach Street • Ormond Beach • Florida • 32174 • (386) 676-3200 • Fax (386) 676-3384

CITY MANAGER MEMORANDUM

To: The Honorable Mayor Partington and City Commissioners

Through: Joyce A. Shanahan, City Manager

From: Steven Spraker, Planning Director

Date: March 2, 2021

Subject: Universal Engineering Work Authorization

Commission Goal: Community Development - Other

Introduction

This is a request for approval of a work authorization, not to exceed \$35,000, for Universal Engineering Sciences, Inc. ("Universal") to provide additional resources for building inspections.

Background

Universal is a continuing contract consultant for the city. For this fiscal year, the Building Department has executed a Work Authorization for an amount not to exceed \$24,900 for Universal. In reviewing the remainder of the year, a Work Authorization for an amount not to exceed \$35,000 to Universal Engineering Sciences, Inc. is needed. The total not to exceed amount for Universal Engineering Sciences, Inc. would be \$59,900 for the fiscal year.

Discussion

The City's Building Department contains an expenditure category for other contractual services, which includes Universal. Universal provides additional building inspections personnel during heavy inspection days, while inspectors are on vacation, medical leave, in training or sick. Universal also has inspectors with a wide range of building certifications to supplement the city inspectors. In addition, the Chief Building Official has also used Universal for inspections and to allow city inspectors to perform building plan review to ensure building permits are reviewed in a timely manner.

Budget Impact

The Work Authorization not to exceed \$35,000, for an annual total not to exceed \$59,900 for Universal, is budgeted within the Building and Planning Department's budget.

Citizen Impact

There is no anticipated citizen impact with this request. The Building Department provides next day building inspections and it is necessary to have the ability to provide additional inspection services through Universal. Universal services have been invaluable as inspectors have required medical leave or perform required training. Also, by utilizing Universal and having an inspector perform building permit review, it has lessened the building review time.

Recommendation

It is recommended that the City Commission **APPROVE** the Work Authorization per the attached Resolution not to exceed \$35,000 for Universal Engineering Sciences, Inc. The not to exceed amount for Universal Engineering Sciences, Inc. will be \$59,900 for the year.

Attachments:

- 21-50 Universal Engineering Work Authorization (P21-0016G) (PDF)
- Universal Eng - Bldg Inspection Svcs 20-21 Addtl Work (PDF)

REVIEWED BY:


Kelly McGuire, Finance Director 2/22/2021


Claire Whitley, Assistant City Manager 2/23/2021

APPROVED BY:


Joyce A. Shanahan, City Manager 2/24/2021

RESOLUTION NO. 2021-50

A RESOLUTION AUTHORIZING THE EXECUTION OF A WORK AUTHORIZATION BETWEEN THE CITY OF ORMOND BEACH AND UNIVERSAL ENGINEERING SCIENCES, INC. FOR THE PROVISION OF BUILDING INSPECTION SERVICES ON AN AS-NEEDED BASIS; AUTHORIZING PAYMENT THEREFOR; AND SETTING FORTH AN EFFECTIVE DATE.

WHEREAS, the City and Universal Engineering Sciences, Inc. entered into a Continuing Engineering Services Agreement on March 20, 2017 for the purpose of providing building inspection services on an as-needed basis, and

WHEREAS, the City and Universal Engineering Sciences, Inc. entered into a Work Authorization on October 7, 2020 for an amount not to exceed \$24,900.00, and

WHEREAS, additional building inspection services are needed for an amount that is reasonably estimated not-to-exceed \$35,000.00 through the end of fiscal year 2020-2021, and

WHEREAS, the total accumulated cost of building inspection services through the end of fiscal year 2020-2021 will not exceed \$59,900.00 (i.e. \$25,900.00 + \$35,000.00) as budgeted to the Building Department/Building Division, and

WHEREAS, the City Manager has certified that funds have been appropriated to the credit of the Planning Department/Building Division budget and have not been appropriated for any other purpose, and

WHEREAS, the City Commission concurs with the foregoing recommendation, 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 Work Authorization, a copy being attached hereto, between the City and Universal Engineering Sciences, Inc. for the provision of building inspection services at a cost not-to-exceed \$35,000.00, and to pay the cost thereof from the Planning Department/Building Division budget.

SECTION TWO. The City Commission hereby ratifies and affirms the execution of the Work Authorization dated October 7, 2020 in the amount of \$24,900.00, including all actions taken in furtherance thereof.

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

APPROVED AND AUTHENTICATED this 2nd day of March, 2021.

BILL PARTINGTON
Mayor

ATTEST

COLBY J. CILENTO
City Clerk

WORK AUTHORIZATION

In accordance with and incorporating the terms of the Continuing Contract dated March 20, 2017 between the City of Ormond Beach, Florida, and Universal Engineering Sciences, Inc., the following Scope of Work and Schedule of Payments are agreed to by the parties to the Agreement:

Project Title: Building Inspection Services – FY 20/21 Additional Work

Project Description: To provide building inspection services, as required by the Building Division, based on the attached Private Provider Rate Sheet and Private Provider Inspector Qualification Statement.

Estimated Project Construction Cost: N/A

Schedule of Payments and Fee Basis

<u>Required Work Task</u>	<u>Fee Basis</u>	<u>Fee</u>
Building Inspections	Actual Cost	\$35,000.00
Total Fee Authorized:	Not To Exceed	<u>\$35,000.00</u>

Funding Source: 00152401 503403

Estimated Time for Completion: Through 9/30/21

AUTHORIZED:
CITY OF ORMOND BEACH
INC

ACCEPTED:
UNIVERSAL ENGINEERING SCIENCES,

By: _____
Bill Partington
Mayor

By: _____
Brian C. Pohl, P.E.
Branch Manager

Date: _____

Date: _____

By: _____
Joyce A. Shanahan
City Manager

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:

COLBY J. CILENTO, CITY CLERK
22 SOUTH BEACH STREET
ORMOND BEACH, FLORIDA 32174 (386) 676-3331
COLBY.CILENTO@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.

**UNIVERSAL ENGINEERING SCIENCE, INC.**

911 Beville Rd, Suite 3
South Daytona, FL 32119
386-756-1105 ~ Fax: 386-760-4067



6.A.b

October 01, 2020

Building Division Manager City
of Ormond Beach
22 South Beach Street
Ormond Beach, Florida 32174 Mr.

Tom Griffith, CBO:

We are pleased to provide you with the rate sheet below for Private Provider Services through Universal Engineering Sciences :

PRIVATE PROVIDER RATES

CITY OF ORMOND BEACH		
UNIT NAME	UOM	RATE
Plan Review	Hour	57.00
Inspector – Standard Time	Hour	54.00
Inspector – Commercial Trades	Hour	54.00
Building Official	Hour	70.00

Should you have any questions, please do not hesitate to ask. Thank you!

Respectfully Submitted,

UNIVERSAL ENGINEERING SCIENCES

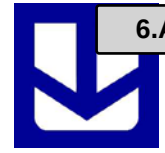
Brian C. Pohl, P.E.
P.E. Number 60216
Branch Manager

Mike Navarra

Mike Navarra, BN-3977
Private Provider Field Manager
(386) 527-1578 (cell)
mnavarra@universalengineering.com

**UNIVERSAL ENGINEERING SCIENCE, INC.**

911 Beville Rd, Suite 3
 South Daytona, FL 32119
 386-756-1105 ~ Fax: 386-760-4067

**6.A.b****Private Provider Inspector Qualification Statement**

Private Provider Firm: Universal Engineering Sciences, Inc.
 Private Provider Name: Brian C. Pohl, P.E.
 Address: 911 Beville Road, Suite 3, South Daytona, FL 32119
 Phone: (386) 756-1105 Fax: (386) 760-4067

Names, License/Certificate Numbers, and License description of provider and duly authorized agents who will be providing services for this project:

Name	License #	License Type
Brian C. Pohl	PE 60216	Licensed Professional Engineer
Mike Navarra	BN – 3977	Standard Inspector (Building) Residential Combination Inspector
	CRC – 057614	Certified Residential Contractor
	SFP – 184	Residential Plans Examiner
	PX – 1865	Standard Plans Examiner (Building)
Frank Godawa	BN – 5965 PX - 3238	Standard Building Inspector (Electrical) Commercial & Residential Standard Plans Examiner (Electrical)
Robert Waldrop	BN – 4320	Standard Building Inspector (Building) Commercial & Residential
Robert T. Hofferth	BN-5373	Standard Building Inspector (Building) Commercial & Residential
William A. Ruzycky	BN – 7594	Standard Building Inspector (Building) Commercial & Residential
Robert Marvel	BN – 4957	Standard Inspector (Building, Mechanical, Electrical & Plumbing) Commercial & Residential
Eric Reinertsen	BN – 6739	Standard Inspector (Building) Residential Combination Inspector
	PX –3758	Standard Plans Examiner
Michael Leo Dove	BN – 6842	Standard Inspector (Building) Residential Combination Inspector
Sam David Thompson	BN – 7462	Standard Building Inspector (Building) Commercial & Residential
Mark Criswell	BN – 4769	Standard Inspector (Building) Residential Combination Inspector
	PX - 2448	Standard Plans Examiner (Building, Mechanical, Electrical & Plumbing)
	BU - 1534	Certified Building Code Administrator



CITY OF ORMOND BEACH

City Manager • 22 S. Beach Street • Ormond Beach • Florida • 32174 • (386) 676-3200 • Fax (386) 676-3384

CITY MANAGER MEMORANDUM

To: The Honorable Mayor Partington and City Commissioners

Through: Joyce A. Shanahan, City Manager

From: Loretta Moisio, Grants Coordinator

Date: March 2, 2021

Subject: Approval of Agreement with Halifax Urban Ministries (HUM)

Commission Goal: N/A

Introduction

This is a request for the City Commission to authorize the approval of an agreement between the City of Ormond Beach and Halifax Urban Ministries, Inc., a non-profit organization providing services to the citizens of Ormond Beach through Hope Place.

Background

On February 2, 2021, the City Commission approved Resolution No. 2021-41 authorizing the approval of the FY 2020-2021 Subrecipient Agreement with Volusia County which included the following:

FY 2020-2021

Public Facilities	
<i>Central Park I, 601 Fleming Avenue</i> Install new playground equipment for ages 5-12 at this location to replace old equipment that was installed in the 1990's. The budget would cover new equipment, poured in place rubber surfacing, concrete curbing around the edge and a new 5' sidewalk connection to existing. The playground equipment has been repaired over the years, but its current condition is severely deteriorated and is beyond repair. This project is located within the City's current CDBG Priority Area.	\$ 129,804.00
Public Services	
<i>Hope Place</i> To pay up to \$22,906.00 of the salary and benefits of a new position for an Unaccompanied Youth House Manager. The amount is the maximum allowed (15% of	22,906.00

total allocation) for public service activities for FY 20-21.	
Total	\$ 152,710.00

Discussion

As a subrecipient of Volusia County, the City is required to have an agreement with Halifax Urban Ministries, Inc., to provide public services through Hope Place on its behalf with the use of a portion of the City's CDBG funding allocation. The attached draft agreement between the City of Ormond Beach and Halifax Urban Ministries, Inc., has been reviewed and approved by Volusia County Community Assistance to be consistent with program and federal guidelines.

Budget Impact

There is no budget impact.

Citizen Impact

Hope Place assists families with children and unaccompanied youth throughout Volusia County to gain independent living.

Recommendation

It is recommended that the City Commission authorize the approval of the attached agreement with Halifax Urban Ministries, Inc., for FY 2020-2021.

Attachments:

- 21-51 HUM Hope Place Subrecipient Agreement (P21-0013G) (PDF)
- Agreement with HUM FY 20-21 (PDF)
- HUM FY 20-21 Reporting Forms Att I (PDF)
- CDBG FY 20-21 Subrecipient Agreement Att II (PDF)

REVIEWED BY:


 Kelly McGuire, Finance Director 2/5/2021


 Claire Whitley, Assistant City Manager 2/22/2021

APPROVED BY:


Joyce A. Shanahan, City Manager 2/24/2021

RESOLUTION NO. 2021-51

A RESOLUTION AUTHORIZING THE EXECUTION OF A
COMMUNITY DEVELOPMENT SUBRECIPIENT
AGREEMENT BETWEEN THE CITY OF ORMOND BEACH
AND HALIFAX URBAN MINISTRIES, INC., REGARDING
HOMELESSNESS PREVENTION SERVICES PROVIDED AT
HOPE PLACE; AND SETTING FORTH AN EFFECTIVE DATE.

WHEREAS, by Resolution 2021-41, the City Commission approved a FY 2020-2021 Community Development Block Grant Subrecipient Agreement with Volusia County which included funding for Halifax Urban Ministries, Inc. (“the Project”), and

WHEREAS, because the Project is being funded with Community Development Block Grant money, the County requires that the City and Halifax Urban Ministries, Inc., execute an agreement for the Project attached hereto and incorporated herein by reference, and

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

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

SECTION ONE. The Mayor and City Manager are hereby authorized and directed to execute a Community Development Subrecipient Agreement with Halifax Urban Ministries, Inc., regarding homelessness prevention services provided at Hope Place.

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

APPROVED AND AUTHENTICATED this 2nd day of March, 2021.

BILL PARTINGTON
Mayor

ATTEST:

COLBY CILENTO
City Clerk

**Community Development
Subrecipient Agreement
FY 2020-2021**

THIS AGREEMENT, made and entered into this _____ day of _____, 2021, by and between the **City of Ormond Beach**, State of Florida, as the Implementer of the Community Development Block Grant Program (hereinafter referred to as "City"), and **Halifax Urban Ministries, Inc.** (hereinafter referred to as "Halifax Urban Ministries").

WITNESSETH

WHEREAS, the City of Ormond Beach has received funding under the federal Community Development Block Grant (CDBG) program from the County of Volusia, and,

WHEREAS, the City of Ormond Beach desires to engage Halifax Urban Ministries to provide homelessness prevention services within Ormond Beach for the benefit of low-moderate income families.

NOW THEREFORE, the parties hereto do mutually agree as follows:

1. Scope of Service

The purpose of this agreement is to define the roles and responsibilities of the City of Ormond Beach and Halifax Urban Ministries in assisting Ormond Beach residents with homelessness prevention through the use of Community Development Block Grant funding through the City of Ormond Beach.

2. Confidentiality

All parties agree to observe the confidentiality provisions of their respective programs and regulations. All appropriate information, with respect to participant eligibility and employment, may be shared. This may include the use of an electronic database system for sharing appropriate information among parties. Records are public and must be made available if requested.

3. Responsibilities of the City of Ormond Beach

The City will receive and review monthly status reports and reimbursement requests from Halifax Urban Ministries. Once approved and paid by the City, a request for reimbursement will be submitted to Volusia County Community Assistance for reimbursement to the City.

4. Responsibilities of the Halifax Urban Ministries

Halifax Urban Ministries will provide services to the homeless at Hope Place, located at 1340 Wright Street, Daytona Beach, Florida, 32117. Hope Place will assist homeless families with children and unaccompanied youth to gain independent living as one in five homeless individuals in Volusia County is a child.

Halifax Urban Ministries will submit monthly status reports, reimbursement requests, and a LMI CDBG Clientele Status Report to the City. (Attachment I) Reimbursement requests must include backup documentation to include proof of payment, copies of invoices, receipts, and other necessary documentation.

5. Income Verification

Homelessness is an eligible population for the use of Community Development Block Grant (CDBG) funding; therefore, all Hope Place clients qualify under CDBG income requirements.

6. Term of Contract

The services of Halifax Urban Ministries will begin on October 1, 2020, and shall be completed by September 30, 2021. CDBG funding awarded for public services must be spent during the program year in which they were awarded; therefore, no extensions of this agreement will be allowed.

7. Compensation

Halifax Urban Ministries shall be paid a total consideration of **\$22,906.00 (twenty-two thousand nine hundred six dollars)** for full performance of the services specified under this agreement. The funding provided is to cover the salary and benefits of an Unaccompanied Youth House Manager at Hope Place. Compensation shall be allowed on a reimbursement basis only after expenditures have been incurred by Halifax Urban Ministries in conformity with the approved budget.

In every case, payment will be made subject to receipt of a request for payment from Halifax Urban Ministries specifying and certifying that such expenses have been incurred and expended in conformance with this agreement and that Halifax Urban Ministries is entitled to receive the amount requested under the terms of the agreement.

Halifax Urban Ministries shall not claim reimbursement from the City for that portion of its obligation which has been paid by another source of revenue.

8. Budget

Community Development Block Funds will be used to cover the expenses of salary and benefits associated with the hiring of an Unaccompanied Youth House Manager at Hope Place.

General Terms and Conditions

- A. Halifax Urban Ministries agrees to submit program status reports and funds reimbursement requests on a monthly basis, **due to the City by the 5th of each month**, or more frequently if requested, and other reports as may be required. (Attachment I)
- B. Halifax Urban Ministries agrees to maintain racial, ethnic, gender, head of household, household income, and household size data showing the extent to which these categories of persons have participated in, or benefited from the project, and to submit this information to the City within 30 days of the last request from the City.
- C. Halifax Urban Ministries agrees to keep all necessary books and records, including property, personnel, and financial records, in connection with the operations and services performed under this agreement, and shall document all transactions and services performed under this agreement, and shall document all transactions so that all expenditures may be properly audited.
- D. Halifax Urban Ministries agrees that the City, or any authorized representative, has access to and the right to examine all records, books, papers or documents related to the project.
- E. Halifax Urban Ministries hereby severally warrants that all project records, books, papers, and documents will be retained for a period of not less than five (5) years after the project terminates and grants the City the option of retention of the project records, books, papers, and documents.
- F. Halifax Urban Ministries agrees to purchase any necessary insurance if its project and or the nature of the project requires insurance.
- G. Halifax Urban Ministries hereby severally warrants that it will establish and adopt safeguards to prohibit members, officers, and employees from using positions for a purpose that is or gives the appearance of being motivated by a desire for private gain for themselves or others, particularly those with whom they have family, business, or other ties. Further, no member, officer, or employee of Halifax Urban Ministries who exercises and functions or responsibility with respect to the program during his or her tenure or for one year thereafter, shall have any financial interest, direct or indirect, in any contract or subcontract, or the proceeds thereof, either for themselves or those with whom they have family or business ties, for work to be performed in connection with the program assisted under this agreement.
- H. The undersigned person signing as an officer on behalf of Halifax Urban Ministries, a party to this agreement, hereby severally warrants and represents that said person has authority to enter into this agreement on behalf of said

Halifax Urban Ministries and to bind same to this agreement, and further that Halifax Urban Ministries has authority to enter into this agreement and that there are no restrictions or prohibitions contained in any article of incorporation or bylaw against entering into this agreement.

- I. Neither the City, nor the County, shall be responsible or liable for any debts, actions, obligations, negligence, or liabilities committed or incurred by Halifax Urban Ministries, its staff or clientele; and Halifax Urban Ministries hereby agrees to defend, hold harmless and indemnify the City and the County from and against all liabilities for debts, obligations, and negligence. No payment, however, final or otherwise, shall operate to release Halifax Urban Ministries from any obligations under this agreement.
- J. Nothing contained in this agreement is intended to, or shall be construed in any manner to, create or establish an employer-employee relationship between the parties, nor shall any employee of Halifax Urban Ministries by virtue of this agreement by an employee of the City for any purpose whatsoever, nor shall any employee of Halifax Urban Ministries be entitled to any of the rights, privileges, or benefits of City employees. Halifax Urban Ministries shall be deemed at all times an independent contractor and shall be wholly responsible for the manner in which it performs the services required of it by the terms of this contract. Halifax Urban Ministries assumes exclusively the responsibility for the acts of its employees as they relate to the services to be provided during the course and scope of their employment.
- K. Halifax Urban Ministries will be subject to all provisions of the Subrecipient Agreement between the County and the City (Attachment II) with regard to the administrative requirements of the U.S. Department of Housing and Urban Development (HUD) guidelines.
- L. Halifax Urban Ministries acknowledges receipt of a copy of the following Code of Federal Regulations:
 - 2 CFR Part 200-Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards
- M. Compliance with Florida Public Records Law

Halifax Urban Ministries 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 that ordinarily and necessarily would be required by the City in order to perform the contracted service.
- (b) Provide the public with access to public records on the same terms and conditions that the City would provide the records and 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.

(d) Meet all requirements for retaining public records and transfer, at no cost, to the City all public records in possession of the contractor upon termination of the contract and destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. All records stored electronically must be provided to the City in a format that is compatible with the information technology systems of the City.

(e) Failure of Halifax Urban Ministries to comply with Public Records Law as provided by Florida Statutes, Chapter 119, shall subject the Agreement to termination for cause by the City.

IN WITNESS WHEREOF, the parties hereto have executed this contract.

Witnesses:

CITY OF ORMOND BEACH

Print Name: _____

By: _____
BILL PARTINGTON
Mayor

Print Name: _____

By: _____
JOYCE SHANAHAN
City Manager

Witnesses:

HALIFAX URBAN MINISTRIES

Print Name: _____

By: _____
BUCK JAMES
Executive Director

ATTACHMENT I – MONTHLY REPORTING AND REIMBURSEMENT FORMS

The forms within this attachment are required to be submitted monthly for subrecipients of City of Ormond Beach Community Development Block Grant (CDBG) FY 20-21 funding. The required forms include:

- **Section I** – CDBG Request for Monthly Reimbursement and Expense Summary Form
- **Section II** – CDBG Public Service Status Report
- **Section III** – LMI CDBG Clientele Status Report

Additional data such as proof of payment, copies of invoices, receipts, payroll records, employee signed timesheets and paystubs, daily activity logs, etc., are also required to support the monthly expenses and funds reimbursement request.

Failure to submit **all** sections of the report, including financial supporting data, will result in a delay of the approval process and subsequent payment.

The Request for Funds Reimbursement Form is due to the City of Ormond Beach by the 5th day of each month for the preceding month, regardless of the activity level or costs incurred until the Agreement is closed.

SECTION I**Request For Monthly Reimbursement and Expense Summary Form FY 2020/21**Subrecipient Name: Halifax Urban Ministries Funding Source: CDBG

Subrecipient Address: _____ Telephone Number: _____

City: _____ State: _____ Zip: _____

Month of Report - this is the month that the subrecipient expended funds:(the report must be submitted by the 5th day of the following month) _____

CDBG Contact Person: _____ Telephone: _____

Reimbursement Funds Requested for this Period: _____ Final Request: ☐ Yes ☐ No**To Be Completed by Subrecipient**

DESCRIPTION OF ACTIVITY	BUDGET	EXPENSES THIS MONTH	EXPENSES TO-DATE	AVAILABLE BALANCE
Hope Place – Salary/Benefits for an Unaccompanied Youth House Manager at Hope Place.	\$22,906.00			
Total	\$22,906.00			

AMENDMENT JOURNAL

Agency Authorized Signature: (This form is for reproduction or copying by Recipient)		Request Date: (actual date signed)	
Print Name of Agency Authorized Signature:			

SECTION II – CDBG Public Service Status Report FY 2020/21

Subrecipient: Halifax Urban Ministries
 Project Name: Hope Place – Unaccompanied Youth House Manager

Month of Report - this is the month that the subrecipient expended funds: (the report must be submitted by the 5th day of the following month):

1. Are reimbursements being requested for this activity? ☐ Yes ☐ No

If yes, answer questions 2-8. If no, continue to question 9.

2. What is the amount being requested? _____
3. What timeframe did the original expenses occur? From _____ To _____
4. What timeframe did the Halifax Urban Ministries pay expenses? From _____ To _____
5. Is backup documentation included to support all expenses? ☐ Yes ☐ No
6. Is a Monthly Clientele Status Report included? ☐ Yes ☐ No
7. Estimated project/activity completion date: 9/30/2021
8. Percent of project/activity completed to date: _____
9. Describe specific work tasks and quantified accomplishments completed this month:
10. Describe specific work tasks and quantified accomplishments for upcoming month (detailed narrative required every month):

SECTION III -- LMI CDBG Clientele Status Report FY 2020/21

Subrecipient Halifax Urban Ministries Activity Name Hope Place - Unaccompanied Youth House Manager

Timeframe Covered by this Report From _____ To _____

Final Report? ☐ Yes ☐ No

COMPLETE THE FOLLOWING TWO (2) TABLES FOR PERSONS SERVED BY THE ACTIVITY DURING THE REIMBURSEMENT PERIOD.

Total Number of Persons Assisted this month

TABLE I: Participant Racial and Ethnic Characteristics:
(Please be as specific as possible in reporting this section)

Racial and Ethnic Characteristics	Month	CDBG Program to Date	Hispanic Month	Hispanic to Date
White				
Black/African American				
Asian				
American Indian/Alaskan Native				
Native Hawaiian/Other Pacific Islander				
American Indian/Alaskan Native & White				
Asian & White				
Black/African American & White				
American Indian/Alaskan Native & Black/African Am.				
Other Multi Racial				
TOTAL PERSONS				

PLEASE NOTE: The Total Number Served is to be an **unduplicated count** of persons served during the reporting period.

TABLE II: Participant Income Level

<u>Income Level</u>	<u>Month</u>	<u>Year to Date</u>
Extremely Low-Income Persons		
Low-Income Persons		
Moderate-Income Persons		
TOTAL PERSONS		

LMI CDBG Clientele Status Report INSTRUCTIONS

TABLE I: Provide the total number of persons assisted by the activity during the reporting month and year to date for each applicable category of Racial and Ethnic groups. Use the category that most closely reflects an individual's recognition in his/her community for purposes of reporting a person of mixed racial and/or ethnic origins. Monthly counts and year to date counts should be an actual unduplicated number, not an estimate. Please make sure that these numbers equal the total number of individuals served. Below are guidelines for this section:

White: A person having origins in any of the original peoples of Europe, the Middle East or North Africa.

Black or African American: A person having origins in any of the black racial groups of Africa. Terms such as 'Haitian' or 'Negro' can be used in addition to 'Black or African American'.

Asian: A person having origins in any of the original peoples of the Far East, Southeast Asia or the Indian subcontinent including, for example, Cambodia, China, India, Japan, Korean, Malaysia, Pakistan, the Philippine Island, Thailand, and Vietnam.

American Indian/Alaskan Native: A person having origins in any of the original peoples of North and South America (including Central America), and who maintains tribal affiliations or community attachment.

Native Hawaiian or Other Pacific Islander: A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.

American Indian/Alaskan Native & White: A person having origins of both of the above-mentioned characteristics.

Asian & White: A person having origins of both of the above-mentioned characteristics.

Black/African American & White: A person having origins of both of the above-mentioned characteristics.

American Indian/Alaskan Native & Black African American: A person having origins of both of the above-mentioned characteristics.

TABLE II: Income Level Definitions:

Extremely Low Income Person: Member of a family that has an income equal to or less than the Section 8 limits for 30% of Median income established by HUD for the Deltona-Daytona Beach – Ormond Beach MSA.

Low-Income Person: Member of a family that has an income equal to or less than the Section 8 Very Low-income limits established by HUD for the Deltona-Daytona Beach – Ormond Beach MSA.

Moderate-Income Person: Member of a family that has an income equal to or less than the Section 8 Low-income limit and greater than the Section 8 Very-Low income limit established by HUD for the Deltona-Daytona Beach – Ormond Beach MSA.

COUNTY OF VOLUSIA/
 CITY OF ORMOND BEACH
 COMMUNITY DEVELOPMENT BLOCK GRANT
 SUBRECIPIENT AGREEMENT FY 2020/21

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**COUNTY OF VOLUSIA/
CITY OF ORMOND BEACH
COMMUNITY DEVELOPMENT BLOCK GRANT
SUBRECIPIENT AGREEMENT FY 2020/21**

This AGREEMENT is made by and between THE COUNTY OF VOLUSIA, a political subdivision of the State of Florida (hereinafter referred to as the "COUNTY") and CITY OF ORMOND BEACH, a governmental entity located in Volusia County, Florida (hereinafter referred to as the "SUBRECIPIENT").

WITNESSETH:

WHEREAS, the COUNTY has the authority to enter into a binding agreement for the expenditure of all or a portion of its Community Development Block Grant (CDBG) funds; and

WHEREAS, the regulations of 24 CFR 570, (as now in effect and as may be amended from time to time), which are incorporated by reference, constitute a part of this AGREEMENT; and

WHEREAS, the COUNTY has determined that the SUBRECIPIENT, through its participation in the County of Volusia Urban County Community Development Block Grant, meets the requirement for subrecipients as defined at 24 CFR 570.500(c); and

NOW, THEREFORE, in consideration of the mutual understanding and agreements set forth herein, the COUNTY and the SUBRECIPIENT or its authorized agent ("Agent") agree as follows:

1. **Responsibility for Grant Administration:** In accordance with Subpart J of 24 CFR 570, the COUNTY is responsible for ensuring the administration of CDBG funds in accordance with all program requirements. The use of subrecipients or contractors does not relieve the COUNTY of this responsibility. The COUNTY is also responsible for determining the adequacy of performance under subrecipient agreements and procurement contracts and for taking appropriate action when performance problems arise, such as those actions described in 24 CFR 570-910.
2. **Other Program Requirements:** This AGREEMENT shall require the SUBRECIPIENT and/or its Agent, as applicable, to carry out each activity in compliance with all federal laws and regulations in Subpart K of 24 CFR 570 as further described in ATTACHMENT III—Certifications and Other Regulations, which is attached hereto and made a part hereof as if fully rewritten, except that:
 - a. Neither the SUBRECIPIENT nor its Agent, as applicable, assumes the COUNTY'S environmental responsibilities as described in 24 CFR 570.604; and

- b. Neither the SUBRECIPIENT nor its Agent, as applicable, is required to comply with the Uniform Relocation Assistance (URA) and Real Property Acquisition Policies Act of 1970, as amended, and described in 49 CFR Part 24; and
 - c. Neither the SUBRECIPIENT nor its Agent, as applicable, assumes the COUNTY'S responsibility for initiating the governmental review process under Executive Order 12372, as described at 24 CFR 576.612.
- 3. **Scope of Services:** The SUBRECIPIENT or its Agent, as applicable, hereby agrees to allow expenditure of "Urban County CDBG" funds, as defined in 24 CFR 570.3, within its jurisdiction. The COUNTY, SUBRECIPIENT or its Agent, as applicable, hereby agrees to utilize funds made available under the CDBG Program for the purpose of implementing activities as described in SECTION A—Activity Responsibility and Description of ATTACHMENT I—STATEMENT OF WORK, which is attached hereto and made a part hereof as if fully rewritten. Changes in ATTACHMENT I—STATEMENT OF WORK may be requested from time-to-time by the COUNTY or the SUBRECIPIENT or its Agent, as applicable, and shall be incorporated as written amendments to this AGREEMENT. The SUBRECIPIENT or its Agent, as applicable, certifies that the Community Development project(s) provided for herein shall be given maximum feasible priority to activities that benefit low-or moderate-income families, according to the metrics set forth in 24 CFR 570.3, or aid in the prevention or elimination of slums or blight.
- 4. **Time of Performance:** This AGREEMENT shall take effect from October 1, 2020 through and including September 30, 2021. If necessary, the performance period of the AGREEMENT may be extended through a formal amendment process initiated by a written request from the SUBRECIPIENT.
- 5. **Compensation:** The COUNTY shall compensate the SUBRECIPIENT or its Agent, as applicable, for all allowable and eligible expenditures made for those community development project(s) for which they are responsible as described in SECTION A—Activity Responsibility and Description of ATTACHMENT I—STATEMENT OF WORK. Compensation shall be made in accordance with the budget schedule set forth in ATTACHMENT II—BUDGET, which is attached hereto and made a part hereof as if fully rewritten. Compensation shall be provided during the term of this AGREEMENT.
- 6. **Method of Payment:** Subject to receipt of funds from the United States Treasury, the COUNTY agrees to reimburse the SUBRECIPIENT or its Agent, as applicable, for authorized expenditures for which vouchers and other similar documentation to support payment expenses are maintained by the SUBRECIPIENT or its Agent, as applicable, under generally accepted accounting principles and procedures approved by the COUNTY and outlined in 2 CFR 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards*. The documentation required to support reimbursement requests from the COUNTY are listed in ATTACHMENT V. A reimbursement request received with all the necessary backup and compliance verification will be classified as a proper invoice and processed as such. All payments by the COUNTY shall be governed by the Florida Prompt Payment Act (Part VII of Chapter 218, Florida Statutes), as applicable.

7. **Compliance with Regulations:** The SUBRECIPIENT and its Agent shall comply with the applicable uniform administrative requirements as described in 24 CFR 570.502, including those listed in ATTACHMENT III-CERTIFICATION AND OTHER REGULATIONS, which are attached hereto and made a part hereof as if fully rewritten.
8. **Maintenance and Availability of Records:** In connection with the AGREEMENT, the SUBRECIPIENT or its Agent, as applicable, shall maintain all accounting and client records and documents, papers, maps, photographs, other documentary materials, and any evidence pertaining to costs incurred, as more fully described in ATTACHMENT IV-RECORDS TO BE MAINTAINED, which is attached hereto and made a part hereof as if fully rewritten.

Copies of all CDBG related records generated by the SUBRECIPIENT or its Agent, as applicable, shall be available for inspection by the Department of Housing and Urban Development, the Comptroller General of the United States, and any authorized representative of the COUNTY.

Such records shall be available at the SUBRECIPIENT or its Agent's offices, as applicable, at all reasonable times during the contract period and kept for a period of five (5) years after expiration of this AGREEMENT. If a claim, investigation, or litigation is pending after what is assumed to be final payment, such pending action is deemed to have cancelled the final payment date. In such a case, the retention period will not commence again until final settlement of the claim, investigation or litigation.

This Section 8 shall be in addition to, and not in lieu of, the Florida Public Records law requirements set forth in Section 22 herein.

9. **Request for Monthly Reimbursement and Expense Summary:** The form provided in ATTACHMENT V and other such documentation as described above shall be submitted to the COUNTY by the 10th day of each month for the preceding month. All required reports and backup documentation, as described in ATTACHMENT V, must be provided for the COUNTY to accept the request as a proper invoice for payment. The payment request will be rejected if all required documentation is not provided, or if the project has not met Davis-Bacon Fair Labor Standard compliance requirements during the period of the payment request. The COUNTY shall process and make payment to the SUBRECIPIENT in accordance with the Florida Prompt Payment Act, as applicable, for reimbursement requests received that meet the requirements of a proper invoice.
10. **Program Income:** All income received from CDBG funded activities shall be considered program income and subject to the requirements set forth in 24 CFR 570.504 (c) of the CDBG regulations. The AGREEMENT, ATTACHMENT II – BUDGET, specifies whether program income received is to be returned to the COUNTY or retained by the SUBRECIPIENT and/or its Agent, as applicable.

11. Reversion of Assets: Upon expiration of this AGREEMENT, the SUBRECIPIENT or its Agent, as applicable, agrees to transfer to the COUNTY any CDBG funds on hand at the time of expiration and shall assign any accounts receivable attributable to the use of CDBG funds to the County. It shall also ensure that any real property under the SUBRECIPIENT or its Agent's control, as applicable, that was acquired or improved in whole or in part with CDBG funds in excess of \$25,000 is either:

- a. Used to meet one of the National Objectives in 24 CFR 570.208 until 5 years after expiration of the AGREEMENT, or such longer period of time as determined appropriate by the COUNTY; or
- b. Is disposed of in a manner that results in the COUNTY being reimbursed in the amount of the current fair market value of property less any portion of the value attributable to expenditures of non-CDBG funds for acquisition of, or improvement to, the property. (Reimbursement is not required after the period of time specified in Paragraph 11.a. above).

12. Subcontracting: All work or services covered by this AGREEMENT, which is subcontracted, shall be specified by written contract and subject to all provisions of this AGREEMENT. **All subcontracts must be submitted to the County for its prior written approval and are subject to such approval prior to any execution thereof.**

13. Suspension and Termination: The COUNTY may terminate this AGREEMENT and such additional supplemental agreements hereafter executed, in whole or in part, and may recover any CDBG funds at its discretion if the SUBRECIPIENT or its Agent, as applicable:

- a. Violates any provision of this AGREEMENT; or
- b. Violates any provision of the Housing and Community Development Acts of 1974 and 1977, as amended; or
- c. Violates any applicable regulations or terms and conditions of approval of the applications that the Secretary of Housing and Urban Development has issued or shall subsequently issue during the period of this AGREEMENT; or
- d. Fails to complete performance in a timely manner; or
- e. Files for bankruptcy (voluntary or involuntary); becomes subject through appointment by any court to a receiver taking possession of substantially all of its assets or remaining in receivership in excess of 60 days; has substantially all of its assets attached, subject to execution or other judicial seizure; or does not perform as required under this Agreement.

The COUNTY may also terminate this AGREEMENT and such additional supplemental agreements hereafter executed, in whole or in part, by giving the SUBRECIPIENT or its Agent, as applicable, 30 days' written notice, in the event that the Secretary of HUD shall:

- f. Withdraw funds allocated to the COUNTY under its application for program activities that substantially prevent performance of the Community Development program in the COUNTY;
 - g. Terminate the COUNTY'S funding allocation pursuant to an Act of Congress.
14. **Audit:** The SUBRECIPIENT and its Agent, as applicable, shall comply with the audit requirements set forth in 2 CFR 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards*.
15. **Conflict of Interest:** The SUBRECIPIENT certifies that it and its Agent, as applicable, maintains a code or standards of conduct that govern the performance of its officers, employees or agents engaged in the awarding and administration of contracts using Federal funds.

Except for the use of CDBG funds to pay for salaries and other related administrative or personnel costs, the SUBRECIPIENT certifies that no employee, agent, or officer of the SUBRECIPIENT or its Agent, as applicable, who exercises decision making responsibility with respect to CDBG funds and activities, is allowed to obtain a financial interest in or benefit from CDBG activities, or have a financial interest in any contract, subcontract or agreement regarding those activities or in the proceeds of the activities. Specifically:

- a. This requirement applies to any person who is an employee, agent, consultant, officer, or elected or appointed official of the grantee, designated public agency, SUBRECIPIENT or its Agent; and to their immediate family members, and business partner(s).
 - b. The requirement applies for such persons during their tenure and for a period of one year after leaving the grantee, SUBRECIPIENT or its Agent, as applicable, organization.
 - c. It is applicable to the procurement of supplies, equipment, construction, and services; acquisition and disposition of real property; provision of assistance to individuals, businesses and other private entities for all eligible activities (Section 570.201-205); and provision of loans to individuals, businesses and other private entities.
 - d. Upon written request, exceptions may be granted by HUD after consideration of the cumulative effect of various factors on a case-by-case basis, and only with: (a) full disclosure of the potential conflict, and (b) a legal opinion of the grantee's attorney that there would be no violation of state or local laws in granting the exception.
16. **Indemnification:** The SUBRECIPIENT and its Agent, as applicable, shall hold harmless, defend and indemnify the COUNTY, including its districts, authorities, separate units of government established by law, ordinance or resolution, partners, elected and non-elected officials, employees, agents, volunteers, and any party with

whom the County has agreed by contract to provide additional insured status, the U.S. Department of Housing and Urban Development, and any other governmental agencies or subdivisions, and their officers, agents and employees, from, or on any account of, any and all claims, actions, lawsuits, losses, expenses, injuries, damages, judgments or liabilities of any kind whatsoever that arise from the SUBRECIPIENT'S, or its Agent's, employees', or officers' performance or non-performance of the terms of this AGREEMENT.

17. **Additional Provisions:** Notwithstanding anything set forth in this AGREEMENT to the contrary, nothing in this AGREEMENT shall be deemed as a waiver of immunity or limits of liability of the COUNTY beyond any statutory limited waiver of immunity or limits of liability (Section 768.28, Florida Statutes), which may have been or may be adopted by the Florida Legislature liability in tort, and, unless otherwise further limited by state or federal law, the cap on the amount and liability of the COUNTY for damages arising from any claims related to this AGREEMENT, regardless of the number or nature of claims or whether such claim sounds in tort, equity, or contract, shall not exceed the dollar amount set by the Florida legislature for tort damages. Further, nothing in this AGREEMENT shall inure to the benefit of any third party for the purpose of allowing any claim against the COUNTY OF VOLUSIA, which claim would otherwise be barred under the doctrine of sovereign immunity or by operation of state or federal law, except as may be expressly provided herein.
18. In no event shall the COUNTY be liable to the SUBRECIPIENT or its Agent, as applicable, for any incidental, indirect, special, punitive or consequential damages even if the COUNTY knew or should have known about the possibility of such damages for any provision of this AGREEMENT.
19. The SUBRECIPIENT shall, and shall ensure that its Agent, as applicable, shall at its own expense, defend, indemnify and hold harmless the COUNTY, including its districts, authorities, separate units of government established by law, ordinance or resolution, partners, elected and non-elected officials, employees, agents, volunteers, and any party with whom the County has agreed by contract to provide additional insured status,, from and against all liabilities, claims, demands, actions, causes of action, losses, damages, costs and expenses (including reasonable attorneys' fees) which may arise under any claim or cause of action whatsoever, contract, equity or tort (including personal injury, death, and damage to tangible property) to the extent caused by the SUBRECIPIENT's or its Agent's, as applicable, negligence or intentional tortious conduct in the performance of this AGREEMENT.
20. Notwithstanding the provisions of Paragraph 17, the SUBRECIPIENT and its Agent, shall save, indemnify, and hold the COUNTY harmless from any and all claims and actions from the SUBRECIPIENT's Subcontractors for payment for Services and Software provided by Subcontractors for the SUBRECIPIENT or its Agent, as applicable, under this AGREEMENT.
21. **Venue / Jurisdiction / Attorney's Fees.** This AGREEMENT shall be governed by the laws of the State of Florida and the Code of Ordinances of the County of Volusia, Florida. Venue for and jurisdiction over any civil lawsuit filed in connection with this AGREEMENT shall, if in state court, be in the 7th Judicial Circuit in and for Volusia

County, Florida, or, if in federal court, in the Middle District of Florida, Orlando Division. In any civil dispute arising from this AGREEMENT, the parties agree to bear their own attorneys' fees and costs, unless otherwise expressly provided herein.

22. **PUBLIC RECORDS.** Pursuant to section 119.0701(2)(a), Florida Statutes, the County is required to provide Subrecipient with this statement and establish the following requirements as contractual obligations pursuant to the AGREEMENT:

IF THE SUBRECIPIENT HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO THE SUBRECIPIENT'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS AGREEMENT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT 386-736-5955, communityassistance@volusia.org, or by mail, Community Assistance Division, Attn: Public Records Custodian, 110 W. Rich Ave., DeLand, FL 32720.

By entering into this AGREEMENT, Subrecipient acknowledges and agrees that any records maintained, generated, received, or kept in connection with or related to the performance of services provided under this AGREEMENT are public records subject to the public records disclosure requirements of section 119.07(1), Florida Statutes, and Article I, section 24 of the Florida Constitution. Pursuant to section 119.0701, Florida Statutes, any Subrecipient entering into an AGREEMENT for services with the County is required to:

- A. Keep and maintain public records required by the County to perform the services and work provided pursuant to this AGREEMENT.
- B. Upon request from the County's custodian of public records, provide the County 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 AGREEMENT term and following completion or termination of the AGREEMENT if the Subrecipient does not transfer the records to the County.
- D. Upon completion or termination of the AGREEMENT, transfer, at no cost, to the County all public records in the possession of the Subrecipient or keep and maintain public records required by the County to perform the service. If the Subrecipient transfers all public records to the County upon completion or termination of the AGREEMENT, the Subrecipient shall destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. If the Subrecipient keeps and maintains public records upon completion or termination of the AGREEMENT, the Subrecipient

shall meet all applicable requirements for retaining public records. All records stored electronically must be provided to the County, upon request from the County's custodian of public records, in a format that is compatible with the information technology systems of the County.

Pursuant to current state law, requests to inspect or copy public records relating to the County's AGREEMENT for services must be made directly to the County. If Subrecipient receives any such request, Subrecipient shall instruct the requestor to contact the County. If the County does not possess the records requested, the County shall immediately notify the Subrecipient of such request, and the Subrecipient must provide the records to the County or otherwise allow the records to be inspected or copied within a reasonable time.

Subrecipient acknowledges that failure to provide the public records to the County within a reasonable time may be subject to penalties under section 119.10, Florida Statutes. Subrecipient further agrees not to release any records that are statutorily confidential or otherwise exempt from disclosure without first receiving prior written authorization from the County. Subrecipient shall indemnify, defend, and hold the County harmless for and against any and all claims, damage awards, and causes of action arising from the Subrecipient's failure to comply with the public records disclosure requirements of section 119.07(1), Florida Statutes, or by Subrecipient's failure to maintain public records that are exempt or confidential and exempt from the public records disclosure requirements, including, but not limited to, any third party claims or awards for attorneys' fees and costs arising therefrom. Subrecipient authorizes County to seek declaratory, injunctive, or other appropriate relief against Subrecipient from a Circuit Court in Volusia County on an expedited basis to enforce the requirements of this section.

23. SUBRECIPIENT acknowledges the COUNTY's obligations under Article 1, Section 24, Florida Constitution and Chapter 286, Florida Statutes (commonly known as the Florida Government in the Sunshine Law (the "Sunshine Law")), the SUBRECIPIENT acknowledges that the COUNTY is required to comply with Article 1, Section 24, Florida Constitution and Chapter 286, Florida Statutes. SUBRECIPIENT and its Agent, as applicable, agrees to comply with these laws and any other laws related to complying with the Sunshine Law, to require any Subcontractors to comply with all laws, as applicable, and to assist COUNTY in complying with the same as it relates to all aspects of this AGREEMENT.
24. The SUBRECIPIENT and its Agent, as applicable, agrees to maintain such financial records and other records as may be prescribed by the COUNTY or by applicable federal and state laws, rules, and regulations. COUNTY shall have the right to audit the books, records, and accounts of the SUBRECIPIENT and its Agent, as applicable, that are directly related to this AGREEMENT. The SUBRECIPIENT shall, and shall require its Agent, as applicable, to keep such books, records, and accounts as may be necessary in order to record complete and correct entries related to this AGREEMENT. The SUBRECIPIENT and its Agent, as applicable, shall preserve and make available, at reasonable times for examination and audit by COUNTY, all financial records, supporting documents, statistical records, and any other documents pertinent to this AGREEMENT for the required retention period of the Florida Public

Records Act (Chapter 119, Florida Statutes), if applicable, or, if the Florida Public Records Act is not applicable, for a minimum period of three (3) years after termination of this AGREEMENT. If any audit has been initiated and audit findings have not been resolved at the end of the retention period or three (3) years, whichever is longer, the books, records, and accounts shall be retained until resolution of the audit findings. If the Florida Public Records Act is determined by COUNTY to be applicable to the SUBRECIPIENT's or its Agent's records, as applicable, the SUBRECIPIENT and its Agent shall comply with all requirements thereof; however, no confidentiality or non-disclosure requirement of either federal or state law shall be violated by the SUBRECIPIENT or its Agent, as applicable. Any incomplete or incorrect entry in such books, records, and accounts shall be a basis for COUNTY's disallowance and recovery of any payment upon such entry.

25. Any legal notice or other communication required or permitted to be made or given by either party pursuant to this AGREEMENT will be in writing, in English, and will be deemed to have been duly given: (i) five (5) business days after the date of mailing if sent by registered or certified U.S. mail, postage prepaid, with return receipt requested; (ii) when transmitted if sent by facsimile, provided a confirmation of transmission is produced by the sending machine and a copy of the notice is promptly sent by another means specified in this section; or (iii) when delivered if delivered personally or sent by express courier service. All notices will be sent to the other party at its address as set forth below or at such other address as the party may specify in a notice given in accordance with this section.

In the case of County:	with a copies of legal notices to:
County of Volusia Attn: Dona D. Butler, Community Services Director Address: 110 W. Rich Ave. DeLand, FL 32720 Phone: (386) 943-7029 Fax: (386) 822-5768	County of Volusia Attn: Charles Hargrove, Deputy County Attorney Address: 123 W. Indiana Ave. Room 301 DeLand, FL 32720 Phone: (386) 736-5950 Fax: (386) 736-5990
In the case of SUBRECIPIENT :	with a copy of legal notices to:
Attn: Joyce Shanahan, City Manager Address: City of Ormond Beach P.O. Box 277 Ormond Beach, FL 32175 Phone: (386) 676-3200 Fax: (386) 676-3384	Attn: Randy Hayes, City Attorney Address: P.O. Box 277 Ormond Beach, FL 32175 Phone: (386) 676-3392 Fax: (386) 676-3321

26. Each party will act in good faith in the performance of its respective responsibilities under this AGREEMENT and will not unreasonably delay, condition or withhold the giving of any consent, decision or approval that is either requested or reasonably required by the other party in order to perform its responsibilities under this AGREEMENT.
27. This Agreement shall not be assigned, transferred, or encumbered by SUBRECIPIENT unless authorized by the COUNTY in writing as a modification to this Agreement.
28. By entering into this AGREEMENT, the SUBRECIPIENT or its Agent, as applicable, and the COUNTY hereby expressly waive any rights either may have to a trial by jury of any civil litigation related to this AGREEMENT for any litigation limited solely to the parties of this AGREEMENT and to the Agent of SUBRECIPIENT, as applicable.
29. If any provision of this AGREEMENT shall for any reason be held to be invalid, illegal, unenforceable, or in conflict with any law of a federal, state, or local government having jurisdiction over this AGREEMENT, such provision shall be construed so as to make it enforceable to the greatest extent permitted, such provision shall remain in effect to the greatest extent permitted and the remaining provisions of this AGREEMENT shall remain in full force and effect unless the COUNTY or the SUBRECIPIENT elect to terminate this AGREEMENT. An election to terminate this AGREEMENT based upon this provision shall be made within seven (7) days after the finding by the court becomes final. Prior to terminating this AGREEMENT, the parties may agree to substitute an enforceable provision that, to the maximum extent possible under applicable law, preserves the original intentions and economic positions of the parties.
30. This Agreement and attached exhibits and amendments thereto constitute the full and complete understanding between the parties.
31. **Amendments:** Upon mutual consent of both parties, this AGREEMENT may be amended in writing.

**COUNTY OF VOLUSIA/
CITY OF ORMOND BEACH
COMMUNITY DEVELOPMENT BLOCK GRANT
SUBRECIPIENT AGREEMENT FY 2020/21**

SIGNATURE PAGE

IN WITNESS WHEREOF, the COUNTY and the SUBRECIPIENT have executed this AGREEMENT.



Joyce Shanahan
City Manager
City of Ormond Beach



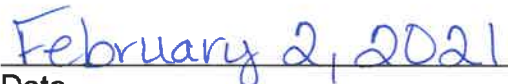
Date

Dona D. Butler
Community Services Director
County of Volusia

Date



Bill Partington
Mayor
City of Ormond Beach



Date

ATTACHMENT I – STATEMENT OF WORK

SECTION A – ACTIVITY RESPONSIBILITY AND DESCRIPTION

The organization responsible for implementing each activity and a brief description of the activity is identified below. Implementation of these activities shall comply with the regulations of 24 CFR 570, as now in effect and as may be amended from time to time.

The COUNTY shall:

1. Be responsible for monitoring all programmatic regulations, to provide review and certification that environmental regulations have been adhered to, and providing technical assistance as requested.
2. Be responsible for determining the adequacy of performance under subrecipient agreements and procurement contracts and for taking appropriate action when performance problems arise.
3. The COUNTY Housing and Grants Staff shall review and approve, prior to execution, all procurement procedures and subcontracts for compliance with the Davis-Bacon Fair Labor Standards Provisions, Minority and Women's Business Enterprise (MWBE) affirmative requirements, Executive Order 11246, Section 3 of Housing and Urban Development Act of 1968, Federal Debarment/Suspension of contractors, and other applicable federal labor and equal opportunity requirements.

The SUBRECIPIENT shall be responsible for implementing the following activities:

1. Central Park I (Fleming Ave)- New Playground: Be responsible for installation of new playground equipment for children ages 5-12 which will replace old equipment installed in the 1990's. The new playground equipment will include benches, poured in place rubber surfacing, concrete curbingt around the edge and a new 5' sidewalk connection to the existing sidewalk.
2. Hope Place Public Service: Be responsible for operating costs for Hope Place. Hope Place is a shelter for homeless families and unaccompanied students. Funds will be used for the salary and benefits to hire an Unaccompanied Youth House Manager who will be provided with room and board so that they are readily available to mentor the youth and respond to their needs as quickly as possible.
3. Be responsible for ensuring that funds distributed are used in accordance with CDBG guidelines by extending all provisions of this subrecipient agreement to written agreements with funded agency. The SUBRECIPIENT will perform programmatic monitoring of this agency and maintain records documenting this monitoring.
4. Be responsible for contacting the Volusia County Community Assistance Housing and Grants Staff **prior** to implementing any phase of construction of the above listed activities. The City agrees to inform and include the Housing and Grants Staff in all pre-bid, bid, pre-construction, or any other applicable meeting related to the above listed activities

5. Be responsible for compliance with all Davis-Bacon Fair Labor Standard regulations with regard to the above listed construction projects. The City agrees to provide certified payroll and contractors invoices related to the above listed activities to the Volusia County Housing and Grants Staff for approval prior to requesting reimbursement for any expenditure.

SECTION B – AREA SERVICES

Persons residing in the geographic location of the following Census Tracts and Block Groups will benefit from the above listed activities. The percentage of low/moderate income persons residing in each Census Tract and Block Group, as defined by the American Community Survey data, is shown below.

Activity	Census Tract(s)/ Block Group(s)	Percentage Low/Moderate Income Persons
Capital Projects		
Central Park I (Fleming Ave)- New Playground	80803/2	54.34%
Public Services		
Hope Place Public Service	Ormond Beach	N/A

SECTION C – WORK SCHEDULE

SUBRECIPIENT

Description of Activities	Time	Quantity	Milestone
<u>Central Park I (Fleming Ave)- New Playground:</u> Be responsible for installation of new playground equipment for children ages 5-12 which will replace old equipment installed in the 1990's. The new playground equipment will include benches, poured in place rubber surfacing, concrete curbing around the edge and a new 5' sidewalk connection to the existing sidewalk.	October 1, 2020 to September 30, 2021	1,190 LMI Persons	Completion by September 30, 2021
<u>Hope Place Public Service:</u> Be responsible for operating costs for Hope Place. Hope Place is a shelter for homeless families and unaccompanied students. Funds will be used for the salary and benefits to hire an Unaccompanied Youth House Manager who will be provided with room and board so that they are readily available to mentor the youth and respond to their needs as quickly as possible.		Estimated 100 LMI Persons	

SECTION D – WORK REVISIONS

The work elements contained herein set forth specific objectives, activities, and schedules. Requests to revise Section A through C may be deemed necessary by the SUBRECIPIENT or its Agent, as applicable. Any revision is subject to prior written approval by the COUNTY.

SECTION E – LEVELS OF ACCOMPLISHMENT – GOALS AND PERFORMANCE MEASURES

The Subrecipient agrees to provide the following level of program services:

<u>Activity</u>	<u>Units per Month</u>	<u>Total Units per Year</u>
Central Park I (Fleming Ave)- New Playground	N/A	1,190 LMI Persons
Hope Place Public Service	N/A	Estimated 100 LMI Persons

Note: Units means the number of low- and moderate-income persons residing in the area that will benefit directly from new or improved access to an infrastructure or public facility benefit and those persons who have low- and moderate-incomes.

SECTION F – RECORDS AND REPORTS TO BE PROVIDED AND MAINTAINED

Records and reports to be provided to the COUNTY:

1. The SUBRECIPIENT and/or its Agent shall provide on a monthly basis until the AGREEMENT is closed, the Request for Funds Reimbursement Form, ATTACHMENT V to this AGREEMENT. The Request for Funds Reimbursement Form contains five sections: Section I - Request for Monthly Reimbursement and Expense Summary Form, Section II A – CDBG Capital Project Status Report, Section II B - CDBG Public Service Status Report, Section III - LMI Clientele Status Report, Section IV - CDBG Plan of Action. **Each section must be completed and submitted on a monthly basis regardless of the activity level until the Agreement is closed.**
 - The Section I – Request for Monthly Funds Reimbursement and Expense Summary Form must include reporting fair housing activities completed at least once per quarter.
 - Section II A – CDBG Capital Project Status Report must be submitted for the following activities: Central Park I (Fleming Ave)- New Playground.
 - Section II B – Public Service Status Report must be submitted for the following activity: Hope Place Public Service.
 - Section III – LMI CDBG Clientele Status Report must be submitted for the following activity: Hope Place Public Service.
 - Section IV - Plan of Action (POA) must be submitted for the following activities: Central Park I (Fleming Ave)- New Playground.
 - i. If any of the dates in the POA attached to this agreement change by 60 days or more, the SUBRECIPIENT must submit an amendment request to amend the POA.

2. The SUBRECIPIENT and/or its Agent shall provide other reports as may be prescribed by the COUNTY or the Secretary of HUD from time to time.

Records to be maintained by the SUBRECIPIENT:

The SUBRECIPIENT and/or its Agent shall maintain all required records, which are applicable to the CDBG-assisted activity, as set forth in ATTACHMENT IV to this AGREEMENT.

ATTACHMENT II – BUDGET

The total amount of CDBG funds allocated to community development activities in City of Ormond Beach is **\$152,710**. The following chart provides details as to the organization responsible for implementing each of the activities, a description of the activities and the amount of funds budgeted for the activity.

RESPONSIBILITY	DESCRIPTION OF ACTIVITY	BUDGET
City of Ormond Beach	Central Park I (Fleming Ave)- New Playground: Be responsible for installation of new playground equipment for children ages 5-12 which will replace old equipment installed in the 1990's. The new playground equipment will include benches, poured in place rubber surfacing, concrete curbing around the edge and a new 5' sidewalk connection to the existing sidewalk.	\$129,804
City of Ormond Beach	Hope Place Public Service: Be responsible for operating costs for Hope Place. Hope Place is a shelter for homeless families and unaccompanied students. Funds will be used for the salary and benefits to hire an Unaccompanied Youth House Manager who will be provided with room and board so that they are readily available to mentor the youth and respond to their needs as quickly as possible.	\$22,906
TOTAL		<u>\$152,710</u>

In the event Program Income is generated, such income shall be returned to the COUNTY.

ATTACHMENT III – CERTIFICATION AND OTHER REGULATIONS

SECTION A – APPLICABILITY OF UNIFORM ADMINISTRATIVE REQUIREMENTS

The COUNTY, SUBRECIPIENT and their Agents which are, or represent governmental entities, shall comply with the requirements and standards, and any revisions or amendments thereto, of 2 CFR 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards*, and with the applicable portions of 24 CFR Part 85, "Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments" as provided in 24 CFR 570.502.

SECTION B – EQUAL OPPORTUNITY

The SUBRECIPIENT and their Agent agrees to comply with:

1. Title VI of the Civil Rights Act of 1964 (P.L.88-352) and the HUD regulations under 24 CFR Part 1, which provides that no person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity receiving Federal financial assistance by way of grant, loan, or contract and will immediately take any measures necessary to effectuate this Agreement. If any real property or structure thereof is provided or improved with the aid of Federal financial assistance extended to the SUBRECIPIENT, this assurance shall obligate the SUBRECIPIENT, or in the case of any transfer of such property or structure is used for a purpose of which the Federal financial assistance is extended or for another purpose involving the provision of similar services or benefits.
2. Title VIII of the Civil Rights Act of 1968 (P.L. 90-284), as amended by the Fair Housing Amendments Act of 1988 (P.L. 100-430), and will administer all programs and activities relating to housing and community development in a manner to affirmatively further fair housing within Constitutional limitations throughout the United States.
3. Section 109 of the Housing and Community Development Act of 1974 and 1977, as amended, and in conformance with all requirements imposed pursuant to the regulations of the Department of HUD (24 CFR Part 570.602) issued pursuant to that Section; no person in the United States shall, on the grounds of race, color, national origin, or sex, be excluded from participation under, any program or activity funded in whole or in part with the Community Development funds.

Section 109 of the Act further provides that any prohibition against discrimination on the basis of age, under the Age Discrimination Act of 1975 (24 CFR Part 146), or with respect to an otherwise qualified handicapped person, as provided in Section 504 of the Rehabilitation Act of 1973 (24 CFR Part 8), shall also apply to any program or activity funded in whole or in part with funds made available pursuant to the Act.

4. Executive Order 11063 on equal opportunity in housing and related facilities owned or operated by the Federal Government or provided with Federal financial assistance.
5. Executive Order 11246, an amended, requiring nondiscrimination and affirmative action to ensure nondiscrimination in employment by government contractors and subcontractors and under federally assisted construction contracts.
6. Section 3 of the Housing and Urban Development Act of 1968 (12 U.S.C. 1701u), as amended, and the HUD regulations issued pursuant thereto (24 CFR Part 135), shall govern all housing rehabilitation and community development construction contracts in excess of \$200,000 where at least \$100,000 of Federal CDBG funds are used, as follows:
 - a. The work to be performed under the contract is subject to the requirements of Section 3 of the Housing and Urban Development Act of 1968, as amended, 12 U.S.C. 1701u (section 3). The purpose of Section 3 is to ensure that employment and other economic opportunities generated by HUD assistance or HUD-assisted projects covered by Section 3, shall, to the greatest extent feasible, be directed to low- and very low-income persons particularly persons who are recipients of HUD assistance for housing.
 - b. The parties to the contract agree to comply with HUD's regulations in 24 CFR Part 135, which implement Section 3. As evidenced by their execution of this contract, the parties to the contract certify that they are under no contractual or other impediment that would prevent them from complying with the Part 135 regulations.
 - c. The contractor agrees to send to each labor organization or representative of workers with which the contractor has a collective bargaining agreement or other understanding, if any, a notice advising the labor organization or workers' representative of the contractors commitments under this Section 3 clause, and will post copies of the notice in conspicuous place at the work site where both employees and applicants for training and employment positions can see the notice. The notice shall describe the Section 3 preference, shall set forth minimum number and job titles subject to hire, availability of apprenticeship and training positions, the qualifications for each; and the name and location of the person(s) taking applications for each of the positions; and the anticipated date the work shall begin.
 - d. The contractor agrees to include the Section 3 clause in every subcontract subject to compliance with regulations 24 CFR Part 135 and agrees to take appropriated action, as provided in an applicable provision of the subcontract or in this section 3 clause upon a finding that the subcontractor is in violation of the regulations in 24 CFR Part 135. The contractor will not subcontract with any subcontractor where the contractor has notice or knowledge that the subcontractor has been found in violation of the regulations in 24 CFR Part 135.
 - e. The contractor will certify that any vacant employment positions, including training positions, that are filled (1) after the contractor is selected but before the contract is executed, and (2) with persons other

than those to whom the regulations of 24 CFR Part 135 require employment opportunities to be directed, were not filled to circumvent the contractors obligations under 24 CFR Part 135.

- f. Noncompliance with HUD's regulations in 24 CFR Part 135 may result in sanctions, termination of this contract for default, and debarment or suspension from future HUD assisted contracts.
 - g. With respect to work performed in connection with Section 3 covered Indian housing assistance, section 7(b) of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450e) also applies to the work to be performed under this contract. Section 7(b) requires that to the greatest extent feasible (i) preference and opportunities for training and employment shall be given to Indians and (ii) preference in the award of contracts and subcontracts shall be given to Indian organizations and Indian-owned Economic Enterprises. Parties to this contract that are subject to the provisions of section 3 and section 7(b) agree to comply with section 3 to the maximum extent feasible, but not in derogation of compliance with section 7(b).
7. The affirmative requirements, as set forth in 24 CFR Part 85.36 (e), to assure that minority firms, women's business enterprises, and labor surplus area firms are used when possible, to include the following actions:
- a. Placing qualified small and minority businesses, and women's business enterprises on solicitation lists;
 - b. Assuring that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources;
 - c. Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority business, and women's business enterprises;
 - d. Establishing delivery schedules, where the requirements permits, which encourage participation by small and minority business, and women's business enterprises;
 - e. Using the services and assistance of the Small Business Administration and the Minority Businesses Development Agency of the Department of Commerce; and
 - f. Requiring the prime contractor, if subcontracts are to be let, to take the affirmative steps listed in paragraphs (a) – (e) of the section.

SECTION C – INTEREST OF CERTAIN FEDERAL OFFICIALS

No member of or delegate to the Congress of the United States shall be admitted to any share or part of this Agreement or to any benefit to arise from the same.

SECTION D – INTEREST OF MEMBERS, OFFICERS, OR EMPLOYEES OF THE SUBRECIPIENT, MEMBERS OF LOCAL GOVERNING BODY, OR OTHER PUBLIC OFFICIALS

No member, officer, or employee of the SUBRECIPIENT or its designees or agents, no member of the governing body of the locality in which the program is situated, and no other public official of such locality or localities who exercises any functions or responsibilities with respect to the program during his tenure or for one (1) year thereafter, shall have any interest, direct or indirect, in any contract or subcontract, or the proceeds thereof, for work to be performed in connection with the program assisted under this Agreement.

SECTION E – HATCH ACT

The SUBRECIPIENT agrees to comply with all provisions of the Hatch Act and that no part of the program will involve political activities, nor shall personnel employed in the administration of the program be engaged in activities in contravention of Title V, Chapter 15, of the United States Code.

SECTION F – DAVIS-BACON FAIR LABOR STANDARDS PROVISIONS

The SUBRECIPIENT agrees to comply with 24 CFR 570.603, Labor Standards of the Regulations published by HUD for Community Development Block Grants.

SECTION G - USE OF DEBARRED, SUSPENDED OR INELIGIBLE CONTRACTORS OR SUBRECIPIENTS.

The SUBRECIPIENT agrees to comply with the requirements of 24 CFR parts 5 and 24, which prohibit a person who is debarred or suspended from receiving Federal financial and non-financial assistance and benefits under any Federal Programs.

SECTION H – ANTI-LOBBYING

The SUBRECIPIENT agrees that:

1. No Federal appropriated funds have been paid or will be paid, by or on behalf of it, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress. In connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement;

2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of congress, or an employee of a Member of Congress in connection with the Federal contract, grant, loan, or cooperative agreement, it will complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

SECTION I – COMPLIANCE WITH ENVIRONMENTAL REQUIREMENTS

The SUBRECIPIENT agrees to comply with any conditions resulting from the COUNTY'S compliance with the provisions of the National Environmental Policy Act of 1969 and the other provisions of law specified at 24 CFR 58.5 insofar as the provisions of such Act apply to the activities set forth in ATTACHMENT I – STATEMENT OF WORK.

SECTION J – COMPLIANCE WITH FLOOD DISASTER PROTECTION ACT

This AGREEMENT is subject to the requirements of the Flood Disaster Protection Act of 1973 (P.L. 93-234). No portion of the assistance provided under this AGREEMENT is approved for acquisition or construction purposes as defined under Section 3 (a) of said Act, for use in any area identified by the Secretary as having special flood hazards, which is located in a community not then in compliance with the requirements for participation in the national flood insurance program pursuant to Section 201(d) of said Act; and the use of any assistance provided under this AGREEMENT for such acquisition or construction in such identified areas in communities then participating in the national flood insurance program shall be subject to the mandatory purchase of flood insurance requirements of Section 102(a) of said Act.

Any contract or agreement for the sale, lease, or other transfer of land acquired, cleared, or improved with assistance provided under this AGREEMENT shall contain, if such land is located in an area identified by the Secretary as having special flood hazards and in which the sale of flood insurance has been made available under the National Flood Insurance Act of 1968, as amended, 42 U.S.C. 4001 et seq., provisions obligating the transferee and its successors or assigns to obtain and maintain, during the ownership of such land, such flood insurance required with respect to financial assistance for acquisition or construction purposes under Section 102 (2) of Flood Disaster Protection Act of 1973. Such provisions shall be required notwithstanding the fact that the construction of such land is not itself funded with assistance under this AGREEMENT.

SECTION K – COMPLIANCE WITH AIR AND WATER ACTS

This AGREEMENT is subject to the requirements of the Clean Air Act, as amended, 42 U.S.C. 1857 et seq.; the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et seq.; and the regulations of the Environmental Protection Agency with respect thereto, at 40 CFR Part 15, as amended from time to time.

In compliance with said regulations, the COUNTY shall cause or require to be inserted in full in all contracts and subcontracts with respect to any nonexempt transaction thereunder funded with assistance provided under this AGREEMENT, the following requirements.

1. A stipulation by the contractor or subcontractor that any facility to be utilized in the performance of any nonexempt contract or subcontract is not listed on the list of Violating Facilities issued by the Environmental Protection Agency (EPA) pursuant to 40 CFR 15.20.
2. Agreement by the contractor to comply with all the requirements of Section 114 of the Clean Air Act, as amended (42 U.S.C. 1857c-8), and Section 308 of the Federal Water Pollution Control Act, as amended, (33 U.S.C. 1318) relating to inspection, monitoring, entry, reports and information, as well as all other requirements specified in said Section 114 and Section 308, and all regulations and guidelines issued thereunder.
3. A stipulation that as a condition for the award of the contract, prompt notice will be given of any notification received from the director, Office of Federal Activities EPA, indicating that a facility utilized or to be utilized for the contract is under consideration to be listed on the EPA list of Violating Facilities.
4. Agreement by the contractor that he will include or cause to be included the criteria and requirements in paragraph 1 through 4 of this section in every nonexempt subcontract and requiring the contractor will take such action as the Government may direct as means of enforcing such provisions.

In no event shall any amount of the assistance provided under this AGREEMENT be utilized with respect to a facility that has given rise to a conviction under Section 113(c)(1) of the Clean Air Act or Section 309(c) of the Federal Water Pollution Control Act.

SECTION L – HISTORIC PRESERVATION

The AGREEMENT is subject to the requirements of P.L. 89-665, the Archaeological and Historic Preservation Act of 1974 (P.L. 93-291), Executive Order 11593, and the procedures prescribed by the Advisory Council on Historic Preservation in 36 CFR Part 800. The COUNTY must take into account the effect of a project on any district, site, building, structure or object listed in or found by the Secretary of the Interior, pursuant to 35 CFR Part 800, to be eligible for inclusion in the National Register of Historic Places, maintained by the National

Park Service of the U. S. Department of the Interior, and must make every effort to eliminate or minimize any adverse effect on a historic property.

SECTION M – ARCHITECTURAL BARRIERS

This AGREEMENT is subject to the requirements of the Architectural Barriers Act of 1968 (42 U.S.C. 4151) and its regulations. Every building or facility (other than a privately owned residential structure) designed, constructed, or altered with CDBG funds must comply with the requirements of the "American Standards Specifications for Making Buildings and Facilities Accessible To, and Usable By, the Physically Handicapped."

SECTION N – LEAD BASED PAINT

This AGREEMENT is subject to the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. 4831 et seq.), and the Lead-Based Paint Regulations (24 CFR Part 35 and 24 CFR 570.608). The use of lead-based paint is prohibited whenever CDBG funds are used directly or indirectly for the construction, rehabilitation, or modernization of residential structures. Immediate lead-based paint hazards existing in residential structures assisted with CDBG funds must be eliminated, and purchasers and tenants of assisted structures constructed prior to 1978 must be notified of the hazards of lead-based paint poisoning.

SECTION O – PROPERTY DISPOSITION

Real or personal property purchased in whole or in part with CDBG funds shall not be disposed through sale, use, or location without the written permission of the COUNTY. The proceeds from the disposition of real property shall be considered program income and subject to 24 CFR 570.504(c).

SECTION P – ACQUISITION/RELOCATION

This AGREEMENT is subject to providing a certification that the parties will comply with the acquisition and relocation requirements of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, implementing regulations at 49 CFR Part 24 and 24 CFR Part 511.14, which govern the acquisition of real property for the project and provision of relocation assistance to persons displaced as a direct result of acquisition, rehabilitation, or demolition for the project.

ATTACHMENT IV – RECORDS TO BE MAINTAINED

The SUBRECIPIENT and its Agents shall establish and maintain sufficient records to enable the COUNTY and/or the Secretary of the Department of Housing and Urban Development (HUD) to determine whether the terms and condition of this AGREEMENT have been met. At a minimum, the parties shall maintain the following records for the term of the AGREEMENT and five (5) years after closure:

Section A. The COUNTY shall maintain:

1. Records providing a full description of each activity assisted (or being assisted) with Community Development Block Grant (CDBG) funds, including its location (if the activity has a geographical locus), the amount of CDBG funds budgeted, obligated, and expended for the activity, records pertaining to the leverage of the CDBG funds with other Federal, State, local, private or other funding, and the provision of Subpart C – Eligible Activities of 24 CFR Part 570 under which the activity is eligible for CDBG-assistance.
2. Records demonstrating that each activity undertaken pursuant to this AGREEMENT meets one of the criteria for meeting the CDBG National Objectives set forth in 24 CFR 570.208. The COUNTY will require the SUBRECIPIENT to maintain or produce records to support the activity's CDBG eligibility and its criteria for meeting the CDBG National Objectives as set forth in Section II below.
3. Records that demonstrate the COUNTY has made the determinations required as a condition of eligibility of certain activities, as prescribed in Sections 570.201(f), 570.201(i), 570.202(b)(3), 570.203(b), 570.204(a), and 570.206(f).
4. Records that demonstrate compliance with the citizen participation requirements prescribed in Section 104(a)(3) of the Act, and in 24 CFR 570.301(b) and 570.305 for Entitlement Communities.
5. Records that demonstrate compliance with fair housing and equal opportunity laws

Section B. The SUBRECIPIENT shall maintain:

1. Records providing a full description of each activity assisted (or being assisted) with Community Development Block Grant (CDBG) funds, including its location (if the activity has a geographical locus), the amount of CDBG funds budgeted, obligated, and expended for the activity, and records pertaining to the leverage of the CDBG funds with other Federal, State, local, private or other funding.
2. For each activity determined to benefit LMI persons based on the area served by the activity:
 - a. The boundaries of the service area;
 - b. The income characteristics of families and unrelated individuals in the service area; and

- c. If the percent of LMI persons in the service area is less than 51 percent, data showing that the area qualifies under the exception criteria set forth in 24 CFR 570.208(a)(1)(ii).

NOTE: Public Facility - Park Improvements - Central Park I (Fleming Ave)-New Playground: These activities have been determined by the COUNTY to benefit Low Moderate Income (LMI) persons because the service areas served by the activities have at least 51 percent of the residents with low and moderate incomes.

3. Records to support that each activity undertaken pursuant to this AGREEMENT is eligible for CDBG-assistance and meets one of the criteria for meeting the CDBG National Objectives. Such records shall include the following information:
 - a. Documentation establishing that the facility or service is designed for and used by LMI persons, for which the regulations provide presumptive benefit to LMI persons; or
 - b. Documentation describing how the nature and, if applicable, the location of the facility or service establishes that it is used predominantly by LMI persons; or
 - c. Documentation showing the size and annual income of the family or each person receiving the benefit as defined by HUD in 24 CFR 570.3.
4. Records that demonstrate compliance with 24 CFR 570.505 regarding any change of use of real property acquired or improved with CDBG assistance.
5. Records that demonstrate compliance with the citizen participation requirements prescribed in Section 104(a)(3) of the Act, and in 24 CFR 570.301(b) and 570.305 for Entitlement Communities.
6. Records that demonstrate compliance with the requirements in 24 CFR 570.606 regarding acquisition, displacement, relocation, and replacement housing.
7. Fair housing and equal opportunity records applicable to the nature of the activity as follows:
 - a. Documentation of the actions the SUBRECIPIENT has carried out with its housing and community development and other resources to remedy or ameliorate any conditions limiting fair housing choice in the Community, and documentation of any other official actions the Community has taken that demonstrate its support for fair housing, such as development of a fair housing analysis described in 24 CFR 570.904(c).
 - b. Data on the extent to which each racial and ethnic group and single headed households (by gender of household head) have applied for, participated in, or benefited from, any program or activity funding in whole or in part with CDBG funds. Such information shall be used only as a basis for further investigation as to compliance with nondiscrimination requirements. The SUBRECIPIENT is not required by law to attain or

maintain any particular statistical measure by race, ethnicity or gender in covered programs.

- c. Data on employment in each of the SUBRECIPIENT'S operating units funded in whole or in part with CDBG funds, with such data maintained in the categories prescribed on the Equal Employment Opportunity Commission's EEO-4 form; and documentation of any actions undertaken to ensure equal employment opportunities to all persons regardless of race, color, national origin, sex, or handicap in operating units funded in whole or in part under this part.
- d. Data indicating the race and ethnicity of households (and gender of single head of households) displaced as a result of CDBG-funded activities, together with the address and census tract of the housing units to which each displaced household relocated. Such information shall be used only as a basis for further investigation as to compliance with nondiscrimination requirements. The SUBRECIPIENT is not required by law to attain or maintain any particular statistical measure by race, ethnicity, or gender in covered programs.
- e. Data indicating the racial/ethnic character of each business entity receiving a contract or subcontract of \$10,000 or more paid, or to be paid with CDBG funds, data indicating which of those entities are women's business enterprises as defined in Executive Order 12138, the amount of the contract or subcontract, and documentation of SUBRECIPIENT'S affirmative steps to ensure that minority business and women's business enterprises have an equal opportunity to obtain or compete for contracts and subcontract as sources of supplies, equipment, constructions, and services. Such affirmative steps may include, but are not limited to, technical assistance open to all businesses but designed to enhance opportunities for these enterprises and special outreach efforts to inform them of contract opportunities. Such steps shall not include preferring any business in the award of any contract or subcontract solely or in part on the basis of race or gender.
- f. Documentation of the affirmative action measures the SUBRECIPIENT has taken to overcome prior discrimination, where the courts or HUD have found that the SUBRECIPIENT has previously discriminated against persons on the grounds of race, color, national origin, or sex in administering a program or activity funding in whole or in part with CDBG funds.
- g. Section 3 records. For those contracts governed by Section 3, the following documentation will be required from the SUBRECIPIENT and/or its Agent to evaluate compliance with Section 3 of the Housing and Urban Development Act of 1968 (12 U.S.C. 1701u), as amended and the HUD regulations issued pursuant thereto in 24 CFR Part 135:
 - 1) Project description, location, total funding limit and the period of performance.

- 2) A summary table identifying the number and category types of the Section 3 residents and business concerns employed/trained on the project. The summary should also include the total amount of funds expended on payroll for Section 3 employment and/ or the amount of the Section 3 business concern's subcontract.
 - 3) If the numerical goals defined by the COUNTY cannot be met, documentation showing why it was not feasible to meet the established goals or impediments encountered despite action taken must be provided.
 - 4) Documentation regarding other economic opportunities provided such as: (a) other training and employment related opportunities such as "upward mobility", "bridge" and trainee positions to fill vacancies, hiring Section 3 residents within other housing developments and, hiring in part time position; (b) other business related economic opportunities such as to establish, stabilize or expand Section 3 business concerns will also be considered in evaluating compliance.
8. Financial Records. Financial records, in accordance with the applicable requirements listed in 24 CFR 570.502.
 9. Records required to be maintained in accordance with other applicable laws and regulations set forth in Subpart K of the CDBG regulations (ATTACHMENT III – Certification and Other Requirements).

ATTACHMENT V – REQUEST FOR FUNDS REIMBURSEMENT REPORT

The Request for Funds Reimbursement Form is due to the COUNTY by the 10th day of each month for the preceding month, regardless of the activity level or costs incurred until the Agreement is closed. The Request for Funds Reimbursement Form is a monthly submittal requirement for all SUBRECIPIENTS and/or their Agents. It is made up of five sections: Section I - Request for Monthly Reimbursement and Expense Summary Form, Section II A – CDBG Capital Project Status Report, Section II B - CDBG Public Service Status Report, Section III - LMI Clientele Status Report, Section IV - CDBG Plan of Action.

- The Section I – Request for Monthly Funds Reimbursement and Expense Summary Form must include reporting fair housing activities completed at least once per quarter.
- Section II A – CDBG Capital Project Status Report must be submitted for the following activities: Central Park I (Fleming Ave)- New Playground.
- Section II B – Public Service Status Report must be submitted for the following activity: Hope Place Public Service.
- Section III – LMI CDBG Clientele Status Report must be submitted for the following activity: Hope Place Public Service.
- Section IV - Plan of Action must be submitted for the following activities: Central Park I (Fleming Ave)- New Playground.

Requesting reimbursement:

Reimbursement requests and related backup documentation received from the SUBRECIPIENT will be reviewed by the COUNTY to determine if the requirements for a proper invoice are met. If the received request is not a proper invoice, it will be rejected and the SUBRECIPIENT will be notified that the request is improper and indicate what corrective action is needed for resubmission. If the received request is a proper invoice it will be processed and paid in accordance with the Florida Prompt Payment Act, as applicable

A proper invoice for reimbursement will:

- Include only expenses that are allowable, eligible and procured in accordance with the program requirements.
- Include only expenses that are allocable to projects within this agreement.
- Include proof of payment by the SUBRECIPIENT.
- Include an invoice for the work, if applicable. The invoice must state when the work was completed and the name of the contractor that completed the work.
- Be in compliance with all Davis-Bacon Fair Labor Standard requirements if construction work was completed by a contractor. If applicable, the COUNTY must have all necessary employee interviews and approved certified payroll reports from all related contractors and subcontractors for the dates being invoiced.
- Be in compliance with all Section III and M/WBE reporting requirements.
- Will include backup documentation to demonstrate that expenses for work completed by employees of the SUBRECIPIENT are allocable to the project, if applicable. Documents to demonstrate employee expenses may include payroll records, signed timesheets, and evidence of costs of employment.

SECTION I**FY 2020/21 Request For Monthly Reimbursement and Expense Summary Form**Subrecipient Name: City of Ormond Beach Funding Source: CDBG

Subrecipient Address: _____ Telephone Number: _____

City: _____ State: _____ Zip: _____

Month of Report - this is the month that is being reported on:
 (the report must be submitted by the 10th day of the following month) _____

CDBG Contact Person: _____ Telephone: _____

Reimbursement Funds Requested for this Period: _____ Final Request: ☐ Yes ☐ No**To Be Completed by Subrecipient**

DESCRIPTION OF ACTIVITY	BUDGET	EXPENSES THIS MONTH	EXPENSES TO-DATE	AVAILABLE BALANCE
Central Park I (Fleming Ave)- New Playground: Be responsible for installation of new playground equipment for children ages 5-12 which will replace old equipment installed in the 1990's. The new playground equipment will include benches, poured in place rubber surfacing, concrete curbing around the edge and a new 5' sidewalk connection to the existing sidewalk.	\$129,804			
Hope Place Public Service: Be responsible for operating costs for Hope Place. Hope Place is a shelter for homeless families and unaccompanied students. Funds will be used for the salary and benefits to hire an Unaccompanied Youth House Manager who will be provided with room and board so that they are readily available to mentor the youth and respond to their needs as quickly as possible.	\$22,906			
Total	\$152,710			

AMENDMENT JOURNAL

Fair Housing Activities Description:
 (fair housing activities must be reported at least every quarter)

Agency Authorized Signature:
 (This form is for reproduction or copying by Recipient)

Request Date:
 (actual date signed)

Print Name of Agency Authorized Signature: _____**Volusia County Community Assistance Use Only**

Prepared By:		Date		Capital Project Reviewed By:		Date	
Approved By:							Date
Account #				IDIS #		Funds Requested	

SECTION II A – CDBG Capital Project Status Report FY 2020/21Subrecipient: City of Ormond BeachProject Name: Central Park I (Fleming Ave)- New Playground**Month of Report** - this is the month that is being reported on: (the report must be submitted by the 10th day of the following month): _____

1. CDBG allocation _____ Project budget _____ Actual award (if known) _____

Please describe any changes to project costs/award:

2. Are reimbursements being requested for this activity?

If yes, answer questions 3-8. If no, continue to question 9.

3. What is the amount being requested? _____

4. What timeframe did the original expenses occur? From _____ To _____

5. What timeframe did City of Ormond Beach pay expenses? From _____ To _____

6. Is backup documentation included to support expenses? ☐ Yes ☐ No7. Has backup documentation been reviewed by the City of Ormond Beach CDBG Contact? ☐ Yes ☐ No8. Have the calculations been reviewed by the City of Ormond Beach CDBG contact? ☐ Yes ☐ No

9. Estimated project/activity completion date: _____

10. Percent of project/activity completed to date: _____

11. Method of procurement identified in application (i.e., formal sealed bid, written quote...): _____

Is this still applicable: ☐ Yes ☐ No

If not, describe changes and/or proposed procurement method:

12. Have any project dates changed by more than 60 days since the last Plan of Action was approved? ☐ Yes ☐ No13. Has a new subrecipient agreement amendment Plan of Action been submitted? ☐ Yes ☐ No

14. Describe specific work tasks and quantified accomplishments completed this month:

15. Describe specific work tasks and quantified accomplishments for upcoming month (detailed narrative required every month):

SECTION II B – CDBG Public Service Status Report FY 2020/21

Subrecipient: City of Ormond Beach

Project Name: Hope Place Public Service

Month of Report - this is the month that the subrecipient expended funds: (the report must be submitted by the 10th day of the following month):

1. CDBG allocation _____ Project budget _____

Please describe any changes to project costs/award:

2. Are reimbursements being requested for this activity?

If yes, answer questions 3-8. If no, continue to question 9.

3. What is the amount being requested?

4. What timeframe did the original expenses occur? From _____ To _____

5. What timeframe did City of Ormond Beach pay expenses? From _____ To _____

6. Is backup documentation included to support expenses? ☐ Yes ☐ No

7. Has backup documentation been reviewed by the City of Ormond Beach CDBG Contact? ☐ Yes ☐ No

8. Have the calculations been reviewed by the City of Ormond Beach CDBG contact? ☐ Yes ☐ No

9. Is a Clientele Status Report included? ☐ Yes ☐ No

10. Estimated project/activity completion date:

11. Percent of project/activity completed to date:

12. Describe specific work tasks and quantified accomplishments completed this month:

13. Describe specific work tasks and quantified accomplishments for upcoming month (detailed narrative required every month):

SECTION III -- LMI CDBG Clientele Status Report FY 2020/21

Subrecipient City of Ormond Beach **Activity Name** Hope Place Public Service

Timeframe Covered by this Report From _____ To _____

Final Report? ☐ Yes ☐ No

COMPLETE THE FOLLOWING TWO (2) TABLES FOR PERSONS SERVED BY THE ACTIVITY DURING THE REIMBURSEMENT PERIOD.

Total Number of Persons Assisted this month

TABLE I: Participant Racial and Ethnic Characteristics:
(Please be as specific as possible in reporting this section)

Racial and Ethnic Characteristics	Month	CDBG Program to Date	Hispanic Month	Hispanic to Date
White				
Black/African American				
Asian				
American Indian/Alaskan Native				
Native Hawaiian/Other Pacific Islander				
American Indian/Alaskan Native & White				
Asian & White				
Black/African American & White				
American Indian/Alaskan Native & Black/African Am.				
Other Multi Racial				
TOTAL PERSONS				

PLEASE NOTE: The Total Number Served is to be an **unduplicated count** of persons served during the reporting period.

TABLE II: Participant Income Level

Income Level	Month	Year to Date
Extremely Low-Income Persons		
Low-Income Persons		
Moderate-Income Persons		
TOTAL PERSONS		

LMI CDBG Clientele Status Report INSTRUCTIONS

TABLE I: Provide the total number of persons assisted by the activity during the reporting month and year to date for each applicable category of Racial and Ethnic groups. Use the category that most closely reflects an individual's recognition in his/her community for purposes of reporting a person of mixed racial and/or ethnic origins. Monthly counts and year to date counts should be an actual unduplicated number, not an estimate. Please make sure that these numbers equal the total number of individuals served. Below are guidelines for this section:

White: A person having origins in any of the original peoples of Europe, the Middle East or North Africa.

Black or African American: A person having origins in any of the black racial groups of Africa. Terms such as 'Haitian' or 'Negro' can be used in addition to 'Black or African American'.

Asian: A person having origins in any of the original peoples of the Far East, Southeast Asia or the Indian subcontinent including, for example, Cambodia, China, India, Japan, Korean, Malaysia, Pakistan, the Philippine Island, Thailand, and Vietnam.

American Indian/Alaskan Native: A person having origins in any of the original peoples of North and South America (including Central America), and who maintains tribal affiliations or community attachment.

Native Hawaiian or Other Pacific Islander: A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.

American Indian/Alaskan Native & White: A person having origins of both of the above-mentioned characteristics.

Asian & White: A person having origins of both of the above-mentioned characteristics.

Black/African American & White: A person having origins of both of the above-mentioned characteristics.

American Indian/Alaskan Native & Black African American: A person having origins of both of the above-mentioned characteristics.

TABLE II: Income Level Definitions:

Extremely Low Income Person: Member of a family that has an income equal to or less than the Section 8 limits for 30% of Median income established by HUD for the Deltona-Daytona Beach – Ormond Beach MSA.

Low-Income Person: Member of a family that has an income equal to or less than the Section 8 Very Low-income limits established by HUD for the Deltona-Daytona Beach – Ormond Beach MSA.

Moderate-Income Person: Member of a family that has an income equal to or less than the Section 8 Low-income limit and greater than the Section 8 Very-Low income limit established by HUD for the Deltona-Daytona Beach – Ormond Beach MSA.

Section IV - CDBG Plan of Action FY 2020/21

Subrecipient	City of Ormond Beach			
Project Name	Central Park I (Fleming Ave.)- New Playground			
Is project being implemented by forced labor (employees of the Subrecipient)?				☐ Yes ☐ No
Milestones	Originally Submitted Date	Amended Date (if applicable)	Actual Date	Notes (indicate most recent estimate)
Authorization to Proceed Received				
Technical Design & Procurement Documents, Municipality Approved				
Complete Solicitation Package Submitted to Volusia County				
Solicitation Package Approved by Volusia County				
Solicitation Advertised				
Pre-Bid Meeting				
Bid Opening				
Contract Award				
Pre-Construction Meeting				
Issue Notice to Proceed				
Project Start Date				
Project Completed				
All Reimbursement Requests Submitted to Volusia County				



CITY OF ORMOND BEACH

City Manager • 22 S. Beach Street • Ormond Beach • Florida • 32174 • (386) 676-3200 • Fax (386) 676-3384

CITY MANAGER MEMORANDUM

To: The Honorable Mayor Partington and City Commissioners

Through: Joyce A. Shanahan, City Manager

From: Robert Carolin, Leisure Services Director

Date: March 2, 2021

Subject: Lease Agreement between the City and Casements Guild

Commission Goal: Quality of Life - Other

Introduction

This is a request to approve the lease agreement to allow The Casements Guild to operate a gift shop at The Casements.

Background

The Casements Guild, a 501(C)(3) volunteer organization in support of The Casements, has operated a gift shop in the northwest corner of the first floor of The Casements for several years, providing visitors an opportunity to purchase reasonably priced gift items, books, and cards relating to the historic period of The Casements. The shop has a volunteer manager and treasurer that report to The Casements Guild Board, accounting for all expenses and revenues and the payment of all sales taxes to the proper authorities.

Beginning in 2002, an annual lease was executed between the City and the Guild for this space. This year's lease is identical to the previous lease. The Guild pays \$1.00 annually for this lease.

Discussion

The Casements Guild has served continuously as the volunteer group on behalf of The Casements for the City of Ormond Beach since 1979. The net proceeds from the gift shop and the Guild events are a primary source of the many generous donations and improvements they make to The Casements each year.

Budget Impact

There is no direct impact upon the City budget.

Citizen Impact

This lease provides a way for citizens to do meaningful volunteer work for their community and the City benefits greatly from their gift of volunteerism.

Recommendation

It is recommended that the City Commission approve the lease agreement with The Casements Guild for operation of The Casements Guild Shop.

Attachments:

- 21-52 Casements Guild Lease (P21-0009G) (PDF)
- Casements Guild Lease 2021 (P21-0009G) (PDF)

REVIEWED BY:


Kelly McGuire, Finance Director 2/5/2021


Claire Whitley, Assistant City Manager 2/22/2021

APPROVED BY:


Joyce A. Shanahan, City Manager 2/24/2021

RESOLUTION NO. 2021-52

A RESOLUTION AUTHORIZING THE EXECUTION OF A LEASE AGREEMENT BETWEEN THE CITY AND THE CASEMENTS GUILD FOR THE CITY OF ORMOND BEACH, INC.; 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 City Manager are hereby authorized and directed to execute a Lease Agreement between the City and The Casements Guild For the City of Ormond Beach, Inc., a copy of said Lease Agreement being attached hereto and incorporated herein by reference.

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

APPROVED AND AUTHENTICATED this 2nd day of March, 2021.

BILL PARTINGTON
Mayor

ATTEST:

COLBY J. CILENTO
City Clerk

LEASE AGREEMENT

THIS LEASE AGREEMENT, made and entered into by and between the **CITY OF ORMOND BEACH**, a Florida municipal corporation, (“the City”), and **THE CASEMENTS GUILD FOR THE CITY OF ORMOND BEACH, INC.**, a Florida non-profit corporation (“the Guild”).

WITNESSETH:

NOW THEREFORE, FOR AND IN CONSIDERATION of the covenants, promises, agreements and conditions to be kept and performed by the respective parties hereto, it is hereby mutually stipulated, covenanted and agreed by and between the parties hereto as follows:

1. TERM. The City hereby leases unto the Guild, and the Guild hereby leases from the City, that portion of the Casements building located at 25 Riverside Drive, Ormond Beach, FL 32176, commonly described as the "gift shop" in the Northwest area of the first floor bordered by the front and north entrance lobbies (“the Premises”). The term of this Lease Agreement shall be for one (1) year, from June 1, 2021, through May 31, 2022, inclusive.

2. RENT. The Guild shall pay to the City for its use of the Premises the sum of one (\$1.00) dollar, payable in advance.

3. GENERAL. The Guild shall:

- a.** make no unlawful, improper or offensive use of Premises;
- b.** observe and obey all laws, ordinances, rules and regulations promulgated and enforced by the city and by any other governmental authority having jurisdiction or responsibility over the conduct and operations at the Premises;
- c.** not use or permit the use of the Premises for any purpose or purposes other than as a gift shop with proceeds benefiting the Guild;
- d.** not assign this Lease Agreement, or sublet any part of the Premises, without the advance written consent of the City; and

e. quit and deliver up the Premises and all additions, improvements and alterations made to the same at the expiration of the term of this Lease Agreement, or any earlier term thereof, in good condition.

4. MAINTENANCE AND IMPROVEMENTS. The Guild covenants, promises and agrees, at its own expense, to keep and maintain the Premises, including all additions, improvements, and alterations made thereto, in a neat, clean, sanitary, well-painted condition, and good state of repair, throughout the term of this Lease Agreement. The Guild further promises and agrees to provide the City with notice, and receive approval of the City, prior to any structural changes being made in and to the Premises.

5. INSURANCE. The Guild covenants, promises and agrees that it will, at its own expense, purchase and maintain in full force and effect at all times during the term of this Lease Agreement, and any extension thereof, insurance as set forth in Section Two of Resolution No. 2011-116 as approved by the City Commission on August 16, 2011.

a. Fire Insurance. The Premises shall be insured against loss by fire at the highest insurable value, with a loss payable clause to the City. In case of loss by fire, the monies received in respect to such insurance shall be expended to repair and replace such loss.

b. Proof of Insurance. The Guild shall furnish evidence of all required insurance in the form of Certificates of Insurance which shall clearly outline all hazards covered, as itemized above, the amounts of insurance applicable to each hazard, the expiration dates and shall contain the following language as to cancellation:

“In the event of cancellation of this policy by the insurer or any insured, the company shall give not less than thirty (30) days’ advance written notice to:

City Clerk
City of Ormond Beach
Post Office Box 277
Ormond Beach, FL 32175-0277”

If requested by the City, the Guild shall furnish copies of the insurance contracts to support the Certificates of Insurance. In the event such required insurance shall lapse, the City expressly reserves the right to renew the insurance at the expense of the Guild.

6. INDEMNIFICATION. To the extent allowed by law, the Guild shall indemnify and hold harmless the City and its agents, officers and employees from and against all claims, damages, losses and expenses, including but not limited to attorneys' fees arising out of or resulting from the performance of this Lease Agreement, including any claim, damage, loss or expense caused in whole or in part by any negligent act or omission of the Guild or its members, agents or employees or any subcontractor or anyone directly or indirectly employed by any one of them.

7. DEFAULT. It is expressly agreed between the parties hereto that, if default should be made in the Guild's performance of any of the covenants, agreements or conditions herein contained, and if such default continues after two (2) weeks' notice in writing to the Guild, this Lease agreement shall thereupon immediately terminate and expire, and it shall be lawful for the City, its successors and assigns, at any time thereafter, at its election, without notice or demand, to reenter the Premises either with or without process of law.

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

DATED this ____ day of _____, 2021.

**Signed, Sealed and Delivered
In the Presence of:**

CITY OF ORMOND BEACH

Name: _____

By: _____
BILL PARTINGTON
Mayor

Name: _____

Attest: _____
JOYCE A. SHANAHAN
City Manager

DATED this _____ day of _____, 2021.

**Signed, Sealed and Delivered
In the Presence of:**

**THE CASEMENTS GUILD FOR THE
CITY OF ORMOND BEACH, INC.**

Name: _____

By: _____
SUSAN HANSEN
President

Name: _____

Attest: _____
NANCY BATES
Vice President



CITY OF ORMOND BEACH

City Manager • 22 S. Beach Street • Ormond Beach • Florida • 32174 • (386) 676-3200 • Fax (386) 676-3384

CITY MANAGER MEMORANDUM

To: The Honorable Mayor Partington and City Commissioners

Through: Joyce A. Shanahan, City Manager

From: Kevin Gray, Deputy Public Works Director

Date: March 2, 2021

Subject: Uniform Rental and Cleaning Services Contract

Commission Goal: N/A

Introduction

This is a request to approve a contractual agreement with UniFirst Corporation to provide general employees with uniform rental and cleaning services.

Background

On December 9, 2020, City staff received Request for Proposals, RFP No. 2021-06, for the intent to provide uniform rental and cleaning services to be implemented upon approval, for the duration of three (3) years, and renewable for an additional three (3) year period. UniFirst Corporation is the current provider of uniform rental and cleaning services for the past six (6) year contract periods and provided excellent customer service and support.

Discussion

A committee was formed to evaluate the two (2) respective proposals submitted by Cintas Uniform Services and UniFirst Corporation. The evaluating members included: Robert Meeks, Stormwater Supervisor, Shawn Finley, P.E., Public Works Director and Kevin M. Gray, Deputy Public Works Director. The evaluation committee awarded points in the categories of: Qualifications and Experience (20), Required Forms (20), Quality of Proposed Products (20), and Proposed Price Schedule (40). The total points awarded for each category are noted below:

Corporation	Cintas	UniFirst
Qualifications and Experience	17	19
Required Forms	20	20
Quality of Proposed Products	18	19
Proposed Price Schedule	<u>19</u>	<u>38</u>
	74	96

The requested proposals included ANSI 107-2004, Fluorescent (Lime Green, Orange) colored t-shirts and button up, collared shirts with reflective striping increasing visibility for employees working in or near the roadway, consistent with Florida Department of Transportation (FDOT) standards.

Budget Impact

The pricing structure provided by UniFirst Corporation is the lowest pricing. Sufficient funding of \$40,000 with an annual limit for uniform rental and cleaning services was included in the FY 2021-22 budgets of the General Fund, Stormwater Fund, and Water/Wastewater Fund.

Citizen Impact

The City of Ormond Beach is required by union contract to provide uniform rental and cleaning services to all general employees.

Recommendation

It is recommended that the City Commission authorize staff to award a contract for uniform rental and cleaning services to UniFirst Corporation.

Attachments:

- 21-53 Uniform rental-UniFirst (P21-0015G) (PDF)
- Uniform Rental Agreement (UniFirst Corp P21-0015G) (PDF)
- 2021-06 Unifirst email(PDF)
- RFP 2021-06 Score Totals (PDF)

REVIEWED BY:


Kelly McGuire, Finance Director 2/5/2021


Claire Whitley, Assistant City Manager 2/22/2021

APPROVED BY:


Joyce A. Shanahan, City Manager 2/24/2021

RESOLUTION NO. 2021-53

A RESOLUTION ACCEPTING THE PROPOSAL OF UNIFIRST CORPORATION REGARDING UNIFORM RENTAL AND CLEANING SERVICES; AUTHORIZING THE EXECUTION OF AN AGREEMENT AND PAYMENT THEREFOR; REJECTING ALL OTHER PROPOSALS; AND SETTING FORTH AN EFFECTIVE DATE.

WHEREAS, the City solicited proposals for uniform rental and cleaning services (the "Project") (City RFP No. 2021-06), in accordance with Section 2-300(b), *Code of Ordinances*, and

WHEREAS, the City's evaluation committee evaluated the two (2) proposals received, and determined the most advantageous proposal for the City to be the proposal submitted by UniFirst Corporation, at the prices set forth in its proposal (a copy of said proposal being incorporated in the Agreement which is 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 proposal of UniFirst Corporation and execute an Agreement for the aforescribed services, now therefore,

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

SECTION ONE. The proposal of UniFirst Corporation to provide uniform rental and cleaning services is hereby accepted.

SECTION TWO. The Mayor and the City Manager are hereby authorized and directed to execute an Agreement between the City and UniFirst Corporation for the services at

the prices set forth in its proposal and to pay the cost thereof from the General Fund, Stormwater Fund and Water/Wastewater Fund, with an annual expenditure not to exceed \$40,000.00.

SECTION THREE. All other proposals relative to the aforescribed Project shall be deemed rejected upon the execution of an agreement with UniFirst Corporation.

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

APPROVED AND AUTHENTICATED this 2nd day of March, 2021.

BILL PARTINGTON
Mayor

ATTEST:

COLBY J. CILENTO
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 **UniFirst Corporation** (“Contractor”), 2357 Bellevue Avenue, Daytona Beach, FL 32114, 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 Request for Proposal (“Uniform Rental and Cleaning Services”, RFP 2021-06) dated December 23, 2020, attached hereto as Exhibit “A”, is incorporated herein by reference and is a material part of this Agreement. The Contractor shall fully comply with the terms and conditions described in the attached exhibit.
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 may be renewed for an additional three (3) year period upon mutual agreement of the parties hereto. The City reserves the right to terminate this Agreement at any time with ninety (90) days’ written notice.
3. **Consideration.** Contractor shall provide the products and perform the services at the prices set forth on the attached exhibit. 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. Final payment will be made only after delivery of the products and completion of the City’s final inspection and acceptance.
4. **Delivery.** Contractor shall complete the project within the time frame set forth on the 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 exhibit 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

Contractor
UniFirst Corporation
Christopher Cottle, Location manager
2357 Bellevue Avenue
Daytona Beach, FL 32114

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 the limits of liability specified herein or as required by law, whichever is greater, and shall include 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 coverages.)

- (b) **Commercial General Liability Insurance** shall be written on a coverage form as broad as Insurance Services Office (ISO) Form CG 00 01 11 88, or its successor form, including but not limited to the following coverages (any deviation shall be noted on the Certificates of Insurance), and the CITY OF ORMOND BEACH shall be named as an additional insured:

1. Premises and Operations
2. Owners' & Contractors' Protective
3. Products & Completed Operations
4. Explosion, Collapse & Underground Conditions
5. Blanket Contractual Liability
6. Personal Injury Liability
7. Broad Form Property Damage Endorsement, including Completed Operations
8. Independent Contractors
9. Watercraft--Owned and Non-Owned (if applicable, endorsement must be included in General Liability policy or a separate Protection & Indemnity Policy must be written)
10. Pollution Liability (if applicable)
11. Asbestos Abatement (if applicable)
12. Fire Damage Liability

Certain coverages outlined above may not be required if they do not relate to the Agreement, 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 than the following for all tiers of Contractors and Subcontractors:

<u>Contract Value</u>	<u>Limits (not less than)</u>
0 - 25,000	\$300,000 Each Occurrence \$300,000 General Aggregate* \$300,000 Aggregate Products & Completed Operations \$ 25,000 Fire Damage (any one fire)
\$25,001 - \$250,000	\$500,000 Each Occurrence \$1 Million General Aggregate* \$1 Million Aggregate Products & Completed Operations

	\$ 50,000	Fire Damage (any one fire)
\$250,001 - \$3,000,000	\$1 Million Each Occurrence \$1 Million General Aggregate* \$1 Million Aggregate Products & Completed Operations	
	\$ 50,000	Fire Damage (any one fire)
\$3,000,001 & over	20% of the Value of the Contract [Minimum \$1 Million Each Occurrence/\$2 Million General Aggregate]	

* 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** for the operation, use, maintenance, loading or unloading of automobiles - ISO Symbol 1 (Any Auto) or alternatively a combination of Symbol 2 (Owned Autos), Symbol 8 (Hired Autos), and Symbol 9 (Non-Owned Autos). The coverage limits shall be no less than the following for all tiers of Contractors and Subcontractors:

<u>Contract Value</u>	<u>Limits (not less than)</u>
0 - 25,000	\$300,000 Combined Single Limit
\$25,001 - \$250,000	\$500,000 Combined Single Limit
\$250,001 and over	\$1 Million Combined Single Limit

- (d) **Excess Liability**

For Contracts of \$250,000 or more, and 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 for occurrences insured in this Excess Policy not to exceed \$25,000 and a minimum limit of \$1 Million.

- (e) **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 provide 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 ACORD 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:

**COLBY J. CILENTO, CITY CLERK
22 SOUTH BEACH STREET
ORMOND BEACH, FLORIDA 32175. (386)676-3331
COLBY.CILENTO@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 (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 execution of this Agreement.

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. **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 _____, 2021.

Witnesses:

CITY OF ORMOND BEACH

By: _____

Print Name: _____

BILL PARTINGTON
Mayor

By: _____

Print Name: _____

JOYCE SHANAHAN
City Manager

DATED this ____ day of _____, 2021.

Witnesses:

UNIFIRST CORPORATION

Print Name: _____

By: _____

Print Name: _____

Title: _____

Print Name: _____

Attest: _____

Print Name: _____

Title: _____



City of Ormond Beach

22 South Beach Street
Ormond Beach, Florida 32174
Telephone (386) 676-3223
Fax (386) 676-3374

REQUEST FOR PROPOSALS

PROPOSER ACKNOWLEDGEMENT FORM

THIS FORM MUST BE COMPLETED AND RETURNED WITH YOUR PROPOSAL

RFP TITLE: **Uniform Rental and Cleaning Services**

RFP NUMBER: **2021-06**

RFP OPENING DATE & TIME: **January 6, 2021 2:00 PM**

RFP OPENING LOCATION: **Training Room (breezeway), Ormond Beach City Hall 22 S. Beach Street**

PRE-SUBMITTAL MEETING: **N/A**

PRE-SUBMITTAL MEETING LOCATION:

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

PROPOSER'S NAME: UniFirst Corp.

PROPOSER'S MAILING ADDRESS: 2357 Bellevue Ave

CITY-STATE-ZIP: Daytona Beach, FL 32114

F.E.I.N.: 042103460

PHONE NUMBER: 386 777 5440 FAX NUMBER: _____

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 a proposal 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 Chris Cottle
AUTHORIZED SIGNATURE (MANUAL)
Chris Cottle
NAME (TYPED)
Location Manager
TITLE
12/23/2020
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 proposal or proposal on a contract to provide any goods or services to a public entity, may not submit a proposal or proposal on a contract with a public entity for the construction or repair of a public building or public work, may not submit proposal 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 PROPOSALS 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 proposal opening, whichever occurs first. Section 119.071, F.S.

DISTRIBUTION OF PROPOSALS AND RFP'S: The City uses the services of Onvia DemandStar (www.demandstar.com) to distribute its proposals and RFP's on-line on the Internet. If you have received a copy of this RFP from any source other than Onvia 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. Telephone, telefax and telegraph Submittals 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: Any submitter wishing to receive a 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. 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.

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.

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 Proposalder(s) awarded contracts from this proposal 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 proposalder(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 119.10, shall subject the 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:

COLBY CILENTO, CITY CLERK

22 SOUTH BEACH STREET

ORMOND BEACH, FLORIDA 32174

(386)676-3297

COLBY.CILENTO@ORMONDBEACH.ORG

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, and Drug Free Workplace Certificate.

I. OBJECTIVE OF THE REQUEST FOR PROPOSALS

The City of Ormond Beach invites qualified Uniform providers to submit a Request for Proposal for an annual contract for **Uniform Rental and Cleaning Services, RFP 2021-06**. Clean working uniforms are an important part of the CITY'S image and morale with its employees. The VENDOR is expected to return all garments to the DEPARTMENT in a usable manner as described herein.

TERM OF AGREEMENT:

The purpose of this Request for Proposal is to obtain competitive proposals to establish a **three (3) year** contract for the rental and cleaning of uniforms by the City of Ormond Beach, hereafter referred to as the "Department". The contract will become effective on the date the successful proposer(s) is approved for award and will expire three years from that date. After the award, said proposer(s) will be referred to as the "Vendor(s)". The City reserves the right to terminate this contract at any time with a ninety (90) days written notice.

RENEWAL:

Upon mutual agreement, the Customer and the Contractor may renew the Contract, in whole or in part, for a period that may not exceed 3 years or the term of the contract, whichever period is longer. Any renewal shall specify the renewal price, as set forth in the solicitation response. The renewal must be in writing and signed by both parties, and is contingent upon satisfactory performance evaluations and subject to availability of funds.

II. SCOPE OF SERVICES

TAXES:

The Contractor is responsible for paying any and all taxes associated with this agreement.

REQUIRED SERVICES:

- A. Initial fittings shall be made upon receiving a Notice to Proceed from the DEPARTMENT after contract execution.
- B. VENDOR shall provide all uniform services necessary to outfit each crew member as specified herein. The number of personnel may vary during the course of the contract. No additional fees, other than the unit price per employee per week, shall be charged should there be an increase or decrease in personnel.
- C. The VENDOR will provide timely service and uniforms requiring repair/replacement will be returned to the employee for use within seven (7) calendar days.

UNIFORMS

- A. Uniforms are to be new, of current manufacture, and will carry the standard warranties prescribed for each specified fabric, at the start of the contract term and obtained, with an initial fitting and/or replacement at each year for term of the contract (see VII. UNIFORM DELIVERY), for personnel assigned to Maintenance and Centralized Location Units, hereinafter referred to Location Unit (LU). Additional fittings shall be performed as employees are hired, and/or change uniform status at no additional cost to the DEPARTMENT.

1. Uniform Markings consisting of the Department name/City Logo and employee name and title, shall be on all of the shirts. No other modifications will be made to the uniform. See attached page titled, "Exhibit "A-1", Emblems and Drawings", for detailed markings and City Logo.

- B. Uniforms shall have the following specifications:

1. SHIRTS (ANSI 107-2004 Fluorescent Lime Green/Orange/Gray Colored) - The shirts provided shall be no-iron work shirts, which are fully cut with long tails, having extra- strength buttons, permanent stays in collar, are double-needle sewn, and have soil- release finish. The shirts shall be 65% polyester and 35% cotton (Fabric: minimum 4-1/4 oz. per square yard) or 100% cotton (Fabric: minimum 5 oz. per square yard) at the option of the DEPARTMENT. The shirts shall be either long or short sleeve, at the option of the DEPARTMENT for each employee. Shirts will have one or two patch pockets (Pockets: Single Needle Hemmed and Set Patch Pocket.).
2. T-SHIRTS – The T-shirts provided will be 100% Polyester, orange\lime green in color, with reflective stripe and front pocket in accordance with ANSI 107-2004.
3. PANTS\SHORTS (All Employees) - The pants\jeans\shorts provided shall be without cuffs, and reinforced with bar-tack at all points of strain. The pants\jeans\shorts shall be either male or female, cargo or relaxed fit styled, as appropriate, for each employee. The color of all pants\jeans\shorts shall be navy blue. The pants\jeans\shorts shall be 65% polyester and 35% cotton (Fabric: minimum 7-3/4 oz. per square yard) or 100% cotton (Fabric: minimum 8-1/4 oz. per square yard) at the option of the DEPARTMENT (Pockets: Single Needle Hemmed and Set Patch Pocket).
4. JACKETS - The new jacket shall match the pants in color, type of material and construction. It shall have long sleeves, and have provisions for a new, long-sleeved "zip-in" liner. The breast pockets (if any) on the jacket must have button-down flaps. Jacket liners will be either black or navy blue (Pockets: Single Needle Hemmed and Set Patch Pocket).

5. PATCHES – The VENDOR will provide and sew new patches of the cloth sew-on type on all shirts. No other method of attachment will be allowed. The designs and colors desired are shown on Exhibit “B”, included with this specification. The VENDOR will verify stitch names and titles of personnel on the patches. The VENDOR will verify names and titles at the time of the fittings.
- C. The successful-proposing VENDOR (hereinafter referred to as the “VENDOR”) shall lease new uniform shirts, pants, shorts, and jeans, in both male and female styles, in all sizes, including non-standard sizes. The VENDOR shall visit each Delivery Location after contract execution, will measure and fit the appropriate personnel for new uniform garments for all employees under this agreement including new employees, employees who change in uniform size/status (i.e., promotion, demotion, etc.), as needed, at no additional cost to the DEPARTMENT with the exception of new jacket/jacket liner purchases at the established Proposal Rate. Employees requiring maternity wear will be fitted for uniforms throughout the term of their pregnancy. Newly hired employees and/or change in uniform size/status employees will receive uniforms no later than fourteen (14) calendar days following measurement and fitting.
 - D. VENDOR must have a reliable method to distinguish and identify each employee’s personnel uniforms. Identification method will also include the date the garment is issued to the Department employee.
 - E. The VENDOR shall provide each delivery location and the contract/project manager with the name and contact information for their respective representative.
 - F. The uniform program consists of the VENDOR providing one clean and odor-free pair of pants and one clean and odor-free shirt (or one clean and odor-free maternity uniform (smock and pants) as applicable) for each employee for each day of the employee’s workweek; and one extra set.
 - a. The VENDOR shall supply receipts detailing number of uniform garments for each LU delivery.
 - b. The initial delivery shall include eleven (11) (for 5-day work week) or nine (9) (for 4-day work week) uniform garment sets (shirt/pant, T-shirt/pant, shirt/shorts, T-shirt/shorts for each employee required to be in uniform at each LU location.
 1. Shirts, ANSI T-Shirts\Shirts, shorts, and pants shall be cleaned by the VENDOR, with weekly pickup and cleaning of soiled shirts and pants and delivery of clean and odor-free shirts and pants to the individual locations. The VENDOR will receive a signed and dated receipt from each LU upon pickup for number and type of uniform pieces to be cleaned.
 - G. The jackets and jacket liners shall be new, and sold to the DEPARTMENT on an as- needed basis.

1. Existing jackets and jacket liners from other companies will be bar coded as per this contract. Existing jackets will not be held under the repair or replacement criteria for the VENDOR.
2. Jackets and jacket liners shall be picked-up, cleaned and delivered by the VENDOR on an as-needed basis during regularly scheduled pickups and deliveries.

REPAIRS

A. The VENDOR will repair or replace shirts, ANSI T-Shirts, pants, jeans, and/or shorts, which are unfit for use caused by normal wear and tear this shall include garments that have stains, snags, fading or welder burns, at no additional cost to the Department. All replacement garments will be new. The decision to repair and/or replace garments will be at the sole discretion of the Department. If applicable, invoicing will occur after the garment (s) has been delivered and put into service. All repaired garments shall not detract from the appearance quality. All repair items shall be noted, in written detail, on VENDOR supplied tags, dated and signed.

1. The VENDOR shall supply tags (to each LU) for uniform garments requiring repair. Tags will identify (a) repairs, (b) LU, and (c) the date submitted for repair. Repairs shall be completed and returned to the LU with the next regularly scheduled delivery. The LU will sign and date said delivery.

REPLACEMENT

A. At the discretion of the DEPARTMENT, the VENDOR shall replace shirts, ANSI t-shirts, shorts, and pants at the proposal priced replacement cost per item on a pro-rated basis, as follows: Uniforms in service six (6) months or less will be paid at 100%, seven (7) months to no greater than twelve (12) months will be paid at 75%, thirteen (13) months to no greater than eighteen (18) months will be paid at 50% , nineteen (19) months to no greater than twenty-four (24) months will be paid at 25%, twenty-five (25) months to no greater than thirty (30) months will be paid at 15%, and thirty-one (31) months to thirty-six (36) months will be paid at 5% of the replacement cost submitted on the Proposal Response. All replaced items shall be noted, in written detail, on VENDOR supplied tags, dated and signed. The DEPARTMENT will not pay any portion of the replacement costs for uniforms requiring replacement as a result of the VENDORS' actions.

1. The VENDOR shall supply tags (to each LU) for uniform garments requiring replacement. Tags will identify (a) damage to garment, (b) LU, and (c) the date submitted for replacement. Replacement uniforms shall be returned to the LU with the next regularly scheduled delivery. The LU will sign and date said delivery.

ORDERING UNIFORMS

A. This is a Contract to which no monies are initially attached and under which all requests for uniform services are to be initiated and filled through the use of Orders

Forms as and when needed throughout the Term of this Contract.

1. Each LU within the DEPARTMENT (see attached exhibit labeled A-2) will issue an Order Form to the VENDOR establishing the existing Uniform needs of their LU.
 - a. Each employee will record his or her choice of (1.) Fabric, (2.) Length of Sleeve, (3.) Type of Pants/Shorts, (4.) Type of Shirt on an individual order form; each employee will sign and date said individual order form.
2. Each Order Form will reference the phone number, name, and address of the contact person receiving delivery at the LUs named herein. A Corrected Order Form will be issued if the original pertinent Uniform information changes; for purposes of clarity, said Corrected Order Form will reference the corresponding date of the original Order Form.
3. Orders for uniforms may be placed by: A) Written Order, B) Corrected Order, C) Fax Order, dated and signed by authorized DEPARTMENT personnel. All orders will also include the name and address of the purchaser and LU.

UNIFORM DELIVERY

- A. Uniform delivery (including all shirts, pants, shorts, and jackets; shall commence within sixty (60) days after the Notice to Proceed is issued from the DEPARTMENT's Office.

Said sixty (60) day start-up period shall be used for initial fitting, fabrication, and preparation of uniforms and any other preparatory work that must be performed by the VENDOR in order to provide uniforms in accordance with the Contract Specifications. The sixty (60) calendar day start-up period will not apply to Contract Renewal or Extensions.

The VENDOR shall pick up soiled uniforms and deliver clean uniforms once a week. The day of the week will be determined by each LU Designee or Assigned personnel and the VENDOR.

- B. Pick up and delivery schedules that fall within City Holidays and/or Natural Disasters will need to be coordinated and rescheduled between the DEPARTMENT and VENDOR.

INSPECTION

- A. All uniform garments listed in the specification, in accordance with Section III. B , delivered to the DEPARTMENT not in compliance with the requirements of the specifications given herein or found to be poorly manufactured, will not be accepted, but returned to the VENDOR, at their expense, for immediate replacement (within forty-eight (48) hours, excluding Saturday and Sunday). Replacement of all garments found defective shall be made without cost to the DEPARTMENT.

1. The VENDOR will be responsible for the inspection of the garments at the time of pickup, before leaving said facility. Any damages found at this time of said inspection must be brought to the attention of the LU before leaving the facility. Proper repair or replacement decision will be identified at that time. If no damages are reported at that time, it will be considered that all uniforms are in good serviceable order.
 2. The LU will be responsible for the inspection of the garments at the time of delivery, before the VENDOR leaves said facility. Any damages found at this time of said inspection must be brought to the attention of the VENDOR before the VENDOR leaves the facility. Proper repair or replacement decision will be identified at that time.
- B. All items cleaned and returned, not meeting specifications, in accordance with Section III. B, or found to be poorly cleaned, will be returned to the VENDOR and tagged with written explanation. A suitable replacement for any such item must be delivered within two (2) working days of return, at no additional cost to the DEPARTMENT.
- C. Failure of the VENDOR to perform services and/or deliver goods, meeting the delivery times established pursuant to this Contract, shall constitute a "Performance Deficiency" on the VENDOR'S part. Said Performance Deficiency will subject the VENDOR to a Reduction in Compensation at the following terms:
1. Should the Performance Deficiency equal five (5) percent or more of a total delivery for a one (1) month period per delivery location, the VENDOR shall deduct an equal percent (in total) from the weekly invoice for that delivery location regardless if the deficiencies are corrected.
 2. Should the VENDOR achieve Performance Deficiencies for two(2) consecutive months or three (3) in a twelve (12) month period, in addition to the invoice reductions as noted above, the VENDOR will submit a detailed plan to the DEPARTMENT on how to ensure Performance Deficiencies will be corrected and prevented from recurring. This plan shall be submitted within thirty (30) days from the second (2nd) or third (3rd) deficiency as noted above. Failure to submit a plan will result in withholding of VENDORS' payment (s), for that specific location, until the DEPARTMENT receives a plan.
 3. Continued Performance Deficiencies or failure to follow the improvement plan by the VENDOR will be grounds for the DEPARTMENT to terminate this Contract in accordance with the terms and conditions established herein.
 4. Compensation Reductions relating to jackets will be calculated in the same manner as described in Section VIII.C above.

INVOICING

- A. Invoicing each LU for cleaning services shall show a "Per 5-day week unit price", which is applicable for services actually performed. The VENDOR will show the actual weekly number of pants, jeans, shorts, shirts, and ANSI T- Shirts\shirts cleaned and returned on each weekly invoice. The VENDOR will show the actual weekly number of pants, jeans, shorts, shirts, and ANSI T-Shirts rented on each weekly invoice. When the VENDOR is invoicing each LU for jackets, the VENDOR will show a "Per Unit Price for goods actually delivered to the LU." At all times, invoicing must include dates of service, and the location of the LU. The driver shall have the ability to adjust invoices at the LU based on what has been delivered and accepted by the DEPARTMENT. The DEPARTMENT reserves the right to adjust invoice amount and quantities at their sole discretion.
- B. The billing for uniforms rented or sold to the DEPARTMENT will be done to each LU location. The VENDOR shall be entitled to bill no more frequently than weekly.
- C. Failure of the VENDOR to perform services and/or deliver goods meeting delivery times, in accord with paragraph VIII. C above will result in a Reduction of Compensation as described therein.
- D. The Reduction, as stated in paragraph VIII. C above will be deducted from the next invoice presented by the VENDOR for payment.
- E. All proper invoices will be paid with through the Procurement System in accordance with Departmental Procedures.

DISPUTE RESOLUTION

- A. Any issue that arises will resolved based on the following:

DEPARTMENT	VENDOR
LU SECTION REPRESENTATIVE	DRIVER
DEPARTMENT	VENDOR
CONTRACT/PROJECT MANAGER OR DESIGNEE	VENDOR CONTRACT MANAGER

- B. If a resolution cannot be achieved at the above levels, the final decision will be made by the Director of Public Works/Administrator.

Note: Examples of disputes could include but not be limited to the following:

1. If the DEPARTMENT or the VENDOR caused damage to the garment(s)
2. Should the DEPARTMENT or the VENDOR be responsible for replacement cost of the damages garment(s)
3. Amount of the replacement cost based on pro-rated cost

NOTICE TO PROCEED

- A. The DEPARTMENT shall issue the Notice to Proceed upon execution of the Contract.

WARRANTY

- A. The successful VENDOR must provide for trial fittings and size exchanges until the employee is satisfied with the sizes provided. No size warranty is required on jackets or liners after they have been worn. The VENDOR shall correct any problems due to defective materials and workmanship of rental items by providing new replacements at no additional cost to the DEPARTMENT.
 1. Jackets will be warranted as follows: The expected usable life of the jacket and liner is three (3) years. At the discretion of the DEPARTMENT, jackets purchased from the VENDOR shall be replaced and the DEPARTMENT shall compensate the VENDOR as follows: 0 months to 6 months at 0%, 7 months to 12 months at 25%, 13 months to 24 months at 50%, 24 months to 30 months at 75%, and 30 months to 36 months at 100%.

SAMPLES

- A. Each proposer will be required to furnish with their proposal offer one new sample of each item of clothing (garment) proposal for lease or sale, plus specification sheets and literature for each item. Each item must be as specified herein and must be identical to the proposed deliverable items. Each sample furnished must be identified as to which VENDOR, Manufacturer and Proposal Number. Samples may be tested for Proposal Specification requirements. Samples shall be submitted at no cost to the DEPARTMENT. The samples from the successful proposal will be retained by the DEPARTMENT to be used in quality assurance standards and as models for acceptance inspection. All others will be returned to the unsuccessful Proposal upon request.

PROPOSAL SCHEDULE

1. <u>RENTAL AND CLEANING</u>				RENTAL	+	CLEANING	-	TOTAL PRICE
				\$		\$		\$
a.	Gray Short/long sleeve shirt (65/35)			\$.14 / .16		\$ 0		\$.14 / .16
b.	Gray Short/long sleeve shirt (100% cotton)			\$.20 / .23		\$ 0		\$.20 / .23
c.	ANSI Flourescent Green short/long sleeve shirt			\$.28 / .32		\$ 0		\$.28 / .32
d.	ANSI Flourescent Orange short/long sleeve shirt			\$.28 / .32		\$ 0		\$.28 / .32
e.	ANSI Flourescent Orange "T" Shirt			\$.19		\$ 0		\$.19
f.	ANSI Flourescent Green "T" Shirt			\$.19		\$ 0		\$.19
h.	Gray Pants (65/35)			\$.22		\$ 0		\$.22
i.	Gray Pants (100% cotton)			\$.28		\$ 0		\$.28
j.	Gray Shorts (65/35)			\$.17		\$ 0		\$.17
k.	Gray Shorts (100% cotton)			\$.28		\$ 0		\$.28
l.	Scraper Mat (3x5) Black			\$ 1.20		\$ 0		\$ 1.20
m.	Mat Nylon/Rubber (3x4) Charcoal			\$ 1.35		\$ 0		\$ 1.35
n.	Shop Towel Plain Red (18"x18")			\$.05		\$ 0		\$.05
			Grand Total:	\$ 4.83 / 4.96		\$		\$ 4.83 / 4.96
2. <u>REPLACEMENT COST FOR UNIFORMS (with approval from the Department)</u>								
				REPLACEMENT COSTS				
a.	Gray Short/long sleeve shirt (65/35)			\$ 11.48 / 13.70		N/A		N/A
b.	Gray Short/long sleeve shirt (100% cotton)			\$ 17.01 / 18.52		N/A		N/A
c.	ANSI Flourescent Green short/long sleeve shirt			\$ 26.09 / 29.91		N/A		N/A
d.	ANSI Flourescent Orange short/long sleeve shirt			\$ 26.09 / 29.91		N/A		N/A
e.	ANSI Flourescent Orange "T" Shirt			\$ 25.17		N/A		N/A
f.	ANSI Flourescent Green "T" Shirt			\$ 25.17		N/A		N/A
h.	Gray Pants (65/35)			\$ 19.25		N/A		N/A
i.	Gray Pants (100% cotton)			\$ 23.32		N/A		N/A
j.	Gray Shorts (65/35)			\$ 15.05		N/A		N/A
k.	Gray Shorts (100% cotton)			\$ 25.05		N/A		N/A
l.	Scraper Mat (3x5) Black			\$ 103.22		N/A		N/A
m.	Mat Nylon/Rubber (3x4) Charcoal			\$ 81.65		N/A		N/A
n.	Shop Towel Plain Red (18"x18")			\$ 1.20		N/A		N/A
			Grand Total:	399.01 / 410.48				

3.	<u>PURCHASE OF NEW JACKETS</u>					
				COST	N/A	N/A
a.	Jacket/zip-in liner			\$ 37.64	N/A	N/A
b.	Jacket Hip Length/zip-in liner			\$ 18.67	N/A	N/A
4.	<u>CLEANING OF JACKETS AND LINERS</u>					
				COST	N/A	N/A
a.	Jackets with liner			\$.40	N/A	N/A
b.	Jacket Hip length with liner			\$.40	N/A	N/A
c.	Cleaning of existing jacket with liner			\$.40	N/A	N/A
					N/A	N/A

ALL PRICES ARE FOR A SINGLE UNIT OF ISSUE

WE HAVE APPROXIMATELY 105 EMPLOYEES TO BE ISSUED 11 SETS (SHIRT AND PANT)
OR ANY COMBINATION OF SHORT OR LONG SLEEVE OR T-SHIRT AND PANT OR SHORT

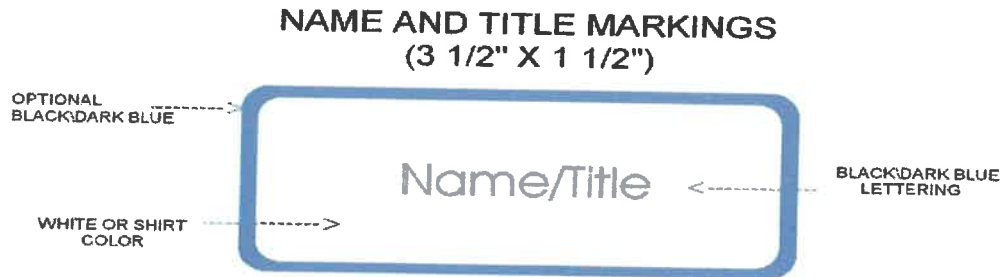
EXHIBIT "A-1" EMBLEMS

& DRAWINGS

LOGO



PLACE ON (UPPER) LEFT POCKET



NAME RIGHT SIDE ABOVE SHIRT POCKET
TITLE LEFT SIDE ABOVE SHIRT POCKET

EXHIBIT "A-2" Local Unit Locations

LOCAL UNIT	LOCAL UNIT LOCATION
Fleet Operations	500 N. Orchard St Ormond Beach
Public Works Operations	501 N.Orchard St Ormond Beach
Waste Water Operations	550 N. Orchard St. Ormond Beach
Water Operations	301 Jefferson St. Ormond Beach F
Airport Sports	700 Hull Road Ormond Beach FL
Nova Rec.	400 N. Nova Rd. Ormond Beach

III. EVALUATION AND 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:

Section 1—Qualifications and Experience:

The Proposer shall include qualifications and past performance of the firm/individual(s) who will provide the services, including resumes. The submission must include: The Proposer shall include qualifications and past performance of the firm/individual(s) who will provide the services, including resumes. The submission must include:

List three (3) references for which your company provided similar services as requested in this RFP. List the names of the client (name, address, telephone number, fax numbers and project title. The list should include brief description of similar work satisfactorily completed, including location, dates of contracts, names and addresses of clients/owners, and contact person.

List of personnel, by name and title, contemplated to perform the work for each position described. Include statement of credentials, education, experience, certifications, licenses and all pertinent information to demonstrate capabilities.

Section 2—Required Forms:

The following completed documents must be provided with your proposal:

Proposer Acknowledgment Form, RFP response form, Conflict, Non-Conflict of Interest Statement litigation statement and the Drug-free workplace certification.

Section 3—Quality of Proposed Product:

As stated previously, each proposer will be required to furnish with their proposal offer one new sample of each item of clothing (garment) proposal for lease or sale, plus specification sheets and literature for each item

Section 4—Proposal Price Schedule:

Competitiveness of proposed fee, the City reserves the right to negotiate all pricing with the successful firm and to eliminate any proposal cost item(s) that is cost prohibitive to this project.

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 the Public Works Director, Accounting Manager, and Deputy Director of Public Works. 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

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:

Qualifications and Experience (20 points)

Required Forms (20 points)

Quality of Proposed Product (20 points)

Proposal Price Schedule (40 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 **January 6, 2021 2:00 PM**

Inquiries: Technical questions may arise as firms are preparing their proposals. The City will accept written inquiries regarding this RFP until seven (7) working days prior to the RFP due date. 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 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: Submit one (1) signed original of the complete proposal packet along with one (1) electronic pdf format copy on either a CD or thumb drive with all required attachments, by the closing date and time. Both versions must be included in the sealed envelope. Submit proposals to: Rob Hart, Purchasing Coordinator, City Hall, 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.

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

Registration Requirements

VENDOR'S 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.

State Certified/Registered Contractors

All registered contractors must be registered with Volusia County. Volusia County Contractor Licensing, 123 W. Indiana Ave., Rm 203, Deland, Fl. 32720 (386) 736-5957 Opt. 2 –(386) 248-8158 Fax. Certified Contractors have the option of registering with Volusia County, or providing information directly to the business tax receipt official.

If you have any questions regarding the above requirements, please contact the business tax receipt official at (386) 676-3370.

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 proposal, 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 the following, or substantially similar, provisions:

- 1. **Hold Harmless**

(a) General

The City, its agents, employees, and officials, both elected and appointed, shall be held harmless from and against all claims for bodily injury, sickness, disease, death or personal injury or damage to property or loss of use resulting therefrom, arising out of the agreement, contract or lease unless such claims are a result of the City's sole negligence, as determined by the final arbiter of such claim.

(b) Professional Services Contracts

The City, its agents, employees, and officials, both elected and appointed shall be held harmless from and against all claims for bodily injury, sickness, disease, death or personal injury or damage to property or loss of use resulting therefrom arising out of performance of the agreement or contract, unless such claims are a result of the City's sole negligence, as determined by the final arbiter of such claim.

The City, its agents, employees, and officials, both elected and appointed shall also be held harmless from and against all claims for financial loss with respect to the provision of or failure to provide professional or other services resulting in professional, malpractice, or errors and omissions liability arising out of performance of the agreement or contract, unless such claims are a result of the City's sole negligence, as determined by the final arbiter of such claim.

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 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 88, or its successor form, including but not limited to the following coverage (any deviation shall be noted on the Certificates of Insurance):

- a. Premises and 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 than the following amounts for all tiers of Contractors and Subcontractors:

<u>Contract Value</u>	<u>Limits (not less than)</u>
0 - \$25,000	\$300,000 Each Occurrence \$300,000 General Aggregate * \$300,000 Aggregate Products & Completed Operations \$ 25,000 Fire Damage (any one fire)
\$25,001 - \$250,000	\$500,000 Each Occurrence \$1 Million General Aggregate*

	\$1 Million Aggregate Products & Completed Operations \$ 50,000 Fire Damage (any one fire)
\$250,001 - \$3,000,000	\$1 Million Each Occurrence \$1 Million General Aggregate* \$1 Million Aggregate Products & Completed Operations \$ 50,000 Fire Damage (any one fire)
\$3,000,001 & over	20% of the Value of the Contract [Minimum \$1 Million Each Occurrence/\$2 Million General Aggregate]

* 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 for the operation, use, maintenance, loading or unloading of automobiles - ISO Symbol 1 (Any Auto) or alternatively a combination of Symbol 2 (Owned Autos), Symbol 8 (Hired Autos), and Symbol 9 (Non-Owned Autos).

<u>Contract Value</u>	<u>Limits (not less than)</u>
0 - \$25,000	\$300,000 Combined Single Limit
\$25,001 - \$250,000	\$500,000 Combined Single Limit
\$250,001 and over	\$1 Million Combined Single Limit

- (d) Excess Liability

For Contracts of \$250,000 or more, and 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 for occurrences insured in this Excess Policy not to exceed \$25,000 and a minimum limit of \$1 Million.

- (e) 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 carriers; 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 and Automobile Liability policies of insurance and certificates thereof.

**City of Ormond Beach
Request for Proposals (RFP)
Uniform Rental and Cleaning Services
(RFP No. 2021-06)**

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 proposing; and SUBMITTER has not sought by collusion to obtain for himself any advantage over any other Proposer or over the CITY.

THIS RESPONSE IS SUBMITTED BY:

COMPANY NAME: UniFirst Corporation

VENDOR/CONTRACTOR LICENSE NUMBER: 042103460

ADDRESS: 2357 Brilleve Ave.
Daytona Beach FL 32114

PHONE NO.: 386-777-5440 FAX NO.: _____

SUBMITTER'S NAME: Christopher A. Cottle
 (Typed or Printed in Ink)

TITLE: Location Manager

AUTHORIZED SIGNATURE: I, Christopher A. Cottle 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 WILL RESULT IN REJECTION OF YOUR PROPOSAL.

**City of Ormond Beach
Request for Proposals (RFP)
Uniform Rental and Cleaning Services
(RFP No. 2021-06)**

CITY OF ORMOND BEACH, FLORIDA

**CONFLICT, NON-CONFLICT OF INTEREST STATEMENT
LITIGATION STATEMENT**

- ☒ 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.
-
- ☒ 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.

UNIFirst Corporation
COMPANY NAME

Christopher A. Little
AUTHORIZED SIGNATURE

Christopher A. Little
NAME (PRINT OR TYPE)

Location Manager
TITLE

12/23/2020
DATE

**City of Ormond Beach
Request for Proposals (RFP)
Uniform Rental and Cleaning Services
(RFP No. 2021-06)**

**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 proposal 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 proposals 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 proposal 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 proposal, 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

UNIFIRST Corporation
Christopher G. Gotta
Christopher A. Gotta
Location Manager



High Visibility Pocket T-Shirts

ANSI Type R or P, Class 2, 100% polyester



UniWeave® Soft Comfort Long or Short Sleeve Uniform Shirts

4.25 oz. 65/35 poly/cotton



100% Cotton Long or Short Sleeve Shirts

6 oz. 100% cotton twill



Spotlite LX® High Visibility Long or Short Sleeve Work Shirts

ANSI Type R or P, Class 2, 4.1 oz. 65/35 poly/cotton



SofTwill® Flat-Front Uniform Shorts or Pants

7.5 oz. 65/35 poly/cotton twill



100% Cotton Flat-Front Pants

8.5 oz. preshrunk 100% cotton twill



UniWear® Permalined Hip Jackets

7.5 oz. 65/35 poly/cotton twill shell



UniWear® Zip-In/Out Liners

100% polyester

UniFirst references

1. City of New Smyrna Beach

Kris Jones

Human Resources Assistant

Utilities Commission, City of New Smyrna Beach

Phone: (386) 424-3060 | Fax: (386) 424-2700 | E-mail: kjones@ucnsb.org

Mailing Address: P.O. Box 689, New Smyrna Beach, FL. 32170

2. Brevard County Public Schools

Mr. Nick Canjar

Buyer II

Brevard Public Schools

2725 Judge Fran Jamieson Way

Viera, FL 32940

321-633-1000 x630

Canjar.James@Brevardschools.org

3. City of Holly Hill

Beth Wrenn

Administrative Assistant

Department of Public Works

453 LPGA Blvd.

Holly Hill, FL 32117

T-386-248-9463

F-386-248-9499

bwrenn@hollyhillfl.org

From: Zachary Kizelewicz
To: Hart, Rob
Subject: RE: City of Ormond Beach RFP 2021-06
Date: Thursday, January 7, 2021 12:06:11 PM
Attachments: image003.png
 image004.png
 image005.png
 image006.png
 image007.png
 image008.png

[External Email-Use Caution] - OB/IT Helpdesk

Yes. That is pricing for 1 piece. Please multiply by 11.

Thank You

Zack Kizelewicz

Route Service Manager

UniFirst Corporation
 2357 Bellevue Avenue
 Daytona Beach, FL 32114
 Tel: 386.777.5440 option 2
 Fax: 386.777.5442
zachary_kizelewicz@unifirst.com



<https://unifirst.com/shop-catalogs/>

From: Hart, Rob <Rob.Hart@ormondbeach.org>
Sent: Wednesday, January 6, 2021 4:16 PM
To: Zachary Kizelewicz <Zachary_Kizelewicz@Unifirst.com>
Subject: City of Ormond Beach RFP 2021-06

Hi Zach,

There was an addendum to this RFP that clarified that the prices for Rental and Cleaning the garments were for an individual unit of 11 garments per employee. It does not appear that your organization downloaded the addendum. Can we make the assumption that the prices listed below would be multiplied by 11 to get the correct per unit price.

If you are not the correct person, please forward and copy me or let me know whom to address this to. Thanks!

1.	RENTAL AND CLEANING	RENTAL	+ CLEANING	TOTAL PRICE
		\$	\$	\$
a.	Gray Short/long sleeve shirt (65/35)	\$.14 / .16	\$ 0	\$.14 / .16
b.	Gray Short/long sleeve shirt (100% cotton)	\$.20 / .23	\$ 0	\$.20 / .23
c.	ANSI Flourescent Green short/long sleeve shirt	\$.28 / .32	\$ 0	\$.28 / .32
d.	ANSI Flourescent Orange short/long sleeve shirt	\$.28 / .32	\$ 0	\$.28 / .32
e.	ANSI Flourescent Orange "T" Shirt	\$.19	\$ 0	\$.19
f.	ANSI Flourescent Green "T" Shirt	\$.19	\$ 0	\$.19
h.	Gray Pants (65/35)	\$.22	\$ 0	\$.22
i.	Gray Pants (100% cotton)	\$.28	\$ 0	\$.28
j.	Gray Shorts (65/35)	\$.17	\$ 0	\$.17
k.	Gray Shorts (100% cotton)	\$.28	\$ 0	\$.28
l.	Scraper Mat (3x5) Black	\$ 1.20	\$ 0	\$ 1.20
m.	Mat Nylon/Rubber (3x4) Charcoal	\$ 1.35	\$ 0	\$ 1.35
n.	Shop Towel Plain Red (18"x18")	\$.05	\$ 0	\$.05
	Grand Total:	\$ 4.83 / 4.96	\$	\$ 4.83 / 4.96

Rob Hart

Purchasing Coordinator
 City of Ormond Beach Finance Department
 22 S Beach Street
 Ormond Beach FL 32174
 Direct 386-676-3223



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RFP Evaluation Summary

Project: Uniform Rental and Cleaning Services

RFP Number: 2021-06

Date & Time: January 19th at 8:00am

The RFP's were scored on the following criteria:

Qualifications and Experience (20 points)

Required Forms (20 points)

Quality of Proposed Product (20 points)

Proposed Price Schedule (40 points)

Summary																		
Firm	Finley	Gray	Weeks	Qualifications and Experience (60 points max)	Finley	Gray	Weeks	Required Forms (60 points max)	Finley	Gray	Weeks	Quality of Proposed Product (60 points max)	Finley	Gray	Weeks	Proposed Price Schedule (120 points max)	**Total	Rank
Cintas	18	16	17	51	20	20	20	60	20	18	17	55	24	15	20	59	225	2
Unifirst	18	19	20	57	20	20	20	60	20	19	18	57	40	35	38	113	287	1 *

Unifirst recommended

Rob Hart
Purchasing Coordinator



CITY OF ORMOND BEACH

City Manager • 22 S. Beach Street • Ormond Beach • Florida • 32174 • (386) 676-3200 • Fax (386) 676-3384

CITY MANAGER MEMORANDUM

To: The Honorable Mayor Partington and City Commissioners
Through: Joyce A. Shanahan, City Manager
From: Shawn Finley, Public Works Director
Date: March 2, 2021
Subject: FDEP Consent Order OGC File No. 20-1457

Commission Goal: Water Quality and Environment - Other

Introduction

This resolution is to affirm the City Manager's execution of a consent order between the Florida Department of Environmental Protection (FDEP) and the City, for the mutual resolution of regulatory exceedances and unauthorized discharges associated with the City's Water Reclamation Facility (WRF) during the previous annual period.

Background

Over the last several months, the City and FDEP have been working toward resolution of the following incidents that are included in the attached consent order and described below.

Gravity sewer main failure, Clyde Morris Blvd. and Granada Blvd.

On July 29, 2020, the gravity sewer main at the intersection of Clyde Morris Blvd. and Granada Blvd. experienced a failure causing a backup of the collection system and collapse of the roadway in the intersection. Although City utilities staff and their contractor worked diligently to repair this main and create a bypass that diverted over 95% of the calculated flow during the period of construction, a Sanitary Sewer Overflow (SSO) was reported to the Florida Department of Environmental Protection (FDEP). With the exception of a negligible amount, the majority of this overflow was recovered and diverted for further treatment. Due to the urgent nature of the incident and number of resources dedicated to the repair, reporting of the event to FDEP was not completed within 24 hours of discovering the event as required. The unauthorized discharge and failure to meet reporting requirements are resolved in the consent order.

Reclaim pipe leak, Halifax River

On approximately July 27 2020, a leak was suspected in the subaqueous crossing of

the Halifax River. Staff immediately engaged the services of an underwater inspection and repair service to locate, identify, and address this issue and restore full function of this distribution line. Upon positive identification of the leak, notice was made to FDEP with a plan to repair the line. However, due to the underwater location, resources dedicated to addressing the urgent gravity sewer main failure identified above, and extended time required to accurately locate and assess the damage, the report was not completed until August 7, 2020. The unauthorized discharge and reporting delay are resolved in the consent order.

Permit limit exceedances, Water Reclamation Facility:

During the past year, effluent water quality parameters reported by plant operations staff contained in monthly discharge monitoring report (DMR) submittals indicated regulatory concentration limit exceedances for certain tested components in the treated effluent from the water reclamation facility. These exceedances are related to process modifications that are made when diverting effluent from surface water discharge to reclaimed water and back to surface water discharge. Staff has aggressively addressed the exceedances over the previous year through operational and equipment modifications, and current plans to modify the chlorine contact chamber are incorporated into the consent order requirements.

Discussion

On November 23, 2020, City staff received correspondence from FDEP outlining the violations described above. City staff, FDEP Central District, and the City's consultant Mead & Hunt, discussed each of the violations, reviewed remedial efforts taken by the City, and collaborated to identify corrective actions and eliminate future violations.

A long form consent order was determined to be the best mechanism to assist the City with full resolution of the identified issues. This order assigns a penalty for the violations, establishes a timeline for full implementation and optimization of the system improvements, and provides for interim testing limits for sampling of the effluent stream until completion of these improvements. These interim limits, proposed by the City and Mead & Hunt, have been agreed to by the FDEP and will facilitate compliance by the WRF.

The items related to plant operation were the result of fecal detection and Carbonaceous Biochemical Oxygen Demand (CBOD) levels. To address these issues the City is required to complete construction modifications to the chlorine contact chamber. Mead & Hunt has already finalized plans and bid documents for the chlorine contact chamber, the final step in the disinfection of our effluent before being directed from the plant to surface water, or as reclaimed water. This project is on the agenda as a separate agenda item and will be advertised immediately for bidding and construction. FDEP has recognized the changes to the chlorine contact chamber as being a solution to this issue and have included the completion of this project as a condition of this consent order.

Upon having the opportunity to explain the nature, cause and small likelihood of harm resulting from the listed violations, it was concluded by all that violations of total nitrogen (TN) concentrations and CBOD would likely continue through the construction period, and higher interim concentration levels would be necessary to avoid future near term violations. FDEP staff accepted the explanation for why the violations occurred and acknowledged the City's actions to date to resolve these issues.

Repairs to the gravity sewer at Granada Blvd. and Clyde Morris Blvd. and the reclaimed water main were completed by August 19, 2020. These repairs provide a satisfactory resolution of this issue and no further action is required by FDEP. Additionally, staff has implemented preventative measures, most notably the installation of pressure gauges on either side of the Halifax River to aid in monitoring of the reclaimed distribution pipe. These sensors are tied to the Utilities Distribution system's Supervisory Controls and Data Acquisition (SCADA) controls and will provide an alert in the event of future issues.

FDEP initially assessed a penalty of approximately \$46,000. After considering additional information provided by staff, FDEP decreased the final penalty to \$38,494.34; which is primarily attributed to the Granada sanitary overflow, and reclaimed water surface water discharge.

FDEP encourages utilities to apply assessed penalties towards Pollution Prevention (P2) Projects, which are approved process improvement that reduce pollution. By electing this option, \$37,744.34 of the city's assessment will be applied to P2 Projects, leaving \$750 to be paid in administrative fees. Through Mead & Hunt, City staff have identified P2 Projects that will reduce energy consumption, minimize environmental impact, and increase the efficiency of utility operations. Final details for these projects will be submitted to FDEP for approval and are scheduled for completion well in advance of the consent order timeline. As a condition of this consent order, the City will be required to publicly advertise the consent order's issuance.

Budget Impact

A portion of this penalty, \$37,744.34, will be taken from Fund 409-Water and Wastewater Capital Projects Fund for application towards a project that meets the guidelines of FDEP's Florida P2 Program; this project will be brought back to the Commission for final disposition. A \$750 administrative fee to FDEP to cover the Central District's cost of implementing the decree remains for payment and will be funded from Fund 401-Water and Wastewater Operating Fund.

Citizen Impact

This consent order provides a mechanism for the City to make necessary improvements to its Water Reclamation Facility and continue to provide environmentally responsible wastewater treatment and reclaimed water distribution.

Recommendation

Staff has reviewed the consent order, and upon recommendation from Mead & Hunt, the City Manager has executed the agreement and published notice of same in accordance with the schedules and deadlines contained therein. Approval of this resolution will ratify and affirm the execution of the consent order.

Attachments:

- 21-55 Consent Order FDEP (P21-0026G)(PDF)
- LFCO - Ormond Beach WRF FL0020532 (PDF)
- Timeline (PDF)

REVIEWED BY:


Kelly McGuire, Finance Director 2/24/2021


Claire Whitley, Assistant City Manager 2/25/2021

APPROVED BY:


Joyce A. Shanahan, City Manager 2/25/2021

RESOLUTION NO. 2021-55

A RESOLUTION APPROVING AND RATIFYING THE EXECUTION OF A CONSENT ORDER BETWEEN THE CITY AND THE STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION; AUTHORIZING PAYMENT; AND SETTING FORTH AN EFFECTIVE DATE.

WHEREAS, the Florida Department of Environmental Protection (“FDEP”) found violations associated with the City’s water reclamation facility, OGC Case No. 20-1457, and

WHEREAS, the FDEP requested that the City execute a Consent Order agreeing to the corrective actions required for resolution of the violations (a copy of the Consent Order is attached hereto and incorporated herein by reference), and

WHEREAS, due to the short turnaround time afforded by the FDEP to the City in having the Consent Order executed and returned, the City Manager signed the Consent Order on February 23, 2021, and

WHEREAS, a penalty of \$37,744.34 was assessed and will be applied toward a project meeting the guidelines of the Consent Order which will be brought to the Commission at a future date, and

WHEREAS, a \$750.00 administrative fee has also been assessed and the City Manager has certified that the money for the payment of the fee has been appropriated to the credit of the Wastewater Operating Fund (401) and is not 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 approves and ratifies the City Manager's execution of the Consent Order between the City of Ormond Beach and the State of Florida Department of Environmental Protection to resolve violations associated with the City's water reclamation facility.

SECTION TWO. The City Commission hereby authorizes the payment of the \$750.00 administrative fee to the Florida Department of Environmental Protection using funds from the Wastewater Operating Fund.

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

APPROVED AND AUTHENTICATED this 2nd day of March, 2021.

BILL PARTINGTON
Mayor

ATTEST:

COLBY CILENTO
City Clerk

BEFORE THE STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

STATE OF FLORIDA DEPARTMENT	)	IN THE OFFICE OF THE
OF ENVIRONMENTAL PROTECTION	)	CENTRAL DISTRICT
	)	
v.	)	OGC FILE NO. 20-1457
	)	
CITY OF ORMOND BEACH	)	
_____	)	

CONSENT ORDER

This Consent Order ("Order") is entered into between the State of Florida Department of Environmental Protection ("Department") and City of Ormond Beach ("Respondent") to reach settlement of certain matters at issue between the Department and Respondent.

The Department finds and Respondent admits the following:

1. The Department is the administrative agency of the State of Florida having the power and duty to protect Florida's air and water resources and to administer and enforce the provisions of Chapter 403, Florida Statutes ("F.S."), and the rules promulgated and authorized in Title 62, Florida Administrative Code ("F.A.C."). The Department has jurisdiction over the matters addressed in this Order.
2. Respondent is a person within the meaning of Section 403.031(5), F.S.
3. Respondent is the owner and is responsible for the operation of the City of Ormond Beach Wastewater Treatment Facility, a 8.0 million gallon per day ("MGD") annual average daily flow ("AADF") permitted capacity Advanced Domestic Wastewater Treatment ("AWT") facility with an odor control system, influent screening, grit removal, biological nutrient removal with two parallel process trains, re-aeration, chemical feed facilities, secondary clarification, tertiary filtration, high level disinfection, post-aeration, and dichlorination for the river discharge ("Facility"). The Facility is operated under Wastewater Permit No. FL0020532 ("Permit"), which was issued on May 8, 2020 and will expire on May 7, 2025. The Facility is located at 550 N Orchard Street, Ormond Beach, in Volusia County, Florida ("Property"). Respondent owns the Property on which the Facility is located.

4. The Department finds that the following violation(s) occurred:
 - a) Review of the Discharge Monitoring Reports ("DMR") for the period of July 2019- September 2020 revealed the following permit limit exceedances:
 - 1) The fecal coliform percent non-detected reported for EFA-1 on the D-001 DMRs for July 2019, August 2019, September 2019, November 2019, February 2020, and May 2020 were below the percent non-detect permit limit of 75%, for total monthly samples.
 - 2) The fecal coliform results reported for EFA-1 on the R-001 DMRs for June 2020 and September 2020 exceeded the permit limit of 25 colony-forming units per 100 milliliters (cfu/100 mL) for any one sample.
 - 3) The CBOD weekly and monthly averages reported for EFD-1 on the D-001 DMRs for July 2020 and August 2020 exceeded the permit limits of 7.5 milligrams per liter (mg/L) and 6.25 mg/L, respectively.
 - 4) The daily maximum CBOD results reported for EFD-1 on the D-001 DMRs for July 2020 and August 2020 exceeded the permit limit of 10 mg/L, for any one sample.
 - 5) The Total Recoverable Copper maximum results reported on the R-001 DMR for January 2020 exceeded the permit limit of 3.7 micrograms per Liter ($\mu\text{g/L}$), for any one sample.
 - 6) The Acute Whole Effluent Toxicity (96-hour LC50) results for *Ceriodaphnia dubia* reported on the D-001 DMR for December 2019 did not meet the permit limit of 100 percent for any one sample.
 - b) The facility had an unauthorized discharge that occurred over several days on July 27, July 31, August 3, August 7, and August 8 of 2020 which resulted in approximately 150,000 gallons of treated effluent to the Halifax River due to a leak in the reclaim pipe, in violation of Chapter 62-604.130(1), F.A.C. The discharge was reported to the Public Notice of Pollution site under incident #6406 and to the State Watch Office as incident #2020-4144.

c) The facility had an unauthorized discharge on July 29, 2020 that resulted in the release of approximately 150,000 gallons of raw sewage to the ground due to a pipe collapse at the intersection of West Granada and Clyde Morris Boulevard in Ormond Beach, FL, in violation of Chapter 62-604.130(1), F.A.C. The discharge was reported to the Public Notice of Pollution site under incident #6331.

d) The facility failed to properly report unauthorized releases orally within 24 hours from the time of discovery of the spill and failed to submit a written report within five days of discovery of the spill for unauthorized releases described in Paragraphs 4 (b) and (c), in violation of Chapter 62-610(20), F.A.C.

1) The Public Notice of Pollution and State Watch Office reports for the unauthorized release described in Paragraph 4(b) were submitted on August 7, 2020.

2) A State Watch Office report was not submitted within 24 hours of discovery for the unauthorized release described in Paragraph 4(c).

Having reached a resolution of the matter Respondent and the Department mutually agree and it is

ORDERED:

5. Respondent shall comply with the following corrective actions within the stated time periods:

a) By January 1, 2022, the facility shall have completed construction and modifications to the chlorine contact chamber.

b) By June 30, 2022, the facility shall provide reasonable assurance that the modified chlorine contact chamber reduces fecal coliform count by providing at least three consecutive months of DMRs with no reported exceedances for fecal coliform and fecal coliform percent non-detect at EFA-1.

c) By June 30, 2022, the facility shall provide reasonable assurance that maintenance and adjustments to monitoring and sampling equipment performed in the CBOD study report submitted to the Department on January 8, 2021, has resolved high CBOD sample results by providing at least six consecutive months of DMRs with no reported exceedances for

CBOD daily maximum, CBOD weekly average, CBOD monthly average and CBOD annual average at EFD-1.

d) Beginning the effective date of this Order and lasting through January 1, 2022, the facility is subject to the following interim limits for CBOD at EFD-1:

Parameter	Units	Max	Limit
BOD, Carbonaceous 5 day, 20C	mg/L	Daily Average	22.0
BOD, Carbonaceous 5 day, 20C	mg/L	Weekly Average	18.0
BOD, Carbonaceous 5 day, 20C	mg/L	Monthly Average	16.0
BOD, Carbonaceous 5 day, 20C	mg/L	Annual Average	8.0

e) Respondent shall continue to maintain and evaluate collection system to minimize unauthorized releases. Within 30 days of the date of the effective date of this order, Respondent shall submit a report outlining the steps taken to ensure proper reporting of unauthorized release from the collection system.

f) Every calendar quarter after the effective date of this Order, Respondent shall submit in writing to the Department a report containing information concerning the status and progress of projects being completed under this Order, information as to compliance or noncompliance with the applicable requirements of this Order including construction requirements and effluent limitations, and any reasons for noncompliance. These reports shall also include a projection of the work to be performed pursuant to this Order during the 12-month period which will follow the report. These reports shall be submitted to the Department within 30 days following the end of the quarter.

6. Notwithstanding the time periods described in the paragraphs above, Respondent shall complete all corrective actions required by paragraphs 5(a)-(c) within two years of the effective date of this Order and be in full compliance with Rule 62-620, F.A.C., regardless of any intervening events or alternative time frames imposed in this Order, other than those excused delays agreed to by the Department, as described in paragraph 14.

7. Within 30 days of the effective date of this Order, Respondent shall pay the Department \$38,494.34 in settlement of the regulatory matters addressed in this Order. This amount includes \$37,744.34 for civil penalties and \$750.00 for costs and expenses incurred by the Department during the investigation of this matter and the preparation and tracking of this Order. The civil penalty in this case includes 3 violations that each warrant a penalty of \$2,000.00 or more.

8. Respondent agrees to pay the Department stipulated penalties as defined in the schedules below:

- a) \$1,000.00 per day for each and every day Respondent fails to timely comply with any of the requirements of paragraphs 5 and 6 of this Order.
- b) For unauthorized discharges from the Facility, Respondent agrees to pay stipulated penalties assessed according to the volume of the discharge and the number of days the discharge continued and/or impacted surface water, as shown below:

<u>Amount per day per Discharge or</u>	
<u>Amount per day per Water Quality Violation</u>	<u>Discharge Volume</u>
\$750.00	Up to 1,000 gallons
\$1,500.00	1,001 to 10,000 gallons
\$3,750.00	10,001 to 50,000 gallons
\$7,500.00	50,001 to 100,000 gallons
\$15,000.00	in excess of 100,000 gallons

The Department will evaluate all unauthorized discharges using the Sanitary Sewer Overflow Tool (dated May 1, 2019), prior to assessing any stipulated penalties. The Department may demand stipulated penalties at any time after violations occur. Respondent shall pay stipulated penalties owed within 30 days of the Department's issuance of written demand for payment, and shall do so as further described in paragraph 10, below. Nothing in this paragraph shall prevent the Department from filing suit to specifically enforce any terms of this Order. Any stipulated penalties assessed under this paragraph shall be in addition to the civil penalties agreed to in paragraph 8 of this Order.

9. Respondent shall make all payments required by this Order by cashier's check, money order or on-line payment. Cashier's check or money order shall be made payable to the "Department of Environmental Protection" and shall include both the OGC number assigned to this Order and the notation "Water Quality Assurance Trust Fund." Online payments by e-check can be made by going to the DEP Business Portal at:

<http://www.fldepportal.com/go/pay/>. It will take a number of days after this order is final, effective and filed with the Clerk of the Department before ability to make online payment is available.

10. Except as otherwise provided, all submittals and payments required by this Order shall be sent to DEP_CD@dep.state.fl.us and copied to David Smicherko, Environmental Manager, Department of Environmental Protection, Central District Office, 3319 Maguire Blvd., Suite 232, Orlando, FL 32803.

11. In lieu of making cash payment of \$ 37,744.34 in civil penalties as set forth in Paragraph 7, Respondent may elect to off-set the amount of \$37,744.34 by implementing a Pollution Prevention (P2) Project, which must be approved by the Department. P2 is a process improvement that reduces the amount of pollution that enters the environment; by conserving resource (including water, raw materials, chemicals, and energy) use, or by minimizing waste generation (including domestic and industrial wastewater, solid and hazardous waste, and air emissions). A P2 Project must reduce pollution or waste within the process beyond what is required by federal, state, or local law, in order to be eligible for civil penalty offset under this

Order. If Respondent chooses to implement a P2 Project, Respondent shall notify the Department of its election by certified mail within 15 days of the effective date of this Order. Within 30 days of the effective date of this Order, Respondent must pay a total of \$750 for costs and expenses incurred by the Department, during the investigation of this matter, and the preparation and tracking of this Order.

12. If Respondent elects to implement a P2 Project as provided in Paragraph 11, Respondent shall submit a completed P2 Project Plan (Plan) within 60 days of the effective date of this Order. The Plan must be completed using Exhibit A, "P2 Project Plan" template.

13. In the event the Department requires additional information to process the Plan described in Paragraph 11, Respondent shall provide a modified Plan containing the information requested by the Department within 30 days of the date of the request.

14. If any balance remains after the entire P2 credit is applied to the allowable portion of the civil penalty, Respondent shall pay the difference within 30 days of written notification by the Department to Respondent that the balance is due.

15. Respondent shall allow all authorized representatives of the Department access to the Facility and the Property at reasonable times for the purpose of determining compliance with the terms of this Order and the rules and statutes administered by the Department.

16. In the event of a sale or conveyance of the Facility or of the Property upon which the Facility is located, if all of the requirements of this Order have not been fully satisfied, Respondent shall, at least 30 days prior to the sale or conveyance of the Facility or Property, (a) notify the Department of such sale or conveyance, (b) provide the name and address of the purchaser, operator, or person(s) in control of the Facility, and (c) provide a copy of this Order with all attachments to the purchaser, operator, or person(s) in control of the Facility. The sale or conveyance of the Facility or the Property does not relieve Respondent of the obligations imposed in this Order.

17. If any event, including administrative or judicial challenges by third parties unrelated to Respondent, occurs which causes delay or the reasonable likelihood of delay in complying with the requirements of this Order, Respondent shall have the burden of proving

the delay was or will be caused by circumstances beyond the reasonable control of Respondent and could not have been or cannot be overcome by Respondent's due diligence. Neither economic circumstances nor the failure of a contractor, subcontractor, materialman, or other agent (collectively referred to as "contractor") to whom responsibility for performance is delegated to meet contractually imposed deadlines shall be considered circumstances beyond the control of Respondent (unless the cause of the contractor's late performance was also beyond the contractor's control). Upon occurrence of an event causing delay, or upon becoming aware of a potential for delay, Respondent shall notify the Department by the next working day and shall, within seven calendar days notify the Department in writing of (a) the anticipated length and cause of the delay, (b) the measures taken or to be taken to prevent or minimize the delay, and (c) the timetable by which Respondent intends to implement these measures. If the parties can agree that the delay or anticipated delay has been or will be caused by circumstances beyond the reasonable control of Respondent, the time for performance hereunder shall be extended. The agreement to extend compliance must identify the provision or provisions extended, the new compliance date or dates, and the additional measures Respondent must take to avoid or minimize the delay, if any. Failure of Respondent to comply with the notice requirements of this paragraph in a timely manner constitutes a waiver of Respondent's right to request an extension of time for compliance for those circumstances.

18. The Department, for and in consideration of the complete and timely performance by Respondent of all the obligations agreed to in this Order, hereby conditionally waives its right to seek judicial imposition of damages or civil penalties for the violations described above up to the date of the filing of this Order. This waiver is conditioned upon Respondent's complete compliance with all of the terms of this Order.

19. This Order is a settlement of the Department's civil and administrative authority arising under Florida law to resolve the matters addressed herein. This Order is not a settlement of any criminal liabilities which may arise under Florida law, nor is it a settlement of any violation which may be prosecuted criminally or civilly under federal law. Entry of this

Order does not relieve Respondent of the need to comply with applicable federal, state, or local laws, rules, or ordinances.

20. The Department hereby expressly reserves the right to initiate appropriate legal action to address any violations of statutes or rules administered by the Department that are not specifically resolved by this Order.

21. Respondent is fully aware that a violation of the terms of this Order may subject Respondent to judicial imposition of damages, civil penalties up to \$10,000.00 per day per violation, and criminal penalties.

22. Respondent acknowledges and waives its right to an administrative hearing pursuant to sections 120.569 and 120.57, F.S., on the terms of this Order. Respondent also acknowledges and waives its right to appeal the terms of this Order pursuant to section 120.68, F.S.

23. Electronic signatures or other versions of the parties' signatures, such as .pdf or facsimile, shall be valid and have the same force and effect as originals. No modifications of the terms of this Order will be effective until reduced to writing, executed by both Respondent and the Department, and filed with the clerk of the Department.

24. The terms and conditions set forth in this Order may be enforced in a court of competent jurisdiction pursuant to sections 120.69 and 403.121, F.S. Failure to comply with the terms of this Order constitutes a violation of section 403.161(1)(b), F.S.

25. This Consent Order is a final order of the Department pursuant to section 120.52(7), F.S., and it is final and effective on the date filed with the Clerk of the Department unless a Petition for Administrative Hearing is filed in accordance with Chapter 120, F.S. Upon the timely filing of a petition, this Consent Order will not be effective until further order of the Department.

26. Respondent shall publish the following notice in a newspaper of daily circulation in Volusia County, Florida. The notice shall be published one time only within 30 days of the effective date of the Order. Respondent shall provide a certified copy of the published notice to the Department within 10 days of publication.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

NOTICE OF CONSENT ORDER

The Department of Environmental Protection (“Department”) gives notice of agency action of entering into a Consent Order with CITY OF ORMOND BEACH pursuant to section 120.57(4), Florida Statutes. The Consent Order addresses the sanitary sewer overflows and surface water discharge permit exceedances at 550 N Orchard Street, Ormond Beach, FL. The Consent Order is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at the Department of Environmental Protection, Central District Office.

27. Persons who are not parties to this Consent Order, but whose substantial interests are affected by it, have a right to petition for an administrative hearing under sections 120.569 and 120.57, Florida Statutes. Because the administrative hearing process is designed to formulate final agency action, the filing of a petition concerning this Consent Order means that the Department’s final action may be different from the position it has taken in the Consent Order.

The petition for administrative hearing must contain all of the following information:

- a) The OGC Number assigned to this Consent Order;
- b) The name, address, and telephone number of each petitioner; 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;
- c) An explanation of how the petitioner’s substantial interests will be affected by the Consent Order;
- d) A statement of when and how the petitioner received notice of the Consent Order;
- e) Either a statement of all material facts disputed by the petitioner or a statement that the petitioner does not dispute any material facts;
- f) A statement of the specific facts the petitioner contends warrant reversal or modification of the Consent Order;

- g) A statement of the rules or statutes the petitioner contends require reversal or modification of the Consent Order; and
- h) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the Department to take with respect to the Consent Order.

The petition must be filed (received) at the Department's Office of General Counsel, 3900 Commonwealth Boulevard, MS# 35, Tallahassee, Florida 32399-3000 or received via electronic correspondence at Agency_Clerk@floridadep.gov, within 21 days of receipt of this notice. A copy of the petition must also be mailed at the time of filing to the District Office at FDEP Central District Office, 3319 Maguire Blvd., Suite 232, Orlando, FL 32803. Failure to file a petition within the 21-day period constitutes a person's waiver of the right to request an administrative hearing and to participate as a party to this proceeding under sections 120.569 and 120.57, Florida Statutes. Before the deadline for filing a petition, a person whose substantial interests are affected by this Consent Order may choose to pursue mediation as an alternative remedy under section 120.573, Florida Statutes. Choosing mediation will not adversely affect such person's right to request an administrative hearing if mediation does not result in a settlement. Additional information about mediation is provided in section 120.573, Florida Statutes and Rule 62-110.106(12), Florida Administrative Code.

28. Rules referenced in this Order are available at <http://www.dep.state.fl.us/legal/Rules/rulelist.htm>

FOR THE RESPONDENT:



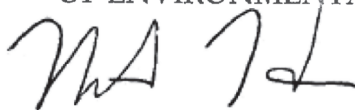
 Joyce Shanahan
 Ormond Beach City Manager

Date

DEP vs. City of Ormond Beach
Consent Order, OGC No. 20-1457
Page 12

DONE AND ORDERED this 23 day of February, 2021, in Orange County,
Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION



on behalf of

Aaron Watkins
District Director
Central District

Filed, on this date, pursuant to section 120.52, F.S., with the designated Department Clerk,
receipt of which is hereby acknowledged.



Clerk

February 23, 2021

Date

Copies furnished to:

Lea Crandall, Agency Clerk
Mail Station 35

[This template is to be used as a Long Form Consent Order Exhibit when regulatory corrective actions, or P2 Projects require time to be resolved or developed. This template must be completed to describe P2 Projects once identified. The document must be approved prior to P2 Project implementation. The Plan must contain the following information.]

Exhibit

P2 Project Plan (Plan)

(Note: Provide the information specified and delete existing text within parentheses)

(Facility Name)

(Address)

(Telephone)

(Preparer Name/Title)

A. **Project Description:** (Summarize P2 Projects selected. Describe the processes or operations to be modified, and the specific changes to be made. Include details such as the specific equipment to be installed, materials to be substituted, and the actual changes to be made to processes or operations. Include manufacturer or vendor information, and specifications.)

B. **Environmental and Economic Benefits:** (Explain why and how each Project proposed constitutes P2.

Specify how each material, chemical, water and energy is saved, and from which processes or operations. Specify how each solid and hazardous waste, industrial wastewater and air emissions are generated, the waste type, and from which processes or operations. **Describe generally in paragraph format.**

Estimate the *annual* savings in *resources* - raw materials, chemicals, water, and energy at the process or operation front end. Estimate the *annual* reductions in *wastes* - solid and hazardous waste, wastewater, and air emission reductions at the process or operation back end.

Figures quoted should represent weights or volumes annually, and should be equalized for production rate changes. Associated cost savings should be included. **Describe specifically using the tables provided.**

Complete the first table for each per Project individually. Add or average corresponding figures from each Project table to complete the Plan table, *for multiple Projects.*)

<i>(Project Name)</i>							
Annual Resource Consumption Comparison							
Item	Quantity Used (gal/lb/kwh-specify)			Purchasing Cost (\$)			Percent (%) Reduction
	Before	After	Reduction	Before	After	Reduction	
Water							
Chemicals							

Materials							
Energy							
Total Annual Cost Savings =							
Annual Waste Generation Comparison							
Item	Quantity Generated (gal/lb/tons-specify)			Disposal Cost (\$)			Percent (%) Reduction
	Before	After	Reduction	Before	After	Reduction	
Hazardous Waste							
Industrial Wastewater							
Solid Waste							
Air Emissions							
Total Annual Cost Savings =							
Total Annual Avoided Cost Savings =							

<i>Summary of All P2 Projects</i>							
Annual Resource Consumption Comparison							
Item	Quantity Used (gal/lb/kwh-specify)			Purchasing Cost (\$)			Percent (%) Reduction
	Before	After	Reduction	Before	After	Reduction	
Water							
Chemicals							
Materials							
Energy							
Total Annual Cost Savings =							
Annual Waste Generation Comparison							
Item	Quantity Generated (gal/lb/tons-specify)			Disposal Cost (\$)			Percent (%) Reduction
	Before	After	Reduction	Before	After	Reduction	
Hazardous Waste							
Industrial Wastewater							
Solid Waste							
Air Emissions							
Total Annual Cost Savings =							
Total Annual Avoided Cost Savings =							

C. **Project Cost:** (Include per Project the itemized, subtotal and Project total costs. A projected payback period in months or years needs to be included.

Provide a grand total cost for all Projects and an averaged projected payback period, *for multiple Projects. Use list or table format for all.*)

D. Implementation Schedule: (Provide a brief discussion of the steps necessary to implement the Projects and expected time frames for completion. A table or list format is preferred. The schedule shall include a list of milestones with dates, or timeframes based on Plan approval date, including Progress and Final Report submittals. Provide a description of any anticipated problems and options. *The implementation should take no longer than six months to complete.*)

E. Project Reporting:

1. Within 90 days of approval of the Project Plan, the Respondent shall submit a P2 Project Progress Report to the Department that describes the Respondent's progress in implementing the P2 Project and meeting the requirements in the Plan, and includes a list of equipment ordered, purchased, and/or installed.

2. Within 180 days of approval of the Plan, the Respondent shall submit to the Department a P2 Project Final Report that includes the following.

a. A confirmation that the information presented in Sections A-C of the Summary is unchanged, or an updated version with the sections changed appropriately. A statement that the Project(s) was/were implemented successfully. An explanation of any problems encountered and corrections applied.

b. Attached expense reports, receipts, purchasing instruments and other documents itemizing costs expended on preparing and implementing the Project.

3. The Department shall review the Final Report and determine:

a. Whether the project was properly implemented; and

b. Which expenses apply toward pollution prevention credits.

4. A \$1.00 pollution prevention credit for each \$1.00 spent on applicable costs will be applied against the portion of the civil penalty that can be offset.

a. The following costs are allowable to offset the allowable amount of the civil penalty:

i. Preparation of the P2 Project;

ii. Design of the P2 Project;

iii. Installation of equipment for the P2 Project;

iv. Construction of the P2 Project;

v. Testing of the P2 Project;

vi. Training of staff concerning the implementation of the P2 Project; and

vii. Capital equipment needed for the P2 Project.

b. The following costs shall not apply toward P2 credit:

i. Costs incurred in conducting a waste audit;

ii. Maintenance and operation costs involved in implementing the P2 Project;

iii. Monitoring and reporting costs;

iv. Salaries of employees who perform their job duties;

v. Costs expended to bring the facility into compliance with current law, rules and regulations;

vi. Costs associated with a P2 Project that is not implemented;

vii. Costs associated with a P2 Project that has not been approved by the Department; and

viii. Legal costs.

c. If any balance remains after the entire P2 credit is applied to the allowable portion of the civil penalty, Respondent shall pay the difference within 30 days of written notification by the Department to the Respondent that the balance is due.

5. The Department may terminate the P2 Project at any time during the development or implementation of it, if the Respondent fails to comply with the requirements in this document, act in good faith in preparing and implementing the project, or develop and implement the P2 Project in a timely manner. The Respondent may terminate the P2 Project at any time during its development or implementation.

Ron DeSantis
Governor

Jeanette Nuñez
Lt. Governor

Noah Valenstein
Secretary



FLORIDA DEPARTMENT OF Environmental Protection

CENTRAL DISTRICT OFFICE
3319 MAGUIRE BLVD., SUITE 232
ORLANDO, FLORIDA 32803

February 23, 2021

Joyce Shanahan, Interim City Manager
City of Ormond Beach
22 S Beach St.
Ormond Beach, FL 32174
Joyce.Shanahan@ormondbeach.org

Re: Ormond Beach WRF
DW Facility ID # FL0020532
OGC Case #20-1457

Dear Ms. Shanahan:

Enclosed is the executed Consent Order to resolve the above referenced case. This copy is for your records.

Should you have any questions or comments, please contact Helena Dacenay at 407-897-4342 or via e-mail at Helena.Dacenay@FloridaDEP.gov.

Your cooperation in this matter will be appreciated.

Sincerely,

A handwritten signature in black ink, appearing to read "AA 7L".

On behalf of:

Aaron Watkins
Director, Central District

Enclosure: Consent Order OGC#20-1457

cc: Lea Crandall, OGC
Zoey Carr, Central District
Daun Festa, Central District
Shawn Finley, Shawn.Finley@ormondbeach.org

Due Date	Requirement
3-Feb-21	Consent Order (CO) sent to City of Ormond Beach
Within 20 days of receipt, 23-Feb-21	Either 1) return a signed copy of the CO to FDEP, or 2) provide comments and suggested changes.
Within 30 days of the effective date of the CO	Either pay FDEP \$38,494.34 in penalties or offset \$37,744.34 by implementing a Pollution Prevention (P2) project that conserves resources (water, raw materials, chemicals, or energy) by minimizing waste generation (including water, raw materials, chemicals and energy use) or (including domestic and industrial wastewater, solid and hazardous waste and air emissions).
Within 15 days of the effective date of the	Notify the FDEP of choice to implement a P2 project by certified mail.
Within 30 days of the effective date of the CO	Pay \$750 to FDEP for costs incurred.
Within 30 days of the effective date of the CO	Publish one time, the FDEP Notice in a newspaper of daily circulation in Volusia County, FL. Provide a certified copy of the published notice to FDEP within 10 days of publication.
Within 30 days of the effective date of the CO	Submit a report of the steps taken to ensure proper reporting of unauthorized releases from the collection system.
Within 60 days of the effective date of the CO	Submit a completed P2 project plan using exhibit A..
Quarterly after the effective date	Submit a progress report of projects being completed, and compliance or no-compliance with the CO, construction requirements, effluent limitations, and a 12-month work projection.
1-Jan-22	Completed construction and modifications to the chlorine contact chamber.
30-Jun-22	Provide reasonable assurance that the modified chlorine contact chamber reduces fecal coliform by at least 3 consecutive months of reports showing no exceedances for fecal coliform and % non-detect.
30-Jun-22	Provide reasonable assurance for CBOD sample results showing at least 6 consecutive months of discharge monitoring reports with no exceedances of CBOD.
Within 2-Years of the effective date of the CO	Complete all corrective actions required and be in full compliance.



CITY OF ORMOND BEACH

City Manager • 22 S. Beach Street • Ormond Beach • Florida • 32174 • (386) 676-3200 • Fax (386) 676-3384

CITY MANAGER MEMORANDUM

To: The Honorable Mayor Partington and City Commissioners

Through: Joyce A. Shanahan, City Manager

From: Shawn Finley, Public Works Director

Date: March 2, 2021

Subject: Invitation to Bid - WRF Chlorine Contact Improvements

Commission Goal: Water Quality and Environment - Other

Introduction

This disposition item provides public notice of the City's intent to issue an invitation to bid for the Water Reclamation Facility (WRF) Chlorine Contact Improvements, Bid Number 2021-14.

Background

The Chlorine Contact Chamber (CCC) is the final process of wastewater treatment before it becomes reclaimed water. Chlorine bleach is mixed into the stream and allowed to react with and neutralize any harmful microorganisms. When the WRF was rehabilitated, the standard time the chlorine is allowed to react with the water was 15 minutes. In recent years, the contact time has been increased to 20 minutes. The extended time allows the chlorine more time to react with anything that may be in the water.

In July 2020, Mead & Hunt finalized a WRF Condition Assessment Report that indicated that the reduced contact time at our WRF is the likely cause of the coliform detection issues that the WRF has been experiencing. As a result of the coliform detection issues at the WRF, the City has been issued a consent order that included a requirement to complete this project.

Discussion

Mead & Hunt prepared the included plans and specifications, as well as all permits for this project. The project proposes to add walls internal to the existing structure and adjust the flow path to prevent short circuiting. Also included in this project is upgraded monitoring of the chlorine residual, as well as devices to better remove algae build up within the structure.

Budget Impact

This project was included in the City's five-year Capital Improvement Program (CIP) for construction in FY 20-21. To accommodate the Consent Order requirements, the project is being completed immediately. As a result, a budget amendment will be required. Funding is available in the budget of Fund 409-Water and Wastewater Renewal and Replacement Fund.

Citizen Impact

Maintenance of the wastewater treatment facility components is required in order for the City to remain in compliance with its Florida Department of Environmental Protection (FDEP) Wastewater Treatment Facility Operation Permit. In addition, continuous operation of the wastewater treatment facility is crucial to the City residents who utilize this service.

Recommendation

Staff intends to publicly advertise this project for competitive bidding, unless otherwise directed by the City Commission.

Attachments:

- OB WRF Chlorine Contact Chamber Modifications_Bid Manual (PDF)
- OB WRF Chlorine Contact Chamber Modifications_ Plans Bid Set Specs _01.19.21 (PDF)

REVIEWED BY:


Kelly McGuire, Finance Director 2/24/2021


Claire Whitley, Assistant City Manager 2/24/2021

APPROVED BY:


Joyce A. Shanahan, City Manager 2/25/2021

PROJECT MANUAL

WRF CHLORINE CONTACT CHAMBER MODIFICATIONS

BID # 2021-14

Mead & Hunt, Inc.
Project # 1000714-200233.01



Prepared for:

City of Ormond Beach

February 2021

Mead&Hunt

4401 Eastport Parkway
Port Orange, FL 32127
Phone: 386-761-6810
www.meadhunt.com

WRF CHLORINE CONTACT CHAMBER MODIFICATIONS

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 **WRF CHLORINE CONTACT CHAMBER MODIFICATIONS, Bid No. 2021-14** for the City of Ormond Beach, Florida, will be received at the Office of the Purchasing Coordinator, City Hall, Ormond Beach, Florida, until **2:00 p.m. on April 6, 2021**, 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 installing baffle walls and making additional structural and mechanical modifications to the City's existing chlorine contact tank at their water reclamation facility (WRF).

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) 676-3223.

A **pre-bid conference** to discuss the details and requirements of the contract will be held on **March 16, 2021 at 11:00 a.m.** in the Training Room at City Hall. All prospective bidders are strongly encouraged to attend. The deadline for submitting questions is **March 23, 2021 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:

Mead & Hunt, Inc.
P.O. Drawer 290247
Port Orange, FL 32129

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:

**COLBY J. CILENTO, CITY CLERK
22 SOUTH BEACH STREET
ORMOND BEACH, FLORIDA 32174 (386) 676-3331
COLBY.CILENTO@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

All questions about the meaning or intent of the Contract Documents shall be submitted in writing to the Purchasing Coordinator via email to Rob.Hart@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.

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
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. 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 five (5) unsigned counterparts of the Agreement and all other Contract Documents. Within ten (10) days thereafter CONTRACTOR shall sign all and deliver at least five (5) counterparts of the Agreement to OWNER with other Contract Documents attached. Within ten (10) 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: **WRF CHLORINE CONTACT CHAMBER MODIFICATIONS**

CONTRACT IDENTIFICATION AND NUMBER:

Bid No. 2021-14

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.)
WRF CHLORINE CONTACT CHAMBER MODIFICATIONS
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	Description	Qty	Unit	Unit Cost	Total Cost
1	Mobilization	1	LS		
2	Indemnification	1	LS		
3	Existing Concrete and Gate Modifications	1	LS		
4	Concrete Baffle Wall Installation	1	LS		
5	Chlorine Analyzer Installation and Programming	1	LS		
6	Submersible Mixer Relocation and Installation	1	LS		
7	Telescoping Valves and Drain Lines	1	LS		
8	Electrical	1	LS		
9	As-Built Survey	1	LS		
10	Permits and Allowances	1	LS		

TOTAL BID

(IN WORDS)

BID (Cont'd.)
WRF CHLORINE CONTACT CHAMBER MODIFICATIONS
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 90 calendar days after the date when the Contract Time commences to run and completed within 120 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 recognizes 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

7. Communications to the BIDDER concerning this Bid shall be addressed to:

BID (Cont'd.)
WRF CHLORINE CONTACT CHAMBER MODIFICATIONS
ORMOND BEACH, FLORIDA

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)

_____ (SEAL)
 (Individual's Name - Typed or Printed)

doing business as _____

Business address: _____

Phone No.: _____

Fax No.: _____

BID (Cont'd.)
WRF CHLORINE CONTACT CHAMBER MODIFICATIONS
ORMOND BEACH, FLORIDA

If BIDDER is:

A Partnership

By _____ (SEAL)
(Firm Name)

(General Partner - Signature)

(General Partner - Typed or Printed)

Business Address: _____

Phone No.: _____

Fax No.: _____

BID (Cont'd.)
WRF CHLORINE CONTACT CHAMBER MODIFICATIONS
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.)
WRF CHLORINE CONTACT CHAMBER MODIFICATIONS
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.)
WRF CHLORINE CONTACT CHAMBER MODIFICATIONS
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.)
WRF CHLORINE CONTACT CHAMBER MODIFICATIONS
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.)
WRF CHLORINE CONTACT CHAMBER MODIFICATIONS
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.)
WRF CHLORINE CONTACT CHAMBER MODIFICATIONS
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.)
WRF CHLORINE CONTACT CHAMBER MODIFICATIONS
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.)
WRF CHLORINE CONTACT CHAMBER MODIFICATIONS
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.)
WRF CHLORINE CONTACT CHAMBER MODIFICATIONS
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.)
WRF CHLORINE CONTACT CHAMBER MODIFICATIONS
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

END OF BID

00300-15

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 **WRF CHLORINE CONTACT CHAMBER MODIFICATIONS (Bid No. 2021-14)** 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)

(SEAL)

By: _____

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 _____, 2021.

Article 1. WORK

CONTRACTOR shall complete all Work as specified or indicated in the Contract Documents. The Work is generally described as follows:

The work consists of installing baffle walls and making additional structural and mechanical modifications to the City's existing chlorine contact tank at their water reclamation facility (WRF).

The Project for which the Work under the Contract Documents may be the whole or only a part is generally described as follows:

WRF CHLORINE CONTACT CHAMBER MODIFICATIONS BID NUMBER 2021-14

Article 2. ENGINEER

The Project has been designed by *Mead & Hunt, P.O. Box 290247 Port Orange, Florida* employed by OWNER 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 90 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 120 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 (\$ 500.00) 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 ____ 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 32 , inclusive).

7.6 Supplementary Conditions (pages 1 to 6 , inclusive).

7.7 Specifications bearing the title:

WRF CHLORINE CONTACT CHAMBER MODIFICATIONS

and consisting of 16 divisions, as listed in table of contents thereof.

7.8 Drawings, consisting of 6 sheets numbered G-001, G-101, G-102, G-301, G-501, and G-502, inclusive and bearing the following general title:

WRF CHLORINE CONTACT CHAMBER MODIFICATIONS

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 _____, 2021

OWNER City of Ormond Beach

CONTRACTOR _____

By _____

Bill Partington
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:

**WRF CHLORINE CONTACT CHAMBER MODIFICATIONS
Bid No. 2021-14**

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

deemed an original, this _____ day of _____, 20_____.
(number)

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:

**WRF CHLORINE CONTACT CHAMBER MODIFICATIONS
Bid No. 2020-14**

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

(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

00615-2

SECTION 00670
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 _____, 20____.

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.

Hold Harmless:

6.15. The OWNER, and its agents, employees, and officials, both elected and appointed, shall be **indemnified** and **held harmless** by CONTRACTOR from any and all claim(s) resulting in liabilities, damages, losses and costs, including but not limited to reasonable attorney's fees, to the extent caused by the negligence, recklessness, or intentional wrongful misconduct in the performance of the construction Contract by the CONTRACTOR, including persons such as subcontractors employed or utilized by the Contractor, unless any such claim arises as a result of the OWNER's sole negligence, as determined by the final arbiter of such claim. Additionally, the OWNER expressly retains all rights, benefits, privileges and immunities provided to Municipalities by **Sovereign Immunity**.

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 the Hold Harmless paragraph. 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 of 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 execution 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 2010-125 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 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. 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 there from, 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 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 88, or its successor form, including but not limited to the following coverage (any deviation shall be noted on the Certificates of Insurance):

- a. Premises and 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 than the following amounts for all tiers of Contractors and Subcontractors:

<u>Contract Value</u>	<u>Limits (not less than)</u>
0 - \$25,000	\$300,000 Each Occurrence \$300,000 General Aggregate* \$300,000 Aggregate Products & Completed Operations \$25,000 Fire Damage (any one fire)
\$25,001 - \$250,000	\$500,000 Each Occurrence \$1 Million General Aggregate* \$1 Million Aggregate Products & Completed Operations \$50,000 Fire Damage (any one fire)
\$250,001 - \$3,000,000	\$1 Million Each Occurrence \$1 Million General Aggregate* \$1 Million Aggregate Products & Completed Operations \$50,000 Fire Damage (any one fire)
\$3,000,001 & over	20% of the Value of the Contract [Minimum \$1 Million Each Occurrence/\$2 Million General Aggregate]

* 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 for the operation, use, maintenance, loading or unloading of automobiles - ISO Symbol 1 (Any Auto) or alternatively a combination of Symbol 2 (Owned Autos), Symbol 8 (Hired Autos), and Symbol 9 (Non-Owned Autos).

<u>Contract Value</u>	<u>Limits (not less than)</u>
0 - \$25,000	\$300,000 Combined Single Limit

\$25,001 - \$250,000 \$500,000 Combined Single Limit

\$250,001 and over \$1 Million Combined Single Limit

(d) Excess Liability

For Contracts of \$250,000 or more, and 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 for occurrences insured in this Excess Policy not to exceed \$25,000 and a minimum limit of \$1 Million.

C. Requirements for Certificates of Insurance

- (a)** 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.
- (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 immediately 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 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.

D. Policies of Insurance

- (a)** Except as otherwise provided in this Agreement, 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.

- (b) For Workers' Compensation coverage only, self-insurance programs are acceptable with a minimum A- rated reinsurance carriers; written confirmation is required.
- (c) All policies of insurance or certificates thereof referred to in this Agreement shall be deposited with the City Clerk.
- (d) The City shall be named an Additional Insured on General Liability 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

END OF SECTION

SECTION 01000
PROJECT REQUIREMENTS

PART 1 – GENERAL

1.01 DESCRIPTION

- A. Scope of Work: The Work to be done consists of the furnishing of all labor, materials and equipment, and the performance of all Work included in this Contract. The summary of the Work is presented in Section 01010: Summary of Work.
- B. Work Included:
1. The Contractor shall furnish all labor, superintendence, materials, plant power, light, heat, fuel, water, tools, appliances, equipment, supplies, and means of construction necessary for proper performance and completion of the Work. The Contractor shall obtain and pay for all necessary local building permits. The Contractor shall perform and complete the work in the manner best calculated to promote rapid construction consistent with safety of life and property and to the satisfaction of the Engineer, and in strict accordance with the Contract Documents. The Contractor shall clean up the Work and maintain it during and after construction, until accepted, and shall do all Work and pay all costs incidental thereto. He shall repair or restore all structures and property that may be damaged or disturbed during performance of the Work.
 2. The cost of incidental work described in these Project Requirements, for which there are no specific Contract Items, shall be considered as part of the general cost of doing the Work and shall be included in the prices for the various Contract Items. No additional payment will be made therefore.
 3. The Contractor shall provide and maintain such modern plant, tools, and equipment as may be necessary, in the opinion of the Engineer, to perform in a satisfactory and acceptable manner all the Work required by this Contract. Only equipment of established reputation and proven efficiency shall be used. The Contractor shall be solely responsible for the adequacy of his workmanship, materials, and equipment, prior approval of the Engineer notwithstanding.
- C. Public Utility Installations and Structures:
1. Public utility installations and structures shall be understood to include all poles, tracks, pipes, wires, conduits, vaults, manholes, and all other appurtenances and facilities pertaining thereto whether owned or controlled by the Owner, other governmental bodies, or privately owned by individuals, firms, or corporations, used to serve the public with transportation, traffic control, gas, electricity, telephone, sewerage, drainage, water, or other public or private property which may be affected by the Work shall be deemed included hereunder.

2. The Contract Documents contain data relative to existing public utility installations and structures above and below the ground surface. These data are not guaranteed as to their completeness or accuracy and it is the responsibility of the Contractor to make his own investigations to inform himself fully of the character, condition, and extent of all such installations and structures as may be encountered and as may affect the construction operations.
3. The Contractor shall protect all public utility installations and structures from damage during the Work. Access across any buried public utility installation or structure shall be made to avoid any damage to these facilities. All required protective devices and construction shall be provided by the Contractor at his expense. All existing public utilities damaged by the Contractor shall be repaired by the Contractor, at his expense. No separate payment shall be made for such protection or repairs to public utility installations or structures.
4. Public utility installations or structures owned or controlled by the Owner or other governmental body which are shown on the Drawings to be removed, relocated, replaced, or rebuilt by the Contractor shall be considered as a part of the general cost of doing the Work and shall be included in the prices bid for the various Contract Items; therefore, no separate payment shall be made.
5. Where public utility installations or structures owned or controlled by the Owner or other governmental body are encountered during the course of the Work, and are not indicated on the Drawings or in the Specifications, and when, in the opinion of the Engineer, removal, relocation, replacement, or rebuilding is necessary to complete the Work under this Contract, such Work shall be accomplished by the utility having jurisdiction, or such Work may be ordered, in writing by the Engineer, for the Contractor to accomplish. If such work is accomplished by the utility having jurisdiction it will be carried out expeditiously, and the Contractor shall give full cooperation to permit the utility to complete the removal, relocation, replacement, or rebuilding as required. If such work is accomplished by the Contractor, it will be paid for as extra work as provided in the Agreement.
6. The Contractor shall, at all times, in performance of the Work, employ acceptable methods and exercise reasonable care and skill so as to avoid unnecessary delay, injury, damage, or destruction of public utility installations and structures; and shall, at all times in the performance of the Work, avoid unnecessary interference with, or interruption of, public utility services, and shall cooperate fully with the owners thereof to that end.
7. The Contractor shall give written notice to Owner and other governmental utility departments and other owners of public utilities of the location of his proposed construction operations, at least forty-eight (48) hours in advance of breaking ground in any area or on any unit of the Work.

8. The maintenance, repair, removal, relocation, or rebuilding of public utility installations and structures, when accomplished by the Contractor as herein provided, shall be done by methods approved by the owners of such utilities.

1.02 DRAWINGS AND PROJECT MANUAL

- A. Drawings: When obtaining data and information from the Drawings, figures shall be used in preference to scaled dimensions, and large-scale drawings in preference to small-scale drawings.
- B. Supplementary Drawings:
 1. When, in the opinion of the Engineer, it becomes necessary to explain more fully the Work to be done or to illustrate the Work further or to show any changes which may be required, drawings known as Supplementary Drawings, with specifications pertaining thereto, will be prepared by the Engineer, and the Contractor will be furnished one (1) complete set of 24-inch by 36-inch set of plans and one (1) reproducible copy of the Project Manual.
 2. The Supplementary Drawings shall be binding upon the Contractor with the same force as the Contract Drawings. Where such Supplementary Drawings require either less or more than the estimated quantities of Work, credit to the Owner or compensation therefore to the Contractor shall be subject to the terms of the Agreement.
- C. Contractor to Check Drawings and Data:
 1. The Contractor shall verify all dimensions, quantities, and details shown on the Drawings, Supplementary Drawings, schedules, Specifications, or other data received from the Engineer, and shall notify him of all errors, omissions, conflicts, and discrepancies found therein. Failure to discover or correct errors, conflicts, or discrepancies shall not relieve the Contractor of full responsibility for unsatisfactory work, faulty construction, or improper operation resulting there from, nor from rectifying such conditions at his own expense. He will not be allowed to take advantage of any errors or omissions, as full instructions will be furnished by the Engineer, should such errors or omissions be discovered.
 2. All schedules are given for the convenience of the Engineer and the Contractor and are not guaranteed to be complete. The Contractor shall assume all responsibility for the making of estimates of the size, kind, and quality of materials and equipment included in work to be done under the Contract.
- D. Specifications: The Technical Specifications consist of three (3) parts: General, Products, and Execution. The General part of a Specification contains General Requirements which govern the Work. The Products and Execution parts modify and supplement the General Requirements by detailed requirements for the Work and shall always govern whenever there appears to be a conflict.

E. Intent:

1. All Work called for in the Specifications applicable to this Contract, but not shown on the Drawings in their present form, or vice versa, shall be of like effect as if shown or mentioned in both. Work not specified in either the Drawings or in the Specifications, but involved in carrying out their intent or in the complete and proper execution of the Work, is required and shall be performed by the Contractor as though it were specifically delineated or described.
2. The apparent silence of the Specifications as to any detail, or the apparent omission from them of a detailed description concerning any work to be done and materials to be furnished, shall be regarded as meaning that only the best general practice is to prevail and that only material and workmanship of the best quality is to be used, the interpretation of these Specifications shall be made upon that basis.

1.03 MATERIALS AND EQUIPMENT

A. Manufacturer:

1. All transactions with the manufacturers or subcontractors shall be through the Contractor, unless the Contractor shall request and at the Engineer's option, that the manufacturer or subcontractor deal directly with the Engineer. Any such transactions shall not in any way release the Contractor from his full responsibility under this Contract.
2. Any two (2) or more pieces of material or equipment of the same kind, type, or classification, and being used for identical types of service, shall be made by the same manufacturer.

B. Delivery:

1. The Contractor shall deliver materials in ample quantities to ensure the most speedy and uninterrupted progress of the Work so as to complete the Work within the allotted time.
2. The Contractor shall also coordinate deliveries in order to avoid delay in, or impediment of, the progress of the work of any related Contractor.

C. Tools and Accessories:

1. The Contractor shall, unless otherwise stated in the Contract Documents, furnish with each type, kind, or size of equipment, one (1) complete set of suitably marked high grade special tools and appliances which may be needed to adjust, operate, maintain, or repair the equipment. Such tools and appliances shall be furnished in approved painted steel cases, properly labeled, and equipped with good grade cylinder locks and duplicate keys.

2. Spare parts shall be furnished as specified herein and as recommended by the manufacturer necessary for the operation of the equipment, not including materials required for routine maintenance.
3. Each piece of equipment shall be provided with a substantial nameplate, securely fastened in place, and clearly inscribed with the manufacturer's name, year of manufacture, serial number, weight, and principal rate data.

D. Service of Manufacturer's Engineer:

1. The Contract Prices for equipment shall include the cost of furnishing a competent and experienced engineer or superintendent who shall represent the manufacturer and shall assist the Contractor, when required, to install, adjust, test, and place in operation, the equipment in conformity with the Contract Documents.
2. After the equipment is placed in permanent operation by the Owner, such engineer or superintendent shall make all adjustments and tests required by the Engineer to prove that such equipment is in proper and satisfactory operating condition, and shall instruct such personnel as may be designated by the Owner in the proper operation and maintenance of such equipment.

1.04 INSPECTION AND TESTING

A. General:

1. For tests specified to be made by the Contractor, the testing personnel shall make the necessary inspections and tests, and the reports thereof shall be in such form as will facilitate checking to determine compliance with the Contract Documents. Five (5) copies of the reports shall be submitted, and authoritative certification thereof must be furnished to the Engineer as a prerequisite for the acceptance of any material or equipment.
2. If, in the making of any test of any material or equipment, it is ascertained by the Engineer that the material or equipment does not comply with the Contract Documents, the Contractor will be notified thereof, and he will be directed to refrain from delivering said material or equipment, or to remove it promptly from the site or from the Work and replace it with acceptable material, without cost to the Owner.
3. Tests of electrical and mechanical equipment and appliances shall be conducted in accordance with the recognized test codes of the ANSI, ASME, or the IEEE, except as may otherwise be stated herein.
4. The Contractor shall be fully responsible for the proper operation of equipment during testing 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.

B. Costs:

1. All inspection and testing of materials furnished under this Contract will be provided by the Contractor, unless otherwise expressly specified.
2. The cost of shop and field tests of equipment and of certain other tests specifically called for in the Contract Documents shall be borne by the Contractor, and such costs shall be deemed to be included in the Contract Price.
3. Materials and equipment submitted by the Contractor as the equivalent to those specifically named in the Contract may be tested by the Owner for compliance. The Contractor shall reimburse the Owner for the expenditures incurred in making such tests of materials and equipment which are rejected for non-compliance.

C. Certificate of Manufacture:

1. Contractor shall furnish to Engineer authoritative evidence in the form of a certificate of manufacture that the materials to be used in the Work have been manufactured and tested in conformity with the Contract Documents.
2. These certificates shall be notarized and shall include copies of the results of physical tests and chemical analyses, where necessary, that have been made directly on the product or on similar products of the manufacturer.

D. Shop Tests:

1. Each piece of equipment for which pressure, duty, capacity, rating, efficiency, performance, function, or special requirements are specified shall be tested in the shop of the maker in a manner which shall conclusively prove that its characteristics comply fully with the requirements of the Contract Documents.
2. Five (5) copies of the manufacturer's actual test data and interpreted results thereof, accompanied by a certificate of authenticity sworn to by a responsible official of the manufacturing company and/or independent laboratory, shall be submitted to the Engineer for approval.
3. The cost of shop tests and of furnishing manufacturer's preliminary and shop test data of operating equipment shall be borne by the Contractor.

E. Start-up Tests:

1. As soon as conditions permit, the Contractor shall furnish all labor, materials, and instruments and shall make start-up tests of equipment.
2. If the start-up tests disclose any equipment furnished under this Contract which does not comply with the requirements of the Contract Documents,

the Contractor shall, prior to demonstration tests, make all changes, adjustments, and replacements required. The furnishing Contractor shall assist in the start-up tests as applicable.

F. Demonstration Tests:

1. Prior to Contractor's request for a Substantial Completion inspection, all equipment and piping installed under this Contract shall be subjected to demonstration tests as specified or required to prove compliance with the Contract Documents.
2. The Contractor shall furnish labor, fuel, energy, water, and all other materials, equipment, and instruments necessary for all demonstration tests, at no additional cost to the Owner. Contractor shall assist in the demonstration tests as applicable.

1.05 LINES AND GRADES

A. Grade:

1. All work under this Contract shall be constructed in accordance with the lines and grades shown on the Drawings, or as given by the Engineer. The full responsibility for keeping alignment and grade shall rest upon the Contractor.
2. The vertical benchmarks provided is USGS "Public Records" monumentation and the horizontal control is the monumentation on plats contained in the "Public Records of Volusia County."

B. Surveys:

1. The Contractor shall furnish and maintain, at his own expense, stakes, and other such materials.
2. The Contractor shall check such reference marks by such means as he may deem necessary and, before using them, shall call the Engineer's attention to any inaccuracies.
3. The Contractor shall, at his own expense, establish all working or construction lines and grades as required from the reference marks set by the Engineer, and shall be solely responsible for the accuracy thereof. He shall, however, be subject to the check and review by the Engineer.

C. Safeguarding Marks:

1. The Contractor shall safeguard all points, stakes, grade marks, monuments, and bench marks made or established on the Work, bear the cost of re-establishing them if disturbed, and bear the entire expense of rectifying work improperly installed due to not maintaining or protecting or to removing without authorization such established points, stakes, and marks.

2. The Contractor shall safeguard all existing and known property corners, monuments, and marks adjacent to but not related to the Work and shall bear the cost of re-establishing them if disturbed or destroyed.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

END OF SECTION

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: **WRF CHLORINE CONTACT CHAMBER MODIFICATIONS, BID NO. 2020-14**

The work consists of installing baffle walls and making additional structural and mechanical modifications to the City's existing chlorine contact tank at their water reclamation facility (WRF).

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) 676-3233

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 forty-eight (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 forty-eight (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) 677-0311
Ormond Beach Fire Dept. Administration	(386) 676-3255
Ormond Beach Police Dept. Dispatch	(386) 676-3508
Ormond Beach Public Works Department	(386) 676-3220
Ormond Beach Postmaster (US Postal Service)	(386) 676-0693
Volusia County School Board - Transportation	(386) 239-6360
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 five (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 forty-eight (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 weekends, 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

- A. Separate payment will be made only 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.
- B. The 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. 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 if not shown as a separate pay item.
 - 1. Clearing and grubbing.
 - 2. Excavation, including necessary pavement base removal.
 - 3. Shoring and sheeting.
 - 4. Dewatering and disposal of surplus water.
 - 5. Structural Fill.
 - 6. Backfill.
 - 7. Grading.
 - 8. Replacement of unpaved roadways, grass and shrubbery plots.
 - 9. Cleanup.
 - 10. Testing and placing system in operation.
 - 11. Any material and equipment required to be installed and utilized for the test.
 - 12. Pipe, structures, pavement replacement and/or appurtenances included within the limits of lump sum work.
 - 13. Maintaining the existing quality of service during construction.
 - 14. Appurtenant work as required for a complete and operable system.
 - 15. Maintaining or detouring of traffic.
- D. No payment shall be made for work constructed outside the authorized limits of work.

PART 2 – MATERIALS AND EQUIPMENT

2.01 Mobilization

Bid Item 1

The lump sum to complete this item shall be full compensation for 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 field office, building, safety equipment and first aid supplies, sanitary and other facilities, as required by these Specifications, and state and local laws and regulations; and any other pre-construction expense necessary for the start of the Work; the cost of field engineering including permits and fees, construction schedules, project signs, shop drawings, temporary facilities, laydown storage area, construction aids, work associated with contractor support during Owner/Engineer reviews and inspection, re-inspections, and any re-work

resulting from same, cleaning, operation and maintenance data, and for all other work required for demobilization. The Contractor shall submit invoices substantiating the cost of mobilization and demobilization with each pay request. Ten percent (10%) for the cost for mobilization and demobilization will be withheld until acceptance and final payment.

2.02 Indemnification

Bid Item 2

Payment for indemnification shall be made at the Contract lump sum price and shall be full compensation for providing indemnification in accordance with Article 5, Paragraph 5.4 and Article 6, Paragraph 6.15 and 6.16 of Section 00700 – General Conditions of the Construction Contract.

2.03 Existing Concrete and Gate Modifications

Bid Item 3

Lump sum payment will be made for modifications of existing concrete, removal of gates, installation of new or relocated gates and weirs, concrete cutting, and mixer removal as shown on the plans. Payment to include all costs associated with concrete cutting, patching, mechanical gates and weirs, coffer dam, bypass coordination and all other miscellaneous items shown on the plans and specifications for a complete and operable system. This includes preparation of a detailed cofferdam installation and bypassing plan. The lump sum price shall be full compensation for all labor, materials, and equipment required to complete the described work in accordance with the plans and specifications.

2.04 Concrete Baffle Wall Installation

Bid Item 4

Lump sum payment will be made for installation of the new concrete baffle walls and fillets. Payment shall include all costs associated with concrete, placement, forms, rebar, dowels into existing, finishing, and all other associated work shown on the plans and specifications for a complete and operable system. The lump sum price shall be full compensation for all labor, materials, and equipment required to complete the described work in accordance with the plans and specifications.

2.05 Chlorine Analyzer Installation and Programming

Bid Item 5

Lump sum payment will be made for all work described in specification Section 13420, as supplemented by section 13300 and 13310. The lump sum price shall include all materials, equipment, labor, markup, OH & P and items necessary to provide, install and coordinate startup and implementation of the specified systems. Electrical work associated with this item shall be paid under bid item 2.08. The lump sum price shall be full compensation for all labor, materials, and equipment required to complete the described work in accordance with the plans and specifications.

2.06 Submersible Mixer Relocation and Installation

Bid Item 6

Lump sum payment will be made for relocation of two (2) existing submersible mixer from the CCC to the filter influent channel and to the northern portion of the CCC as shown on the plans. Mixer installation shall include relocation of the existing mixer, rail system, startup and demonstration of the equipment in the new location. Installation to include all items for a complete and operable system. The lump sum price shall be full compensation for all labor, materials, and equipment required to complete the described work in accordance with the plans and specifications.

2.07 Telescoping Valves and Drain Lines**Bid Item 7**

Lump sum payment will be made for installation of (3) telescoping valves in the CCC. The work includes the telescoping valves, valve and drain piping, wall cores, link seals, wall fasteners, excavation and installation. The lump sum price shall be full compensation for all labor, materials, and equipment required to complete the described work in accordance with the plans and specifications.

2.08 Electrical**Bid Item 8**

Lump sum payment will be made for all electrical work associated with relocation of the mixers and provision of conduit, power and requisite signal wiring to/from the new chlorine analyzers. The lump sum price shall be full compensation for all labor, materials, and equipment required to complete the described work in accordance with the plans and specifications.

2.09 As-Built Survey**Bid Item 9**

Lump sum payment will be made based on delivery of record drawings produced by a licensed surveyor conforming to the specifications. Periodical record drawings shall be submitted with each pay estimate on which the Engineer shall rely to ensure the improvements are constructed in accordance with the design locations and elevations. Progress payments submitted without updated record drawings to document work constructed that pay period shall be a basis for rejection of the pay request until such time as adequate record drawings are submitted.

2.10 Permits and Allowances**Bid Item 10**

Payment will be made at actual cost plus 10% for additional work and/or materials specifically requested and authorized by the City. Upon request, a written proposal will be prepared detailing labor, equipment, and material costs. The proposal will be submitted by the GC and reviewed by the City and Engineer. A written work authorization will be provided for the activity and must be approved in writing. The work authorization will contain a description of the work, schedule, and price. This allowance will also be used to pay for electrical permit fees. The application is the Contractor's responsibility and fees will be paid at actual cost.

END OF SECTION

SECTION 01027
APPLICATION FOR PAYMENT

PART 1 – GENERAL

1.01 DESCRIPTION

- A. Scope of Work: Submit Application for payment to the Engineer in accordance with schedule established by Conditions of the Contract and Agreement between Owner and Contractor.
- B. Related Requirements Described Elsewhere:
 - 1. Agreement: Section 00500
 - 2. Construction Progress Schedules: Section 01310
 - 3. Schedule of Unit Prices: Section 00300.
 - 4. Project Record Documents: Section 01720

1.02 FORMAT REQUIRED

- A. Submit applications with itemized data typed on 8-1/2 inch by 11 inch or white paper continuation sheets.
- B. Provide itemized data on continuation sheets of format, schedules, line items, and values specified on the Application and Certificate for Payment Form. The Contractor shall use the item descriptions and contract values included in schedule of values, approved, and accepted by the Engineer as a basis for preparation of the Application for Payment Form.

1.03 PREPARATION OF APPLICATION FOR EACH PROGRESS PAYMENT

- A. Application Form:
 - 1. Fill in required information, including that for Change Orders executed prior to date of submittal of application.
 - 2. Fill in percent complete for each activity and dollar values to agree with respective percents.
 - 3. Execute certification with signature of a responsible officer of Contractor.
- B. Continuous Sheets:
 - 1. Fill in total of all scheduled component items of the Work, with item number and schedule dollar value for each item.

2. Fill in dollar value in each column for each scheduled line item when Work has been performed or products stored. Round off values to nearest dollar, or as specified for Schedule of Values.
3. List each Change Order executed prior to date of submission, at the end of the continuation sheets. List by Change Order Number, and description, as for an original component item Work.
4. To receive approval for payment on component material stored on site, submit copies of the original invoices with Application and Certificate for Payment.
5. As provided for in the Application and Certificate for Payment Form, the Contractor shall certify, for each current pay request, that all previous progress payments received from the Owner, under this Contract, have been applied by the Contractor to discharge in full, all obligations of the Contractor in connection with Work covered by prior Applications for Payment, and all materials and equipment incorporated into the Work are free and clear of all liens, claims, security interest, and encumbrances. Contractor shall attach to each Application and Certificate for Payment like affidavits by all Subcontractors.

1.04 SUBSTANTIATING DATA FOR PROGRESS PAYMENTS

- A. 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:
 5. Item number and identification as shown on application.
 6. Description of specific material.
- B. Submit one (1) copy of data and cover letter for each copy of application.
- C. The Contractor is to maintain an updated set of drawings to be used as record drawings in accordance with Section 01720: Project Record Documents. As a prerequisite for monthly progress payments, the Contractor is to exhibit the updated record drawings for review by the Owner and the Engineer.
- D. Each monthly application for payment shall incorporate the corresponding "monthly progress status report" and updated construction schedule, prepared in accordance with the requirements of Section 01310: Construction Progress Schedules.

- E. As a prerequisite for payment, Contractor shall submit a duly executed letter from surety consenting to payment due and progress to date.
- F. Provide construction photographs in accordance with Section 01380: Construction Photographs.

1.05 PREPARATION OF APPLICATION FOR FINAL PAYMENT

- A. Fill in application form as specified for progress payments. Provide information as required by the General Conditions and Section 01700: Contract Closeout.
- B. Furnish evidence of completed operations and insurance in accordance with the General Conditions.
- C. Provide Contractor's Final Release of Lien and other close-out submittals as required by the General Conditions.

1.06 SUBMITTAL PROCEDURE

- A. Submit Application for Payment to the Engineer at the time stipulated in the Agreement, or as agreed to at the pre-construction meeting. Review the percents complete with the Engineer and resolve any conflict or discrepancies.
- B. Application for Payment to be submitted electronically in color for processing and payment.
- C. When the Engineer finds the Application and Certificate for Payment Form is properly completed and correct, he will execute the Certificate for Payment and transmit the forms to the Owner, with a copy to the Contractor.

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 Engineer shall not exceed 50 dBA from 7 P.M. to 7 A.M. or 60 dBA 7 A.M. to 7 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 Engineer or 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 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.

1.03 EXCAVATION AROUND AND CONNECTION TO EXISTING UTILITIES

- A. It is essential that the Contractor understand that the existing Owner's facilities must be kept in operation with minimal impact and shut-downs. To this end, the Contractor shall coordinate and consult with the Owner's operating personnel before excavating around or cutting into existing utilities on the site. Existing utilities of major concern are water, sanitary sewer, electrical power conduits, phone and television cables, instrumentation conduits, and cables.
- B. Some areas within the construction site may require hand excavation due to the congestion of underground piping systems and/or due to the criticality of piping systems that may be damaged unavoidably during machine excavation.
- C. Cover for underground piping shall not be less than that indicated on the Drawings, up to a minimum of 30 inches of cover where obtainable. In areas where other piping conflicts preclude the minimum cover desired, the piping shall be laid to provide the maximum cover obtainable.
- D. All connections to existing piping systems shall be made as shown or indicated on the Drawings after consultation, cooperation, and coordination with the Owner's

management personnel. Some such connections may have to be made during off-peak hours (late night or early morning hours). The Contractor shall give a minimum of three (3) working days notice to the Owner when tie-ins with the existing plant utilities are required.

- E. For major utility pipeline tie-ins and relocations, the Contractor shall submit a detailed Plan of Action for review and approval by the Owner and the Engineer. No major utility relocation or tie-ins shall proceed until the Plan of Action for that Work is approved.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

END OF SECTION

SECTION 01200
PROJECT MEETINGS

PART 1 - GENERAL

1.01 DESCRIPTION

A. Scope of Work:

1. The Contractor shall coordinate with the Engineer to schedule and administer the preconstruction meeting, resident meeting, utility coordination, periodic progress meetings, and specifically called meetings throughout the progress of the Work.
2. The Engineer shall:
 - a. Prepare agenda for meetings.
 - b. Make physical arrangements for meetings.
 - c. Preside at meetings.
 - d. Take and distribute meeting minutes.
3. The Contractor shall:
 - a. Attend all meetings along with pertinent subcontractors and suppliers.
 - b. Appoint attendees who are qualified and authorized to act on behalf of the entity each represents.
 - c. Provide requested information at meetings.
4. The Owner shall:
 - a. Attend meetings to ascertain that the Work is expedited consistent with Contract Documents and construction schedules.

B. Related Requirements Described Elsewhere:

1. Construction Progress Schedules: Section 01310
2. Shop Drawings: Section 01340
3. Project Record Documents: Section 01720

1.02 PRECONSTRUCTION MEETING

- A. Purpose: To initiate coordination of contractual requirements prior to start of work.
- B. Scheduling: Engineer will schedule a preconstruction meeting after execution of the Contract. Invites shall be sent via electronic mail.
- C. Location: A local site, convenient for all parties, designated by the Engineer.

D. Attendance:

1. Owner's representative.
2. Engineer and his sub-consultants.
3. Resident project representative.
4. Contractor and his superintendent.
5. Major subcontractors.
6. Representatives of major suppliers and manufacturers, as appropriate.
7. Governmental and franchised utility representatives, as appropriate.
8. Permit agency representatives, as appropriate.
9. Funding agency representatives, as appropriate.
10. Others as requested by the Contractor, Owner, and Engineer.

E. Suggested Agenda:

1. Introductions and Roles.
2. Contract Execution and Dates.
 - a. Contracts.
 - b. Contract Time/Dates.
 - c. Copies of Conformed Documents.
3. Communications:
 - a. Lines of Communication.
 - b. Coordination Meetings.
 - c. Contact List.
 - d. Requests for Information (RFIs).
4. Preconstruction Matters:
 - a. Submittals.
 - b. Material Acquisition.
 - c. Mobilization.
 - d. Permitting.
5. Construction/Coordination:
 - a. Working Days/Hours.
 - b. Change Orders.
 - c. Locating Existing Facilities.
 - d. Demolition.
 - e. Testing.
 - f. Updated Schedules.
6. Pay Requests:
 - a. Process.
 - b. Schedule of Values.
 - c. Stored Materials.
 - d. Preliminary As-Built.

7. Contract Closeout:

- a. Substantial Completion.
- b. Punch-list.
- c. Final Acceptance.
- d. Warranty.
- e. Final Payment.

1.03 RESIDENT MEETING(S)

- A. Purpose: To present construction approach to effected residents and to allow residents to ask questions concerning such.
- B. Scheduling: Engineer/Owner will schedule resident meeting(s) after preconstruction meeting is held, but before construction begins. Invites shall be distributed via electronic mail and hard copy flyers. Contractor shall assist in the distribution of flyers.
- C. Location: A local site, convenient for all parties, designated by the Engineer/Owner.
- D. Attendance:
 - 1. Owner's representative.
 - 2. Engineer.
 - 3. Resident project representative.
 - 4. Contractor and his superintendent.
 - 5. Major subcontractors, as appropriate.
 - 6. Residents.
- E. Suggested Agenda: To be determined by Engineer/Owner.

1.04 UTILITY COORDINATION MEETING(S)

- A. Purpose: To discuss the coordination of the construction with existing and proposed utilities.
- B. Scheduling: Engineer will schedule utility coordination meeting(s) as needed. These meetings may be held in conjunction with Progress Meetings. Invites shall be distributed via electronic mail.
- C. Location: A local site, convenient for all parties, designated by the Engineer.
- D. Attendance:
 - 1. Owner's representative.
 - 2. Engineer.
 - 3. Resident project representative.
 - 4. Contractor and his superintendent.
 - 5. Major subcontractors, as appropriate.
 - 6. Utility representatives.

E. Suggested Agenda: To be determined by Engineer.

1.05 PROGRESS MEETINGS

A. Purpose: To discuss the progress of the construction and projected work activities.

B. Scheduling: Engineer will schedule progress meetings on a regular basis at a maximum frequency of once per week or less frequently, i.e. once per month, depending on the level of communication required for the project. Invites shall be distributed via electronic mail.

C. Location: A local site, convenient for all parties, designated by the Engineer.

D. Attendance:

1. Owner's representative.
2. Engineer and sub-consultants, as appropriate.
3. Resident project representative.
4. Contractor and his superintendent.
5. Major subcontractors, as appropriate.
6. Utility representatives, as appropriate.
7. Permit agency representatives, as appropriate.
8. Funding agency representatives, as appropriate.

E. Suggested Agenda:

1. Work progress since last meeting.
2. Work scheduled this period.
3. Field observations, problems and conflicts.
4. Construction schedule.
 - a. Status of current schedule.
 - b. Issues impacting schedule.
 - c. Fabrication and delivery schedules.
 - d. Corrective measures to regain projected schedule.
5. Submittals.
6. RFIs.
7. Pending Changes and Substitutions.
8. Quality Control.
9. Pay Requests.
10. Other Business.

PART 2- PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

SECTION 01300
LOCATION, SCOPE AND SPECIAL REQUIREMENTS

PART 1 - GENERAL

- 1.01 The Contractor shall not have any right in property in any materials taken from any excavation and he shall not remove any earth, sand or other material from the lines of the work before the excavation is refilled except upon direction of the Engineer. The provisions of this paragraph shall not be construed as relieving the Contractor of any kind of his obligations to remove and dispose of any of the material excavated, with or without rehandling, at his cost and expense as provided in these specifications.
- 1.02 From investigations, including surveys made at the site, it is assumed that physical conditions are approximately as indicated on the drawings, but the nature of the materials below the surface, the depth to satisfactory foundations, or the stability of beds or banks or quantity of groundwater are not guaranteed.
- 1.03 Where reference is made within these documents to government specifications, or those of well known organizations such as ASTM, ASA, ASME, etc., the latest editions shall be used, any or all references in these documents to earlier stated editions notwithstanding.
- 1.04 The Contractor shall take all necessary precautions to prevent damage to existing City utilities which are to remain in service during any of his construction operations. Should such utilities be damaged by the Contractor, he shall be required to replace, or repair same, to the satisfaction of the Engineer, at no additional cost to the Owner.
- 1.05 Certain information regarding the reputed presence, size, character, and location of existing underground structure, pipes and conduits has been shown on the contract drawings. The location of underground structures shown may be inaccurate and other obstructions than those shown may be encountered. The Contractor distinctly agrees that the Engineer and the Owner are 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; that he shall have no claim for delay or extra compensation on account of incorrectness of information given; or on account of insufficiency or absence of information regarding obstructions either revealed or not revealed by the drawings; and that he shall have no claim for relief from any obligation or responsibility under this Contract, in case the location, size or character of any pipe or other underground structure is encountered that is not shown on the drawings.
- 1.06 The Contractor agrees that the work shall be started not later than the date indicated in the "Notice to Proceed", and that the total work shall be completed within ninety (90) calendar days.
 - A. The Contractor further agrees that for each calendar day, with the exception of Sundays and legal holidays, that any such work shall remain uncompleted after the completion time stipulated above, the sum of **Five Hundred Dollars (\$500)** per day shall be deducted by the Owner from monies due the Contractor, not as a penalty but as liquidated damages. Charges shall accrue upon failure to achieve final completion target date, unless otherwise approved. If the Contractor is declared in default in accordance with the provisions of the specifications, liquidated damages shall be charged as provided herein, and such amounts shall be deducted from the final amount payable to the Contractor or his Surety. Should the total amount chargeable as liquidated damages exceed the amount due or payable to the

Contractor or his Surety, then such excess shall be paid to the Owner by the Contractor or his Surety.

- 1.07 The City shall provide reference points as shown on the plans. Contractor shall be responsible for having a land surveyor registered in the State of Florida and approved by the Engineer lay out the work, shall protect and preserve the established reference points and shall make no changes or relocations without the prior written approval of the Engineer. Contractor shall report to Engineer whenever such reference point is lost or destroyed or required location because of necessary changes in grades or locations, and the Contractor shall be responsible for replacement or relocation of such reference points by professionally qualified personnel, registered in the State of Florida and approved by the Engineer.
- 1.08 All dewatering and pumping necessary to accomplish the work of this Contract shall be performed by the Contractor at no extra or additional cost to the Owner. Any permits required shall be the responsibility of the Contractor.
- 1.09 Examination of Contract Documents and Site. Before submitting a Bid each Contractor 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, ordinance, 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.
- 1.10 Attention is directed to the requirements of the following agencies with regard to permits and construction of utilities within their rights of way or jurisdiction.
 - A. City of Ormond Beach.
 - B. FDEP Wastewater Collection /Transmission System Permit.
 - C. The Owner will make necessary application for permits to construct such utilities. It shall be, however, the responsibility of the Contractor to construct the utilities in strict accordance with the requirements of the above-mentioned agencies, and no extra or additional payments will be made by the Owner for this work.
- 1.11 Construction shall be limited to weekday "day light" working hours. No "weekend", night time", or "holiday" work shall be performed without obtaining permission in advance from the Project Engineer. Certain non-essential items such as clean up, seeding and mulching, sodding, some well pointing operations, saw cutting of pavement, etc. may be performed by the Contractor during the above times by giving the Project Engineer "Advance Notice" of such operations. The Prime Contractor shall establish the normal (40 hours) work week and all subcontractors shall work only during this normal (40 hour) work week to allow the Project Owners' Representative to observe the contract work during this normal (40 hour) work week. Any weekend, nighttime, or holiday work permitted to be performed by the Contractor shall be by agreement of both the Engineer and the City. Such work shall be performed in the presence of the Owners' Representative, paid for and scheduled at least 48 hours in advance of the activity planned. The fee shall be \$500 per inspector per day or any portion thereof, paid in advance directly to the Owner. The fee shall only cover the activities the Owner can reasonably inspect with one person. The Owner solely reserves the right to determine the number of inspectors required for the number of Contractor's crews working outside of the normal 40 hour work week.

- 1.12 Contract Insurance Requirements. The insurance requirements in Section 00800A represent the minimum insurance requirements for contract with the OWNER.
- 1.13 The Contractor shall provide an English speaking full time superintendent to supervise sub-contractors and provide direction to field crews. The Engineer's representative shall not be responsible for providing direction to sub-contractor or field crews. The Contractor's superintendent shall not be verbally or physically abusive to citizens or other project personnel. Use of "foul" language in the presence of or belligerence towards citizens or project representatives shall be grounds for immediate replacement of the superintendent at no cost to the owner.
- 1.14 The Contractor acknowledges that he is responsible for complying with all aspects of the Florida Trench Safety Act (90-96, Laws of Fla.) effective October 1, 1990. He assumes all responsibility and costs entailed.
- 1.15 The Contractor is responsible for obtaining a Water Management District Permit for (dewatering) consumptive use if the Contractor's "means or methods" trip the Agency's thresholds requiring permits. No separate payment or contract time extension for the Contractor obtaining the permit shall be granted by the City.
- 1.16 Land disturbed shall have silt fence or "turbidity curtains" installed around the perimeter to control erosion and sediment runoff where it is likely to occur during construction at no extra cost to the Owner.
- 1.17 The Contractor shall submit an executed "Consent of Surety for Final Payment" form, copy of which is included with the Contract Documents, prior to submitting a final request for payment.
- 1.18 All unit pricing shall remain valid for the duration of the contract.
- 1.19 Florida Sales Tax on materials, as well as all other customary taxes on construction activities, shall be paid for by the Contractor at no additional expense to the Owner.
- 1.20 The Contractor shall not sublet, sell, transfer, assign or otherwise dispose of the utility portion thereof, or his right, title or interest therein, without written consent of the Owner.
- 1.21 Limitations on the Engineer's Responsibilities
 - A. Neither the Engineer's authority to act under this Paragraph nor any decision made by him in good faith either to exercise or not exercise such authority shall give rise to any duty or responsibility of the Engineer to the Contractor, any Subcontractor, any of their agents or employees or any other person performing any of the work.
 - B. The Engineer will not be responsible for the construction means, methods, techniques, sequences or procedures, or the safety precautions and programs incident thereto, and he will not be responsible for the Contractor's failure to perform the work in accordance with the Contract Documents.
 - C. The Engineer will not be responsible for the acts or omissions of the Contractor, any subcontractors, or any of his or their agents or employees, or any other persons performing any of the work.

- 1.22 The City subject to availability will make available reasonable amounts of water for contractor compaction requirements and potable water for flushing and testing requirements at no cost to the contractor. Abnormally high usage (gross wastage) of provided water by the Contractor's organization shall be subject to City backcharges to the Contractor at established City rates.
- 1.23 Reasonable care shall be taken during construction to avoid damage to vegetation. Ornamental shrubbery and tree branches shall be temporarily tied back, where appropriate, to minimize damage. Trees which receive damage to branches shall be trimmed of those branches to improve the appearance of the tree. Tree trunks receiving damage from equipment shall be treated with a tree dressing.
- 1.24 The Contractor's forces shall be required to dig and expose all existing utilities including telephone cables, T.V. cables (both public and private), gas lines, water mains, force mains, sewer services, water services and private sprinklers a minimum of twenty-four (24) hours in advance of the pipe laying operation. City forces and other utilities will mark the approximate location of their utilities when contacted. City crew will not be responsible for hand digging the location of City services. Separate lump sum payment shall be made for this work.
- 1.25 All existing improved areas disturbed by construction shall be sodded with the same type sod as the existing variety of sod encountered. Separate unit price payment or lump sum payment will be made for this work.
- 1.26 The Contractor shall make his own provisions for materials security. Any City provided work areas shall be returned to its original or better condition upon the completion of the project. Sodding of any disturbed areas utilized by the Contractor for work area will be accomplished by the Contractor at no additional cost to the City. Separate payment for this work will not be made and shall be included in the appropriate contract work items by the Contractor in the bid proposal.
- 1.27 Attached if issued are the project permits the Contractor shall comply with at no additional cost to the Owner.
- 1.28 Burning or burying of land clearing debris shall not be permitted. All organic matter and other debris shall be disposed of by the Contractor at an approved landfill.

END OF SECTION

SECTION 01310
CONSTRUCTION PROGRESS SCHEDULES

PART 1 - GENERAL

1.01 DESCRIPTION

A. Scope of Work:

1. Promptly after award of the Contract, the Contractor shall prepare and submit to the Engineer estimated construction progress schedules demonstrating complete fulfillment of all Contract requirements utilizing a Critical Path Method (hereinafter referred to as CPM) in planning, coordinating, and performing the Work under this Contract (including all activities of subcontractors, equipment vendors, and suppliers). The principles and definition of CPM terms used herein shall be as set forth in the Associated General Contractors of America (AGC) publication, The Use of CPM in Construction, A Manual for General Contractors and the Construction Industry, Copyright 1976, but the provisions of this Specification shall govern the planning, coordinating, and performance of the Work.
2. Submit revised progress schedules on a monthly basis. No partial payments shall be approved until there is an approved construction progress schedule on hand.

B. Related Requirements Described Elsewhere:

1. Conditions of the Contract.
2. Summary of Work: Section 01010
3. Project Meetings: Section 01200
4. Application for Payment: Section 01027
5. Shop Drawings: Section 01340
6. Schedule of Values: Section 01370

1.02 QUALIFICATIONS

- A. A statement of computerized CPM capability shall be submitted in writing prior to the award of the Contract and shall verify that either Contractor's organization has in-house capability to use the CPM technique or that Contractor will employ a CPM consultant who is so qualified.
- B. In-house capability shall be verified by description of construction projects to which Contractor or Contractor's consultant has successfully applied computerized CPM

and shall include at least two (2) projects valued at least half the expected value of this project.

1.03 FORM OF SCHEDULES

- A. Prepare schedules in the form of a horizontal bar chart.
 - 1. Provide a separate horizontal bar for each trade or operation within each structure or item.
 - 2. Horizontal time scale:
 - a) Show starting and completion dates for each activity in terms of the number of days after Notice to Proceed. All completion dates shown shall be within the period specified for contract completion.
 - b) Identify the first workday of each month.
 - 3. Scale and Spacing: Sufficient to allow space for notations and future revisions.
 - 4. Maximum Sheet Size: 24 inches by 36 inches.
- B. Format of Listings: The chronological order of the start of each item of work for each structure.
- C. Identification of Listings: By major specification section numbers as applicable and by utility.
- D. Construction Progress Schedules shall be computer generated using software offered by Primavera or approved equal.

1.04 CONTENT OF SCHEDULES

- A. Construction Progress Schedule:
 - 1. Show the complete sequence of construction by activity and by structure.
 - 2. Show the dates for the beginning and completion of each major element of construction in no more than a two (2) week increment scale. Specifically list, but do not limit to:
 - a. Shop Drawing Schedule.
 - b. Installation of temporary facilities.
 - c. Clearing.
 - d. Demolition.
 - e. Subcontractor work.

- f. Utility Installations.
 - g. Paving.
 - h. Start-Up.
 - i. Project closeout.
- 3. Show projected percentage of completion for each item, as of the first day of each month.
- 4. Show projected dollar cash flow requirements for each month of construction and for each activity as indicated by the approved Schedule of Values.
- B. Submittals for construction progress schedules shall be in accordance with Section 01340: Shop Drawings. Indicate on the schedule the following:
 - 1. The dates for Contractor's submittals.
 - 2. The dates submittals will be required for Owner-furnished products, if applicable.
 - 3. The dates approved submittals will be required from the Engineer.
- C. A typewritten list of all long lead items (equipment, materials, etc.).
- D. To the extent that the progress schedule or any revised progress schedule shows anything not jointly agreed upon or fails to show anything jointly agreed upon, it shall not be deemed to have been approved by the Engineer. Failure to include any element of work required for the performance of this Contract shall not excuse the Contractor from completing all work required within any applicable completion date, notwithstanding the Engineer's approval of the progress schedule.
- E. Scheduling Constraints: The work within Owner's property must be completed within the maximum number of days start to finish, as indicated in the Contract. Additionally, work must proceed on a continuous basis, without stoppages, except for nights and weekends. There shall be no lapses between phases of construction.

1.05 PROGRESS REVISIONS

- A. Indicate progress of each activity to date of submission.
- B. Show changes occurring since previous submission of schedule:
 - 1. Major changes in scope.
 - 2. Activities modified since previous submission.
 - 3. Revised projections of progress and completion.

4. Other identifiable changes.
- C. Provide a narrative report as needed to define:
1. Problem areas, anticipated delays, and the impact on the schedule.
 2. Corrective action recommended, and its effect.
 3. The effect of changes on schedules of other prime contractors.
- D. If the Work falls behind the critical path schedule by two (2) weeks or more, the Contractor shall prepare a recovery schedule.

1.06 SUBMISSIONS

- A. Submittal Requirements.
1. Logic network and/or time-phased bar chart, computer generated.
 2. Computerized network analysis:
 - a. Sort by early start.
 - b. Sort by float.
 - c. Sort by predecessor/successor.
 3. Narrative description of the logic and reasoning of the schedule.

B. Time of Submittals.

Within ten (10) working days after Notice to Proceed, Contractor shall submit a network diagram describing the activities to be accomplished in the project and their dependency relationships, (predecessor/successor) as well as a tabulated schedule as herein defined. The total length of time indicated on the initial CPM schedule shall equal the exact number of days in the Contract Time as defined in Section 00500: Agreement. The schedule produced and submitted shall also indicate calendar dates, including project starting and completion dates, based on the Contract Commencement and completion dates indicated in the Notice to Proceed. The Engineer will complete the review of the complete schedule within fifteen (15) working days after receipt. During the review process, the Engineer may meet with a representative of Contractor to review the proposed plan and schedule to discuss any clarifications that may be necessary.

- C. Within ten (10) working days after the conclusion of the Engineer's review period, Contractor shall revise the network diagram as required and resubmit the network diagram and a tabulated schedule produced there from. The revised network diagram and tabulated schedule shall be reviewed and accepted or rejected by the Engineer within fifteen (15) working days after receipt. The network diagram and tabulated schedule, when accepted by the Engineer, shall constitute the project work schedule unless a revised schedule is required due to substantial changes in

the Work, a change in Contract Time or a recovery schedule is required and requested.

- D. Acceptance. The finalized schedule will be acceptable to the Engineer when, in the opinion of the Engineer, it demonstrates an orderly progression of the Work to completion in accordance with the Contract Documents. Such acceptance will neither impose on the Engineer responsibility for the progress or scheduling of the Work nor relieve Contractor from full responsibility therefore. The finalized schedule of shop drawing submittals will be acceptable to the Engineer when, in the opinion of the Engineer, it demonstrates a workable arrangement for processing the submittals in accordance with the requirements. The finalized Schedule of Values (lump sum price breakdown), as applicable, will be acceptable to the Engineer as to form and content when, in the opinion of the Engineer, it demonstrates a substantial basis for equitably distributing the Contract Price. When the network diagram and tabulated schedule have been accepted, the Contractor shall submit to the Engineer six (6) copies of the time-scaled network diagram, six (6) copies of a computerized tabulated schedule in which the activities have been sequenced by numbers, six (6) copies of a computerized tabulated schedule in which the activities have been sequenced by early starting date, and six (6) copies of a computerized, tabulated schedule in which activities have been sequenced by total float, and six (6) copies sorted by predecessor/successor.

- E. Revised Work Schedules. Contractor, if requested by the Engineer, shall provide a revised work schedule if, at any time, the Engineer considers the completion date to be in jeopardy because of "activities behind schedule." The revised work schedule shall include a new diagram and tabulated schedule conforming to the requirements of Paragraph 1.09 herein, designed to show how Contractor intends to accomplish the Work to meet the completion date. The form and method employed by Contractor shall be the same as for the original work schedule. No payment will be made if activities fall more than two (2) weeks behind schedule and a revised work schedule is not furnished.

- F. Schedule Revisions. The Engineer may require Contractor to modify any portions of the work schedule that become infeasible because of "activities behind schedule" or for any other valid reason. An activity that cannot be completed by its original latest completion date shall be deemed to be behind schedule. No change may be made to the sequence, duration, or relationships of any activity without approval of the Engineer.

1.07 DISTRIBUTION

- A. Distribute copies of the reviewed schedules to:
 - 1. Engineer.
 - 2. Jobsite file.
 - 3. Subcontractors.
 - 4. Other concerned parties.

5. Owner (two copies).

- B. Instruct recipients to report promptly to the Contractor, in writing, any problems anticipated by the projections shown in the schedules.

1.08 CHANGE ORDERS

- A. Upon approval of a change order, the approved changes shall be reflected in the next scheduled revision or update submittal of the construction progress schedule by the Contractor.

1.09 CPM STANDARDS

- A. CPM, as required by this Section, shall be interpreted to be generally as outlined in the Associated General Contractor's (AGC) publication, The Use of CPM in Construction, A Manual for General Contractors and the Construction Industry, Copyright 1976.

- B. Work schedules shall include a graphic network and computerized, tabulated schedules as described below. To be acceptable the schedule must demonstrate the following:

1. A logical succession of work from start to finish.
2. Definition of each activity. Activities shall be identified by major specification section numbers, as applicable, and by major utility.
3. A logical flow of work crews/equipment (crews are to be defined by manpower category and man-hours; equipment by type and hours).
4. Show all work activities and interfaces including submittals as well as major material and equipment deliveries.

- C. Networks.

1. The CPM network, or diagram, shall be in the form of a time-scaled diagram of the customary activity-on-type and may be divided into a number of separate pages with suitable notation relating the interface points among the pages. Notation on each activity line shall include a brief work description and a duration, as described in Paragraph 1.09, D. herein.
2. All construction activities and procurement shall be indicated in a time-scaled format, and a calendar shall be shown on all sheets along the entire sheet length. Each activity arrow shall be plotted so the beginning and completion dates of said activity can be determined graphically by comparison with the calendar scale. All activities shall be shown using the symbols that clearly distinguish between critical path activities, non-critical path activities, and float for each non-critical activity. All non-critical path activities shall show estimated performances time and float time in scaled form.

- D. The duration indicated for each activity shall be in calendar days and shall represent the single best time considering the scope of the work and resources planned for the activity including time for inclement weather. Except for certain non-labor activities, such as curing concrete or delivering materials, activity durations shall not exceed fourteen (14) days nor be less than one (1) day unless otherwise accepted by the Engineer.
- E. Tabulated Schedules. The initial schedule shall include the following minimum data for each activity.
1. Activity Beginning and Ending Numbers (i-j numbers) (single activity numbers may be used).
 2. Duration.
 3. Activity Description.
 4. Early Start Date (Calendar Dated).
 5. Late Start Date (Calendar Dated).
 6. Early Finish Date (Calendar Dated).
 7. Late Finish Date (Calendar Dated).
 8. Identified Critical Path.
 9. Total Float (Note: No activity may show more than twenty (20) days float).
 10. Cost of Activity.
 11. Equipment Hours, by type; Man-Power Hours, by crew or trade.
- F. Project Information. Each tabulation shall be prefaced with the following summary data.
1. Project Name.
 2. Contractor.
 3. Type of Tabulation (Initial or Updated).
 4. Project Duration.
 5. Project Scheduled Completion Date.
 6. Effective or Starting Date of the Schedule.
 7. New Project Completion Date and Project Status (if an updated or revised schedule).

8. Actual Start Date and Actual Finish Date (for all updated schedules).

1.10 SCHEDULE MONITORING

- A. At not less than monthly intervals or when specifically requested by Engineer, Contractor shall submit to the Engineer a computer printout of an updated schedule for those activities that remain to be completed. Typically, the updated schedule will be submitted with the application for payment as specified below.
- B. The updated schedule shall be submitted in the form, sequence, and number of copies requested for the initial schedule.

1.11 PROGRESS MEETINGS

For the monthly progress meeting, Contractor shall submit a revised CPM schedule and a three-week look-ahead schedule, showing all activities completed, in progress, uncompleted, or scheduled to be worked during the weeks. The three (3) weeks include the current week plus the next two (2) weeks. All activities shall be from the approved CPM and must be as shown on the CPM unless behind or ahead of schedule. One copy of the revised CPM schedule shall be submitted with each copy of that month's application for payment, electronically in color.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

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 material samples materials list, 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 Re submittal 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 Drawings 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 five (5) copies of descriptive or product data submittals/drawings to the Engineer. The Engineer will review the submittals/drawings and return to the Contractor the sets of marked-up submittals/drawings with appropriate review comments. All shop drawings, when practical, shall be 24 inch by 36 inch in size.
- H. Once submittals/drawings are approved, they are to be distributed as follows:
 - 1. Owner: One (1) copy.
 - 2. Engineer: Two (2) copies.
 - 3. Contractor: Two (2) copies.
- I. 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.

- J. 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 re-submittal.
- 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 no 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 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 3½-inch by 3½-inch, 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 title and number.
 9. 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, 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 one (1) year.
- I. Only the Engineer will utilize the color "red" in marking shop drawing submittals.

1.05 WORKING DRAWINGS

- A. When used in the Contract Documents, the term "working drawings" shall be considered to mean the Contractor's plan for temporary structures such as temporary bulkheads, support of open cut excavation, support of utilities, ground water control systems, forming and false work; for underpinning; and for such other work as may be required for construction but does not become an integral part of the project.
- B. Copies of working drawings as noted in paragraph 1.05 A. above, shall be submitted to the Engineer where required by the Contract Documents or requested by the Engineer, and shall be submitted at least thirty (30) calendar days (unless otherwise specified by the Engineer) in advance of their being required for work.
- C. Working drawings shall be signed by a registered Professional Engineer, currently licensed to practice in the State of Florida and shall convey, or be

accompanied by, calculation or other sufficient information to completely explain the structure, machine, or system described and its intended manner of use. Review of working drawings by the Engineer will not relieve the Contractor in any way from his responsibility with regard to the fulfillment of the terms of the Contract. All risks of error are assumed by the Contractor; the Owner and Engineer shall have no responsibility therefore.

1.06 SAMPLES

- A. The Contractor shall furnish, for the approval of the Engineer, samples required by the Contract Documents or requested by the Engineer. Samples shall be delivered to the Engineer as specified or directed. The Contractor shall prepay all shipping charges on samples. Materials or equipment for which samples are required shall not be used in work until approved by the Engineer.
- B. Samples shall be of sufficient size and quantity to clearly illustrate:
 - 1. Functional characteristics of the product, with integrally related parts and attachment devices.
 - 2. Full range of color, texture and pattern.
 - 3. A minimum of two samples of each item shall be submitted.
- C. Each sample shall have a label indicating:
 - 1. Name of project.
 - 2. Name of Contractor and subcontractor.
 - 3. Material or equipment represented.
 - 4. Place of origin.
 - 5. Name of producer and brand (if any).
 - 6. Location in project.
 - 7. Submittal Number.

(Samples of finished materials shall have additional marking that will identify them under the finish schedules).
- D. The Contractor shall prepare a transmittal letter in triplicate for each shipment of samples containing the information required in paragraph 1.06 B. above. He shall enclose a copy of this letter with the shipment and send a copy of this letter to the Engineer. Approval of a sample shall be only for the characteristics or use names in such approval and shall not be construed to change or modify any Contract requirements.
- E. Approved samples not destroyed in testing shall be sent to the Engineer or stored at the site of work. Approved samples of the hardware in good condition will be marked for identification and may be used in the work. Materials and equipment incorporated in work shall match the approved samples. Samples which failed testing or were not approved will be returned to the Contractor at his expense, if so requested at time of submission.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

SECTION 01370
SCHEDULE OF VALUES

PART 1 - GENERAL

1.01 DESCRIPTION

A. Scope of Work:

1. Submit to the Engineer a Schedule of Values allocated to the various lump sum portions of the Work, at the Pre-Construction Conference, and as otherwise specified or requested to be submitted earlier as evidence of the Apparent Low Bidder's qualifications.
2. Upon request of the Engineer support the values with data which will substantiate their correctness. The data shall include, but not be limited to quantity of materials, all sub-elements of the activity, and their units of measure.
3. The Schedule of Values shall establish the actual value for each activity of the Work to be completed taken from the approved Critical Path Method (CPM) Construction Schedule and shall be used as the basis for the Contractor's Applications for Payment.

B. Related Requirements Described Elsewhere:

1. Conditions of the Construction Contract.

1.02 FORM AND CONTENT OF SCHEDULE OF VALUES

A. Identify schedule with:

1. Title of project and location.
2. Owner and purchase order number.
3. Engineer and project number.
4. Name and address of Contractor.
5. Contract designation.
6. Date of submission.

B. Schedule shall list the installed value of the component parts of the Work in sufficient detail to serve as a basis for computing item prices for progress payments during construction.

C. Identify each line item with the number and the title of the respective section of the Specifications.

- D. For each major item of the Work, list sub-values of major products or operations under the major item.
- E. For the various portions of the Work:
 - 1. The amount for each item shall reflect a total installed cost including a directly proportional amount of the Contractor's overhead and profit.
 - 2. For items on which progress payments will be requested for stored materials, break down the value into:
 - a. The cost of the materials, delivered and unloaded, with taxes paid. Paid invoices are required for materials. Payment for materials shall be limited to the invoiced amount only.
 - b. The total installed value.
- F. Round off figures to nearest dollar amount.
- G. The sum of the costs of all items listed in the schedule shall equal the total Contract Price.
- H. For each item which has an installed value of more than \$15,000, provide a breakdown of costs to list major products or operations under each item.

1.03 SUB-SCHEDULE OF UNIT MATERIAL VALUES

- A. Submit a separate schedule of unit prices for materials to be stored on site and for those materials incorporated into the Work for which progress payments will be requested.
- B. The unit values for the materials shall be broken down into:
 - 1. Cost of the material, delivered and unloaded at the site, with taxes paid.
 - 2. Copies of paid invoices for component material shall be included with the payment request in which the material first appears.
- C. Only materials unique to the project may be billed when stored on site. Materials of standard use such as conduit, wire, small-diameter pipe, steel, etc., shall not be accepted for payment.
- D. The installed unit value multiplied by the quantity listed shall equal the cost of that item in the Schedule of Values.

1.04 REVIEW AND RESUBMITTAL

- A. After review by Engineer, revise and resubmit Schedule of Values and Schedule of Unit Material Values as required.
- B. Resubmit revised schedules in same manner.

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.
- B. Related Requirements Described Elsewhere:
 - 1. Project Requirements: Section 01000
 - 2. Summary of Work: Section 01010
 - 3. Location, Scope and Special Requirements: Section 01300
 - 4. Project Record Documents: Section 01720

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 (10) 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 flash drive to the Owner at the completion of the Project.
 - 2. Flash drives 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.

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 client)
- 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 as specified in Section 01720.
 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 (1) 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 (10%) 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 01410

TESTING AND TESTING LABORATORY SERVICES

PART 1 - GENERAL

1.01 DESCRIPTION

A. Scope of Work:

1. Contractor will employ, and pay for services of an Independent testing Laboratory to perform testing specifically indicated on the Contract Documents or specified in the Specifications herein and may at any other time elect to have materials and equipment tested for conformity with the Contract Documents.
2. Contractor shall cooperate with the laboratory to facilitate the execution of its required services.
3. Contractor shall provide engineer with all test results as indicated herein within five (5) days of receipt.

B. The following schedule defines the responsibility for various tests.

<u>Test</u>	<u>Notes</u>	<u>Paid for By</u>
Soil Compaction	Pipe Work: every 300 ft. at each lift of compaction minimum. Beneath Structures: each 500 sq.ft. lift of compaction minimum and each lift around structures.	Contractor
Pressure	As specified in Section 15050	Contractor
Bacteriological	As required by local and state agencies.	Contractor
LBR	Each 1500 SF of pavement (minimum).	Contractor
Concrete	Slump test each delivery and compression test five cylinders every 50 C.Y. (minimum).	Contractor

- C. Additional Tests: The Contractor shall pay for first tests as specified herein. In the event that first test samples do not meet the applicable material specification, the Contractor shall take measures to conform the material and equipment to the Specifications. All subsequent tests shall be paid for by the Contractor.

1.02 LABORATORY TESTS

- A. The materials listed below shall require advance and periodic laboratory tests as indicated, and shall be sampled in accordance with the methods of the A.S.T.M. and as directed by the Engineer. With the exception of concrete test cylinders and mixing water, duplicate advance samples of all materials requiring laboratory tests shall be submitted to the Engineer, one of which will be certified by the Engineer for submission to the testing laboratory and the other retained on the job site in suitable storage provided by the Contractor. Except as noted below, preliminary samples of materials for advance laboratory tests shall be submitted at least two (2) weeks prior to starting delivery of such materials to the site of the project. The testing laboratory shall furnish both the Engineer and the Contractor with two (2) copies of the reports showing the results of such tests, and the reports shall be considered as sufficient evidence of the acceptance or rejection of the quality of the materials tested. The specifications for, and the method of testing, will be found under the detailed specifications for the particular material involved. All samples shall be properly packed and clearly marked as to source and intended use.

MATERIALS	TEST FREQUENCY	SAMPLE SIZE	SHIPPING CONTAINER
Fine Aggregate	Advance, first shipment then each 100 tons	100 lbs.	Canvas Sack
Coarse Aggregate	Advance, first shipment then each 200 tons	Stone or Gravel 200 lbs.	Strong Sack
Concrete	Advance test using approved materials	4 cylinders per mix, 2 broken at 7 days, 2 at 28 days	
Concrete (b) Air Entrainment	Advance test on trial mix air entraining agent is used. Test as specified under Article 405 (e)		

1.03 TESTS

- A. The materials listed below shall be tested at the shop or plant of, and by, the producer. Each manufacturer of such materials shall be fully equipped to carry out the tests herein designated. Upon demand of the Engineer, the manufacturer shall perform such additional number of tests as the Engineer may deem necessary to establish the quality of the material offered for use. The Engineer shall be furnished with the certified records of reports of the results of all tests, such reports of records to contain a sworn statement that the tests have been made as specified.

MATERIAL	TEST METHOD
Cement	ASTM C114
Ductile Iron Pipe (Centrifugally Cast)	As required under ANSI A21.51-1176
Brick	ASTM C-32
Reinforcement	ASTM A-15 & A-305

1.04 FIELD TESTS

- A. All sewers, water lines, piping and equipment shall be tested in the field in the presence of the Engineer or his authorized assistant, in the manner prescribed in the sections of these specifications pertaining to such installations. The Engineer may also perform or have performed any other field tests necessary to determine compliance with the Contract requirements. The Contractor shall furnish all necessary labor, equipment, and materials for such tests and, with the exception of the Engineer's expenses, shall bear all the cost thereof.

1.05 PAVING TESTS

- A. The following tests will be made, unless otherwise stipulated by the Engineer, by a testing laboratory approved by the Engineer.

Material	Test or Test Method	Frequency
Subbase	1) AASHO T-180 (Modified Proctor Minimum 98% Density)	Every 300 LF
	2) Limerock Bearing Ratio 40	Every 300 LF
Base	(Soil Cement) (1) Mix Design 350 psi @ 28 days. Mix design required 7 days in advance.	Prior to Mixing Base
	(2) Optimum Moisture content and Maximum Density (AASHTO T-134)	Every 300 LF
	(3) LBR 100	Every 1500 sf
	(4) Depth (6 inch minimum)	Every 300 feet
Paving	(1) Job Mix Formula. Required 7 days in advance and submit to Engineer	Each Job
	(2) Bitumen Content of Mix	Every 2500 SY or fraction thereof
	(3) In Place Density	Every 300' (left, right & center)
	(4) Marshall Field Stability Index	Every 1500 SY or fraction thereof
	(5) Thickness Cores	Every 300' (left, right, & center)

1.06 Basis of Payment

- A. All shop tests and mill inspection shall be included in the price of the manufactured article, and no separate or extra payment will be made for such tests and inspection.
- B. All laboratory and field tests will be paid for by the Contractor; he shall furnish all necessary labor, equipment and materials for such tests and, with the exception of the Engineer's expenses, shall bear all the costs thereof.

1.07 LABORATORY DUTIES: LIMITATIONS OF AUTHORITY

- A. Cooperate with Engineer and Contractor; provide qualified personnel promptly on notice.
- B. Perform specified inspections, sampling and testing of materials and methods of construction:
 - 1. Comply with specific standards; ASTM, other recognized authorities, and as specified.
 - 2. Determine and report on compliance with requirements of Contract Documents.
- C. Promptly notify the Engineer and Contractor of material or operations which do not meet the specifications.
- D. Promptly submit five (5) copies of reports of inspections and tests to the Engineer including:
 - 1. Date issued.
 - 2. Project title and Engineer's job number.
 - 3. Testing Laboratory name and address.
 - 4. Name and signature of inspector.
 - 5. Date of inspection of inspector.
 - 6. Date of inspection or sampling.
 - 7. Date of test.
 - 8. Identification of product and Specification section.
 - 9. Location in project.
 - 10. Type of inspection or test.
 - 11. Compliance with Contract Documents or not.
- E. Laboratory is not authorized to:
 - 1. Release, revoke, alter, or enlarge on requirements of Contract Documents.
 - 2. Approve or reject any portion of work.
 - 3. Perform any duties of the Contractor.

1.08 CONTRACTOR'S RESPONSIBILITIES

- A. Cooperate with laboratory personnel; provide access to Work and manufacture's operations.
- B. Secure and deliver to the laboratory adequate representational samples of materials purposed to be used and which require testing.
- C. Provide to the laboratory the preliminary design mix proposed to be for concrete, and other materials mixes which require control by the testing laboratory.
- D. Materials and equipment used in the performance of work under this Contract are

subject to inspection and testing at the point of manufacturer of fabrication. Standard specifications for quality and workmanship are indicated in the Contract Documents. The Engineer may require the Contractor to provide statements or certificates from the manufacturers and fabricators that in full accordance with the standard specifications for quality and workmanship indicated in the Contract Documents. All costs of this testing and providing statements and certificates shall be a subsidiary obligation of the Contractor, and no extra charge to the Owner shall be allowed on account of such testing and certification.

E. Furnish incidental labor and facilities:

1. To provide access to Work to be tested.
2. To obtain and handle samples at the Project site or at the source of the product to be tested.
3. To facilitate inspections and tests.
4. For storage and curing of test samples.
5. Notify laboratory sufficiently in advance of operations to allow for laboratory assignment of personnel and scheduling of tests.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

SECTION 01505 MOBILIZATION

PART I - GENERAL

1.01 DEFINITION AND SCOPE

- A. Mobilization shall include the obtaining of all permits, insurance, and bonds; moving onto the site of all plant and equipment; furnishing and erecting plants, temporary buildings, and other construction facilities; all as required for the proper performance and completion of the Work. Mobilization shall include, but not be limited to, the following principal items.
1. Move onto the site all Contractors' plant and equipment required for first month operations.
 2. Install temporary construction power, wiring, and lighting facilities.
 3. Establish fire protection plan and safety program.
 4. Secure construction water supply.
 5. Provide field office trailers for Contractor and as may be specified for Owner and Engineer.
 6. Provide on-site sanitary facilities and potable water facilities as specified.
 7. Arrange for and erect Contractor's work and storage yard and employee's parking facilities.
 8. Submit all required insurance certificates and bonds.
 9. Obtain all required permits.
 10. Post all OSHA, EPA, Department of Labor, and all other required notices.
 11. Have Contractor's superintendent at the job site full time.
 12. Submit a detailed construction CPM schedule acceptable to the Engineer as specified.
 13. Submit a schedule of values of the Work.
 14. Submit a schedule of submittals.

1.02 DEMOBILIZATION

- A. Demobilization is the timely and proper removal of all contractor owned material, equipment or plant, from the job site and the proper restoration or completion of work necessary to bring the site into full compliance with the contract documents.

1.03 PAYMENT FOR DEMOBILIZATION

- A. The Contractor's attention is directed to the condition that no payment for Demobilization, or any part thereof, will be approved for payment under the Contract. Demobilization is a subsidiary obligation of the Contractor.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

SECTION 01525 CONSTRUCTION AIDS

PART 1 - GENERAL

1.01 DESCRIPTION

- A. Scope of Work: Furnish, install and maintain required construction aids, remove on completion of Work.
- B. Related Requirements Described Elsewhere:
 - 1. Summary of Project: Section 01010.
- C. Comply with applicable requirements specified in Sections of Division 2 through 16.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Materials may be new or used, suitable for the intended purpose, but must not violate requirements of applicable codes and standards.

2.02 CONSTRUCTION AIDS

- A. Provide construction aids and equipment required by personnel and to facilitate execution of the Work: scaffolds, staging, ladders, stairs, ramps, runways, platforms, railings, hoists, cranes, chutes and other such facilities and equipment such as temporary valves and fittings. Refer to respective Sections for particular requirements for each trade.
- B. When permanent stair framing is in place, provide temporary treads, platforms and railings, for use by construction personnel.
- C. Maintain facilities and equipment in first-class condition.

PART 3 - EXECUTION

3.01 PREPARATION

- A. Consult with the Engineer, review site conditions and factors which affect construction procedures and construction aids, which may be affected by execution of the Work.

3.02 GENERAL

- A. Comply with applicable requirements specified in sections of Division 2 through 16.

- B. Relocate construction aids as required by progress of construction, by storage of work requirements of Owner and other contractors employed at the site.

3.03 REMOVAL

- A. Completely remove temporary materials, equipment and services:
 - 1. When construction needs can be met by use of permanent construction.
 - 2. At completion of work.
- B. Clean and restore areas damaged by installation by use of temporary facilities.
 - 1. Remove foundations and underground installations for construction aids.
 - 2. Grade and grass areas of site affected by temporary installations to required elevations, slopes, ground cover and clean the area.
- C. Restore permanent facilities used for temporary purposes to specified condition or in kind if not specified.

END OF SECTION

SECTION 01530
PROTECTION OF EXISTING FACILITIES

PART 1 - GENERAL

1.01 GENERAL

- A. The Contractor shall protect all existing facilities, including all utilities and improvements not designated for removal, and shall restore damaged or temporarily relocated utilities and improvements to a condition equal to or better than prior to such damage or temporary relocation, all in accordance with the Contract Documents.

1.02 EXISTING UTILITIES AND IMPROVEMENTS

- A. General: The Contractor shall protect both aboveground and underground utilities and other improvements which may be impaired during construction operations, regardless of whether or not the utilities are indicated on the Drawings. The Contractor shall take all possible precautions for the protection of unforeseen utility lines to provide for uninterrupted service and to provide such special protection as may be necessary.
- B. Except where the Drawings indicate utilities have been field located during design or certain utility locations shall be exposed as part of the Work, the Contractor shall be responsible for exploratory excavations as it deems necessary to determine the exact locations and depths of utilities which may interfere with its work. All such exploratory excavations shall be performed as soon as practicable after Notice to Proceed and, in any event, a sufficient time in advance of construction to avoid possible delays to the Contractor's progress. When such exploratory excavations show the utility location as shown on the Drawings to be in error, the Contractor shall so notify the Engineer.
- C. The number of exploratory excavations required shall be that number which is sufficient to determine the alignment and grade of the utility.
- D. Utilities to be Moved: In case it shall be necessary to move the property of any public utility or franchise holder, such utility company or franchise holder will, upon request of the Contractor, be notified by the Owner to move such property within a specified reasonable time. When utility lines that are to be removed are encountered within the area of operations, the Contractor shall notify the Engineer a sufficient time in advance for the necessary measures to be taken to prevent interruption of service.
- E. Utilities to be Removed: Where the proper completion of the Work requires the temporary or permanent removal and/or relocation of an existing utility or other improvement which is indicated, the Contractor shall remove and, without unnecessary delay, temporarily replace or relocate such utility or improvement in a manner satisfactory to the Engineer and the Owner of the facility. In all cases of such temporary removal or relocation, restoration to the former location shall be

accomplished by the Contractor in a manner that will restore or replace the utility or improvement as nearly as possible to its former locations and to as good or better condition than found prior to removal.

- F. **Owner's Right of Access:** The right is reserved to the Owner and to the owners of public utilities and franchises to enter at any time upon any public street, alley, right-of-way, or easement for the purpose of making changes in their property made necessary by the Work of this Contract.
- G. **Underground Utilities Indicated:** Existing utility lines that are indicated or the locations of which are made known to the Contractor prior to excavation and that are to be retained, and all utility lines that are constructed during excavation operations shall be protected from damage during excavation and backfilling and, if damaged, shall be immediately repaired or replaced by the Contractor, unless otherwise repaired by the owner of the damaged utility. If the owner of the damaged facility performs its own repairs, the Contractor shall reimburse said owner for the costs of repair.
- H. **Underground Utilities Not Indicated:** In the event that the Contractor damages existing utility lines that are not indicated or the locations of which are not made known to the Contractor prior to excavation, a verbal report of such damage shall be made immediately to the Engineer and a written report thereof shall be made promptly thereafter. The Engineer will immediately notify the owner of the damaged utility. If the Engineer is not immediately available, the Contractor shall notify the utility owner of the damage. If directed by the Engineer, repairs shall be made by the Contractor under the provisions for changes and extra work contained in Articles 10, 11, and 12 of the General Conditions.
- I. **Costs of locating and repairing damage not due to failure of the Contractor to exercise reasonable care,** and removing or relocating such utility facilities not indicated in the Contract Documents with reasonable accuracy, and for equipment on the project which was actually working on that portion of the Work which was interrupted or idled by removal or relocation of such utility facilities, and which was necessarily idled during such Work will be paid for as extra Work in accordance with the Contract Documents.
- J. **Approval of Repairs:** All repairs to a damaged utility or improvement are subject to inspection and approval by an authorized representative of the utility or improvement owner before being concealed by backfill or other Work.
- K. **Maintaining in Service:** Unless indicated otherwise, oil and gasoline pipelines, power, and telephone or the communication cable ducts, gas and water mains, irrigation lines, sewer lines, storm drain lines, poles, and overhead power and communication wires and cables encountered along the line of the Work shall remain continuously in service during all the operations under the Contract, unless other arrangements satisfactory to the Engineer are made with the owner of said pipelines, duct, main, irrigation line, sewer, storm drain, pole, or wire or cable. The Contractor shall be responsible for and shall repair all damage due to its operations, and the provisions of this Section shall not be abated even in the event such damage occurs after backfilling or is not discovered until after

completion of the backfilling.

1.03 LAWN AREAS

- A. Lawn or landscaped areas damaged during construction shall be repaired to match the pre-construction condition to the satisfaction of the land owner and the Owner.

1.04 NOTIFICATION BY THE CONTRACTOR

- A. The Contractor must contact "Sunshine State One Call" at (800) 432-4770 a minimum of forty-eight (48) business hours prior to excavation. The Contractor shall provide the Sunshine State One Call verification number for the project to the Owner.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION

SECTION 01550
SITE ACCESS AND STORAGE

PART 1 – GENERAL

1.01 USE OF STREET AND PARKING AREAS

- A. Street and Parking Use: Nothing herein shall be construed to entitle the Contractor to the exclusive use of any public street, alleyway, or parking area during transportation and performance of the Work hereunder, and it shall so conduct its operations as not to interfere unnecessarily with the authorized use and transportation of public in such waterways, streets, alleyways, or parking areas. No area shall be closed to the public without first obtaining permission from the City and proper governmental authority.

1.02 TRAFFIC CONTROL AND MONITORING

- A. For the protection of traffic in public or private streets, parking and storage areas, the Contractor shall provide, place, and maintain all necessary barricades, traffic cones, warning signs, lights, and other safety devices in accordance with the requirements of the Manual of Uniform Traffic Control Devices. The Contractor shall take all necessary precautions for the protection of the Work area and the safety of the public. All areas of use shall be secured. If required by the permit conditions, the Contractor shall station such guards or flaggers and shall conform to such special safety regulations relating to traffic control as may be required by the public authorities within their respective jurisdictions. All signs, signals, and barricades shall conform to the requirements of the OSHA Safety and Health Standards for Construction.

1.03 CONTRACTOR'S WORK AND STORAGE AREAS

- A. Storage areas shall be coordinated with the City. Responsibility for protection and safekeeping of equipment and materials at or near the sites shall be solely that of the Contractor and no claim shall be made against the City by reasons of any loss or any act of an employee or trespasser. Should an occasion arise necessitating access to an area occupied by stored equipment and/or materials, the Contractor shall immediately move them. No equipment or materials shall be placed upon the City's property until it is acceptable to the City.
- B. If the Contractor requires additional staging area then the Contractor shall obtain such areas from off-site sources. The Contractor shall pay for any off-site area he requires.
- C. Upon completion of the Contract, the Contractor shall remove from the storage areas all of their equipment, temporary fencing, surplus materials, rubbish, etc.,

and restore the areas back to existing conditions.

1.04 SAFETY AND SECURITY

- A. The Contractor shall be responsible for the safety and security and may choose to employ watchmen and security guards to protect the job site against vandalism, burglary, theft, trespassing, etc. The Contractor shall care for and protect against loss or damage of all material to be incorporated in the construction for the duration of the project and shall repair or replace damaged or lost materials and damage to structures.

PART 2 -- PRODUCTS (Not Used)

PART 3 -- EXECUTION (Not Used)

END OF SECTION

SECTION 01560
ENVIRONMENTAL CONTROLS

PART 1- GENERAL

1.01 DUST ABATEMENT

- A. The Contractor shall furnish all labor, equipment, and means required and shall carry out effective measures wherever and as often as necessary to prevent its operation from producing dust in amounts damaging to the wetlands, protected vegetation, or causing a nuisance to persons living in or occupying buildings in the vicinity. The Contractor shall be responsible for any damage resulting from any dust originating from its operations. The dust abatement measures shall be continued until the Contractor is relieved of further responsibility by the City and/or Engineer.

1.02 RUBBISH CONTROL

- A. During the progress of the Work, the Contractor shall keep the site of the Work and other areas used by it in a neat and clean condition, and free from any accumulation of rubbish. The Contractor shall dispose of all rubbish and waste materials of any nature occurring at the Work site and shall establish regular intervals of collection and disposal of such materials and waste. Disposal of all rubbish and surplus materials shall be off the site of construction in accordance with local codes and ordinances governing locations and methods of disposal, and in conformance with all applicable safety laws, and to the particular requirements of the OSHA Safety and Health Standards for Construction.

1.03 SANITATION

- A. Toilet Facilities: Portable chemical toilets shall be provided wherever needed for the use of employees. Toilets at construction job sites shall conform to the requirements of the OSHA Standards for Construction.
- B. Such facilities shall be made available when the first employees arrive on the Work, shall be properly secluded from public observation, and shall be constructed and maintained in suitable numbers and at such points and in such a manner as may be required. At the close of each work day, the facilities shall be locked to prevent unauthorized access.
- C. 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, or on any lands of the City.
- D. Sanitary and Other Organic Wastes: The Contractor shall establish a regular collection of all sanitary and organic wastes. All wastes and refuse from sanitary

facilities provided by the Contractor or organic material wastes from any other source related to the Contractor's operations shall be disposed of away from the site in a manner satisfactory to the Engineer and in accordance with all laws and regulations pertaining thereto.

1.04 CHEMICALS

- A. All chemicals used during project construction or furnished for project operation, whether defoliant, soil sterilant, herbicide, pesticide, disinfectant, polymer, paint, fuel, solvent or reactant of other classification, shall show approval of either the U.S. Environmental Protection Agency or the U.S. Department of Agriculture. The handling, storage, use and disposal of all such chemicals and disposal of residues shall be in strict accordance with all applicable rules and regulations of Federal, State and local jurisdictional agencies and the printed instructions of the manufacturer and all regulatory requirements. Copies of antidote literature shall be kept at the storage site and at the Contractor's job site office. A supply of antidotes shall be kept at the Contractor's office at all times.
- B. The Contractor shall take all precautions to prevent spillage or spraying of any chemicals over the wetlands or protected vegetation. It shall be Contractor's responsibility to immediately inform the Engineer if there is a spillage or spraying of chemicals over the wetlands or protected vegetation. The Contractor shall immediately isolate the affected areas until an investigation is conducted. All damages, including permitting, approval and restoration shall be borne by the Contractor.

1.05 NOISE CONTROL

- A. Noise resulting from the Contractor's work shall not exceed the noise levels and other requirements stated in local ordinances. The Contractor shall be responsible for curtailing noise resulting from his operation. He shall, upon written notification from the Engineer or the noise control officers, make any repairs, replacements, adjustments, additions and furnish mufflers when necessary to fulfill requirements.

1.06 HURRICANE AND STORM WARNINGS

- A. The Contractor shall take all precautions necessary to protect the job site during hurricane and storm watches and warnings.

1.07 PERIODIC CLEANUP AND BASIC SITE RESTORATION

- A. During construction, the Contractor shall regularly remove from the site all accumulated trash and debris of any kind which results from its operations.
- B. Upon failure of the Contractor to perform periodic clean-up and basic restoration

of the site to the Engineer's satisfaction, the Engineer may, upon five (5) days prior written notice to the Contractor, employ such labor and equipment as it deems necessary for the purpose, and all costs resulting there from shall be charged to the Contractor and deducted from amounts of money that it may be due.

PART 2 – PRODUCTS (Not Used)

PART 3 – EXECUTION (Not Used)

END OF SECTION

SECTION 01568

TEMPORARY EROSION AND SEDIMENTATION CONTROL

PART 1 - GENERAL

1.01 DESCRIPTION

A. Scope of Work:

1. The Work specified in this Section consists of designing, providing, maintaining and removing temporary erosion and sedimentation controls as required by Rules and Regulations and permit conditions.
2. Temporary erosion controls include, but are not limited to, grassing, mulching, setting, watering and re-seeding on-site surfaces and soil and borrow area surfaces and providing interceptor ditches at ends of berms and at those locations which will ensure that erosion during construction will be either eliminated or maintained within acceptable limits as established by the Owner.
3. Temporary sedimentation controls include, but are not limited to silt dams, traps, barriers, and appurtenances at the foot of sloped surfaces which will ensure that sedimentation pollution will be either eliminated or maintained within acceptable limits as established by the Owner.
4. Contractor is responsible for providing effective temporary erosion and sediment control measures during construction or until final controls become effective.

PART 2 - PRODUCTS

2.01 EROSION CONTROL

- A. Netting shall be fabricated of material acceptable to the Owner.

2.02 SEDIMENTATION CONTROL

- A. Bales shall be clean, seed-free cereal hay type.
- B. Netting shall be fabricated of material acceptable to the Owner.
- C. Filter stone shall be crushed stone which conforms to Florida Department of Transportation (FDOT) specifications.
- D. Concrete block shall be hollow, non-load bearing type.
- E. Concrete shall be exterior grade not less than 1-inch thick.

PART 3 - EXECUTION

3.01 EROSION CONTROL

- A. Minimum procedures for grassing are:
1. Scarify slopes to a depth of not less than six inches and remove large clods, rock, stumps, roots larger than 1/2 inch in diameter and debris.
 2. Sow seed within twenty-four (24) hours after the ground is scarified with either mechanical seed drills or rotary hand seeders.
 3. Apply mulch loosely and to a thickness of between 3/4 inch and 1-1/2 inches.
 4. Apply netting over mulched areas on sloped surfaces.
 5. Roll and water seeded areas in a manner which will encourage sprouting of seeds and growing of grass. Reseed areas which exhibit unsatisfactory growth. Backfill and seed eroded areas.

3.02 SEDIMENTATION CONTROL

- A. Install and maintain silt dams, traps, barriers, and appurtenances as shown on the approved descriptions and working drawings. Hay bales which deteriorate and filter stone which is dislodged shall be replaced.

3.03 PERFORMANCE

- A. Should any of the temporary erosion and sediment control measures employed by the Contractor fail to produce results which comply with the requirements of the State of Florida, the Owner or Engineer, the Contractor shall immediately take whatever steps are necessary to correct the deficiency at his own expense.

END OF SECTION

SECTION 01590
CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS

PART 1 - GENERAL

1.01 REFERENCES

- A. The following is a list of standards which may be referenced in this Section:
1. American Association of Nurserymen: American Standards of Nursery Stock.
 2. U.S. Weather Bureau, "Rainfall-Frequency Atlas of the U.S. for Durations from 30 Minutes to 24 Hours and Return Periods from 1 to 100 years."
 3. U.S. Department of Agriculture, "Urban Hydrology for Small Watersheds."
 4. Federal Emergency Management Agency
 5. NFPA, National Fire Prevention Standard for Safeguarding Building Construction Operations.

1.02 SUBMITTALS

- A. Administrative Submittals: Copies of permits and approvals for construction as required by Laws and Regulations and governing agencies.
- B. Shop Drawings:
1. Temporary Utility Submittals: Electric power supply and distribution plans, if applicable.
 2. Temporary Construction Submittals:
 - a. Parking area plans.
 - b. Contractor's field office, storage yard, and storage building plans.
 - c. Engineer's field office plans.
 - d. Staging area location plan.

1.03 MOBILIZATION

- A. Mobilization shall Include, Not be Limited to, these Principal Items:
1. Obtaining required permits.
 2. Moving Contractor's field office and equipment required for first month operations onto site.
 3. Installing temporary construction power, wiring, and lighting facilities.

4. Providing onsite communication facilities.
5. Providing onsite sanitary facilities and potable water facilities as specified and as required by Laws and Regulations, and governing agencies.
6. Arranging for, and erection of, Contractor's work and storage yard.
7. Posting OSHA required notices and establishing safety programs and procedures.
8. Having Contractor's superintendent at site full time.

1.04 PROTECTION OF WORK AND PROPERTY

- A. Comply with Owner's safety rules while on Owner's property.
- B. Keep Owner informed of serious accidents on the site and related claims.
- C. Use of Explosives: No blasting or use of explosives will be allowed on the Site.

PART 2 - PRODUCTS

2.01 ENGINEER'S FIELD OFFICES

- A. Furnish equipment specified for exclusive use of Engineer and its representatives.
- B. Ownership of equipment furnished under this article will remain, unless otherwise specified, that of Contractor.
- C. Equipment furnished shall be new in appearance and function. Determination of acceptable condition will be made by the Engineer.
- D. Contractor may elect to rent/lease available commercial developed property within/adjacent to the project area for these requirements. Contractor is to abide by all applicable zoning regulations and pay all applicable fees.
- E. Minimum Features:
 1. 110-volt lighting and wall plugs.
 2. Fluorescent ceiling lights and exterior lighting at each entrance.
 3. Electric heating and self contained air conditioning unit properly sized for Project locale and conditions. Provide ample electric power to operate installed systems.
 4. Railed stairways and landings at entrances.
 5. Exterior Door(s):

- a. Number: Two.
 - b. Type: Solid Core.
 - c. Lock(s): Cylindrical; keyed alike.
- 6. Number of Windows: Four minimum.
- 7. Minimum Interior Height: 8 feet.
- 8. Vinyl Flooring.
- 9. Trailer Type Mobile Structure: One (New).
- 10. Floor Space: Minimum 300 square feet.
- 11. All-metal frame; all metal exterior, sides, and roof; and insulated double walls, floor and roof.
- 12. Security guard screens on all windows.
- 13. Number of Private Offices: One, 10 feet by 10 feet (minimum).
- 14. Blinds or drapes on all windows.
- 15. Office Equipment-General:
 - a. Bottled Water Service: One, with cooler capable of producing hot water and cold water.
 - b. Paper cup dispenser with cups: one each.
 - c. Pipe towel dispenser with towels: two each.
 - d. Desk: one each, steel. 30 inches by 60 inches.
 - e. Swivel chair: one each.
 - f. Folding table: one each, 36 inches by 72 inches.
 - g. Steel folding chairs: six each.
 - h. Four drawer steel file with lock: one each, legal width.
 - i. Handicap accessible restroom.
 - j. Bookcase.
 - k. Wastepaper Basket: 2 each.
 - l. Carbon Dioxide (10 pound) fire extinguisher: two each.
 - m. Telephone: one each with conference speaker, and 12-foot coiled handset cord.
 - n. Answering Machine: AT&T voice mail service.
 - o. Drafting Table: One.
 - p. Drafting Stool: One.
 - q. One incoming/outgoing telephone line with Caller ID, one fax line.
 - r. New "White Boards": one each, wall mount, 36 inches by 48 inches.

2.02 PROJECT SIGN

- A. Provide and maintain one, 8 foot wide by 4 foot high sign constructed of 3/4-inch exterior high density overlaid plywood. Sign shall bear name of Project, Owner, Owner Logo, Contractor, Engineer, and other participating agencies. Lettering shall be blue applied on a white background by an experienced sign painter. Paint shall be exterior type enamel. Information to be included will be provided by Owner. To be installed within thirty (30) days of start of work.

PART 3 - EXECUTION

3.01 ENGINEER'S FIELD OFFICE

- A. Make available for Engineer's use prior to the start of Work at site, to remain on the site for a minimum of thirty (30) days after final acceptance of the Work.
- B. Locate where directed by Engineer; level, block, tie down, skirt, provide stairways, and relocate when necessary and approved. Construct on proper foundations, provide surface drainage and connections for utility services.
- C. Raise grade under field office, as necessary, to an elevation adequate to avoid flooding.
- D. Provide sanitary facilities in compliance with state and local health authorities
- E. Exterior Door Keys: Furnish three (3) sets of keys.
- F. Telephone Services:
 - 1. Provide number of incoming lines equal to that specified for telephone type.
 - 2. Provide appropriate jacks; locate as directed by Engineer.
 - 3. Provide all wiring necessary for a completed telephone system.
 - 4. Provide separate fax line.
- G. Maintain in good repair and appearance, and provide weekly cleaning service. Replenish as required: paper towels, paper cups, hand soap, toilet paper, bottled water, cleaning supplies - Windex, cleaning spray, dishwashing liquid, mop head, broom.

3.02 TEMPORARY UTILITIES

- A. Power:
 - 1. Electric power will be available at or near the site. Determine the type and amount available and make arrangements for obtaining temporary electric power service, metering equipment, and pay all costs for the electric power used during the contract period except for portions of the Work designated in writing by Engineer as substantially complete.

2. Cost of electric power used in performance and acceptance testing will be borne by Contractor.
- B. Lighting: Provide temporary lighting at least to meet all applicable safety requirements to allow erection, application or installation of materials and equipment, and observation or inspection of the work.
- C. Heating, Cooling and Ventilating:
1. Provide as required to maintain adequate environmental conditions to facilitate progress of the work, to meet specified minimum conditions for the installation of material, and to protect materials, equipment, and finished from damage due to temperature or humidity.
 2. Provide adequate forced air ventilation of enclosed areas to cure installed materials, to dispense humidity, and to prevent hazardous accumulations of dust, fumes, vapors or gases.
 3. Pay all costs of installation, maintenance, operation, removal, and fuel consumed.
 4. Provide portable unit heaters, complete with controls, oil or gas fired and suitable vented to outside as required for protection of health and property.
 5. If permanent natural gas piping is used for temporary heating units, do not modify or reroute gas piping without approval of utility company. Provide separate gas metering as required by utility.
- D. Water:
1. Contractor to provide electric water cooler with cold and hot water
 2. Provide a means to prevent water used for testing from flowing back into the source pipeline.
- E. Sanitary and Personnel Facilities: Provide and maintain facilities for Contractor's employed, Subcontractors, and all other onsite employer's employees. Service, clean and maintain facilities and enclosures.
- F. Telephone Service:
1. Arrange and provide onsite telephone service for Contractor's use during construction. Pay costs of installation and monthly bills.
 2. Arrange and provide Engineer's telephone system. Pay for all installation and monthly billing charges.
- G. Fire Protection: Furnish and maintain on site adequate firefighting equipment capable of extinguishing incipient fires. Comply with applicable parts of the

National Fire Prevention Standards for Safeguarding Building Construction Operations (NFPA No. 241).

3.03 PROTECTION OF WORK AND PROPERTY

A. General:

1. Where completion of Work requires temporary or permanent removal and/or relocation of an existing utility, coordinate all activities with owner of said utility and perform all work to their satisfaction.
2. Protect, shore, brace, support, and maintain underground pipes, conduits, drains, and other underground utility construction uncovered or otherwise affected by construction operations.
3. Keep fire hydrants and water control valves free from obstruction and available for use at all times.
4. Do not impair operation of existing sewer systems. Prevent construction material, pavement, concrete, earth, volatile and corrosive wastes, and other debris from entering sewers, pump stations and other sewer structures.
5. Maintain original site drainage wherever possible.

B. Site Security: Provide and maintain additional temporary security fences as necessary to protect the Work and Contractor-furnished products not yet installed.

C. Finished Construction: Protection finished floors and concrete floors exposed as well as those covered with composition tile or other applied surfacing.

D. Waterways: Keep ditches, culverts, and natural drainages continuously free of construction materials and debris.

3.04 TEMPORARY CONTROLS

A. Air Pollution Control:

1. Minimize air pollution from construction operations.
2. Burning: Of waste materials, rubbish, or other debris will not be permitted on or adjacent to site.

B. Noise Control: Provide acoustical barriers or other measures as required so noise emanating from tools or equipment will not exceed legal noise levels.

C. Water Pollution Control:

1. Comply with procedures outlined in U.S. Environmental Protection Agency manuals entitled, "guidelines for Erosion and Sedimentation

Control Planning” and “implementation, Processes, Procedures, and Methods to Control Pollution Resulting from All Construction Activity”, and “erosion and Sediment Control-Surface Mining in Eastern United States.”

2. Do not dispose of volatile wastes such as mineral spirits, oil, chemicals, or paint thinner in storm or on the ground drains. Disposal of wastes into streams or waterways is prohibited. Provide acceptable containers for collection and disposal of waste materials, debris, and rubbish.
 3. Comply with all requirements for the NPDES Stormwater Construction Permit.
- D. Erosion, Sediment, and Flood Control: Provide, maintain, and operate temporary facilities to control erosion and sediment releases, and to protect Work and existing facilities from flooding during construction period.

3.05 STORAGE YARDS AND BUILDINGS

- A. Coordinate requirements with Section 01600, Material and Equipment.
- B. Temporary Storage Yards: Construct temporary storage yards for storage of products that are not subject to damage by weather conditions.
- C. Temporary Storage Buildings:
 1. Provide environmental control systems that meet recommendations of manufacturers of equipment and materials stored.
 2. Arrange or partition to provide security of contents and ready access for inspection and inventory.
 3. Store combustible materials (paints, solvents, fuels, etc.) in a well ventilated and remote building meeting safety standards.

3.06 PARKING AREAS

- A. Control vehicular parking to preclude interference with public traffic or parking, access by emergency vehicles, Owner’s operations, or construction operations.
- B. Provide parking facilities for personnel working on the Project. No employee or equipment parking will be permitted on Owner’s existing paved areas.

3.07 CLEANING DURING CONSTRUCTION

- A. In accordance with General Conditions, as may be specified in Specification sections, and as required herein.
- B. Provide approved containers for collection of disposal of waste materials, debris, and rubbish. At least at weekly intervals, dispose of such waste materials, debris, and rubbish offsite.

- C. At least weekly, brush sweep the entry drive and roadways, and all other streets and walkways affected by Work and where adjacent to Work.

END SECTION

SECTION 01600
MATERIAL AND EQUIPMENT

PART 1 - GENERAL

1.01 DESCRIPTION

A. Scope of Work:

1. Conform to applicable specifications and standards.
2. Comply with size, make, type and quality specified, or as specifically approved in writing by Engineer.
3. Manufactured and fabricated products:
 - a. Design, fabricate and assemble in accordance with the best engineering and shop practices.
 - b. Manufacture like parts of duplicate units to standard sizes and gauges, to be interchangeable.
 - c. Two or more items of the same kind shall be identical, by the same manufacturer.
 - d. Products shall be suitable for service 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.

1.02 APPROVAL OF MATERIALS

- A. Only new materials and equipment shall be incorporated in the work. All materials and equipment furnished by Contractor shall be subject to the inspection and approval of Engineer. No material shall be delivered to the work without prior approval of Engineer.
- B. Within twenty (20) days after the Effective Date of the Agreement, Contractor shall submit to Engineer, data relating to materials and equipment he proposes to furnish for the work. Such data shall be in sufficient detail to enable Engineer to identify the particular product to form an opinion as to its conformity to the specifications.
- C. Facilities and labor for handling and inspection of all materials and equipment shall be furnished by Contractor. If Engineer requires, either prior to beginning or during progress of the work, 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

Contractor's expense. Except as otherwise noted, Contractor shall make arrangements for and pay for the tests.

- D. 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 Contractor's failure to submit samples or data promptly shall not be used as a basis of claim against Owner or Engineer.
- E. In order to demonstrate the proficiency of workers or to facilitate the choice among several textures, types, finishes and surfaces, 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 SUBSTITUTIONS AND PRODUCT OPTIONS

- A. The substitution requirements of this Section are in addition to the requirements of the General Conditions and Supplementary Conditions.
- B. The intent of these Specifications is to provide Owner with a quality facility without discouraging competitive bidding. Substitutions may be submitted and will be evaluated as specified herein.
- C. A Request for Substitution of Product may be submitted after the Contractor:
 - 1. Has investigated the proposed product and determined that it is equal to or superior to specified product, furnishes a certification to that effect and waives all rights to additional payment or time that may subsequently become necessary due to the failure of the substituted product to perform adequately.
 - 2. Agrees to provide same warranties or bonds for product substitution as for product specified.
 - 3. Agrees to be responsible for coordinating and paying for any necessary changes to other work required by approved substitutions or product options which he selects and shall pay all such costs including the costs of the services of the design professional to revise the Contract Documents, if such revisions are required.
 - 4. Waives all claims for additional costs due to substitution which may subsequently become apparent.
 - 5. Is offering either a substantial credit to the Owner for acceptance of the substitution or a convincing justification that the product to be provided as the substitution is substantially superior in quality, performance, compatibility with adjacent products, durability, vandal-resistance or in other important ways.

D. Engineer's Action:

1. Engineer will consider written requests for product substitution for a period of forty-five (45) calendar days after the effective date of the Agreement. Engineer will review requests for substitutions with reasonable promptness and notify Contractor in writing of Owner's decision to accept or reject requested substitutions. Only the Owner may accept a substitution.
2. Substitution requests made by means of shop drawings or product data submittal will not be considered.
3. After the period of forty-five (45) days has elapsed, the only substitution requests which will be considered are those which are made necessary by the removal of the specified products from the market or by other similar, unavoidable circumstances beyond the control of the Contractor.

1.04 MANUFACTURER'S INSTRUCTIONS FOR INSTALLATION

- A. When Contract Documents require that installation of work shall comply with manufacturer's printed instructions, obtain and distribute copies of such instructions to parties involved in the installation, including five copies to Engineer.
 1. Maintain one (1) set of complete instructions at the job site during installation and until completion.
- B. Handle, install, correct, clean, condition and adjust products in strict accord with such instructions and in conformity with specified requirements.
 1. Should job conditions or specified requirements conflict with manufacturer's instructions, consult with Engineer 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.

1.05 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.

1.06 STORAGE AND PROTECTION

- A. 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 heaters, placing of storage lubricants in equipment, etc. 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.
- B. Store products in accordance with manufacturer's instructions, with seals and labels intact and legible.
 - 1. Store products subject to damage by the elements in weathertight enclosures such as buildings or trailers which have a concrete or wooden floor, a roof and fully closed walls on all sides.
 - 2. Maintain temperature and humidity within the ranges required by manufacturer's instructions (i.e. electrical and instrumentation equipment).
 - 3. Protect mechanical and electrical equipment from being contaminated by dust, dirt and moisture.
 - 4. Store fabricated products above the ground, on blocking or skids prevent soiling and staining. Cover products which are subject to deterioration with impervious sheet coverings, provided adequate ventilation to avoid condensation.
 - 5. Provide heated storage space for material which would be damaged by freezing.
 - 6. Store loose granular materials in a well-drained area on solid surfaces to prevent mixing with foreign matter.
 - 7. Prior to the installation of equipment, it shall be stored at locations designated and approved by the Engineer.
- C. All materials and equipment to be incorporated in the work shall be handled and stored by 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.
- D. Cement, sand and 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 and to minimize rusting. Beams shall be stored with the webs vertical. Precast concrete beams shall be handled and stored in a manner to prevent accumulations of dirt, 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.

- E. All materials which, in the opinion of Engineer, have become so damaged as to be unfit for the use intended or specified shall be promptly removed from the site of the work, and Contractor shall receive no compensation for the damaged material or its removal.
- F. Arrange storage in a manner to provide easy access for inspection. Make periodic inspections of stored materials and equipment to assure that products are maintained under specified conditions, and free from damage or deterioration.
- G. Protection After Installation: Provide substantial coverings as necessary to protect installed products from damage from traffic and subsequent construction operations. Remove covering when no longer needed.
- H. The Contractor shall be responsible for all material, equipment, and supplies delivered to Owner under this Contract until final inspection of the work and acceptance thereof by Owner. In the event any such material, equipment and supplies are lost, stolen, damaged or destroyed prior to final inspection and acceptance, Contractor shall replace same without additional cost to Owner.
- I. Should Contractor fail to take proper action on storage and handling of equipment supplied under the Contract within seven days after written notice to do so has been given, Owner retains the right to correct all deficiencies noted in previously transmitted written notice and deduct the cost associated with these corrections from 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.

1.07 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. Contractor shall preserve and deliver to Owner these tools and instructions in good order no later than upon completion of the Contract.

1.08 STORAGE AND HANDLING OF EQUIPMENT ON SITE.

- A. 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 Engineer. 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 Engineer. Equipment shipped to the site shall be stored in accordance with Paragraph 1.06, herein. Operation and maintenance data shall be submitted to Engineer for review prior to shipment of equipment.

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 Engineer, 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 Contractor and reviewed with Engineer by him. 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 ensure proper lubrication and to avoid metal-to-metal "welding". Upon installation of the equipment, Contractor shall start the equipment, at least half load, once weekly for an adequate period of time to ensure that 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 Owner.
7. Prior to acceptance to the equipment, Contractor shall have the manufacturer inspect the equipment and certify that its condition has not been detrimentally affected by the long storage period. Such certifications by the manufacturer shall be deemed to mean that the equipment is judged 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 Contractor's expense.

1.09 WARRANTY

- A. For all major pieces of equipment, submit a warranty from the equipment manufacturer as specified. The manufacturer's warranty period shall be concurrent with the Contractor's for one (1) year after the time of acceptance.

1.10 SPARE PARTS

- A. Spare parts for certain equipment have been specified in the pertinent sections of the Specifications. Contractor shall collect and store all spare parts so required in an area to be designated by Engineer. In addition, Contractor shall furnish Engineer 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 items. Spare parts shall be turned over in conjunction with the "Spare Parts List" as shown. Copies of actual invoices for each item shall be furnished with the inventory to substantiate the delivered cost.

1.11 GREASE, OIL AND FUEL

- A. All grease, oil and fuel required for testing of equipment shall be furnished with the respective equipment. Owner shall be furnished with a year's supply of required lubricants including grease and oil of the type recommended by manufacturer with each item of equipment supplied.
- B. Contractor shall be responsible for changing the oil in all drives and intermediate drives of each mechanical equipment after initial break-in of the equipment, which in no event shall be any longer than three (3) weeks of operation.

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.
 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. If it is determined 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.

PART 2 - PRODUCTS

(Not Applicable)

PART 3 - EXECUTION

(Not Applicable)

END OF SECTION

SECTION 01650
START-UP

PART 1 - GENERAL

1.01 DESCRIPTION

- A. The Work may be segmented into several phases of construction in a logical order to meet the project schedule. Portions of the Work may be utilized prior to Substantial Completion of all the Work. Also, certain items of equipment are to be temporarily utilized in a phased segment of the Work and then relocated in a subsequent phase in a permanent installation.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.01 PRELIMINARY MATTERS

- A. Start-up Certification: Prior to start-up, successfully complete all testing required of the individual components of work in the presence of the Engineer or is representative.
- B. Demonstrate to the Engineer that all temporary jumpers and/or bypass have been removed and that all components are operating under their own controls as designated.
- C. Coordinate start-up activities with equipment suppliers, subcontractors, and the Owner's operating personnel at the site and with the Engineer prior to commencing system start-up. All coordination is the responsibility of the Contractor.

3.02 START-UP

- A. Confirm that all equipment is properly installed and that the flow path through the new work is unobstructed.
- B. Make adjustments as necessary.

3.03 START-UP DEMONSTRATION AND TESTING

- A. After all Work components have been constructed, field tested and started up in accordance with the individual specifications, perform the Start-Up Demonstration and Testing in the presence of the Engineer and the Owner. The demonstration shall be held upon completion of all systems at a date to be agreed upon in writing with the Owner.
- B. Acceptability of the Work's performance will be based on the Work performing as specified, under these actual and simulated operating conditions as defined in the Contract Documents. The intent of the start-up demonstration and testing is for the Contractor to demonstrate to the Owner and the Engineer the Work will

function as a complete and operable system under normal operating conditions and is ready for acceptance.

- C. Certificate of Completed Demonstration: Submit five (5) copies of Demonstration Certification memo signed by the Contractor, Subcontractor and Owner and insert one copy in each Operation and Maintenance Manual.

EQUIPMENT TRAINING & STARTUP CHECKLIST

PROJECT: _____

OWNER: _____

ENGINEER: _____

CONTRACTOR: _____

DATE: _____

STRUCTURE: _____

EQUIPMENT DESCRIPTION: _____

VENDOR: _____

REPRESENTATIVE: _____ INIT.: _____

of training days required: _____ # received: _____

STARTUP/TRAINING DESCRIPTION: _____

COMMENTS: _____

ACCEPTABLE:___ PARTIALLY ACCEPTABLE:___ NON-ACCEPTABLE:___

ATTENDEES:

<u>NAME</u>	<u>AFFILIATION</u>	<u>DATE</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

END OF SECTION

SECTION 01660
PRESSURE TESTING

PART 1 - GENERAL

1.01 DESCRIPTION OF REQUIREMENTS

- A. The Contractor shall be responsible for the pressure testing of all systems prior to placing them in service.
- B. The pressure testing shall be as required to prove that the piping is left in proper condition for satisfactory operation under the conditions specified.

PART - MATERIALS AND EQUIPMENT
(Not Applicable)

PART 3 - EXECUTION

3.01 PRESSURE AND LEAKAGE TESTS

- A. Tests shall be conducted in the presence of and to the satisfaction of the Owners' Representative and of authorities having jurisdiction over the work. Notice shall be given prior to start of tests.
- B. Field pressure and leakage tests shall be conducted on the following:
- C. Water Mains.
 - 1. Water Mains shall be subjected to a leakage test. This test measures the amount of water required to be supplied to newly laid pipe to maintain a specific pressure after the pipe has been filled with water and the air expelled. The duration of this test shall be not less than two (2) hours and the test pressure shall be 150 psig as measured at the end point in the line. The maximum allowable leakage shall not exceed the limits specified in AWWA C-600.
- D. Force Mains.
 - 1. Force Mains shall be subjected to a leakage test. This test measures the amount of water required to be supplied to newly laid pipe to maintain a specific pressure after the pipe has been filled with water and the air expelled. The duration of this test shall be not less than two (2) hours and the test pressure shall be 100 psig as measured at the end point in the line. The maximum allowable leakage shall not exceed the limits specified in AWWA C-600.

3.02 ENGINEER'S RIGHT TO RETESTING

- A. Should the Contractor refuse or neglect to make any tests necessary to demonstrate the integrity of the completed system, the Engineer may retain the services of an outside consultant to make all such tests and their resulting adjustments and balance.

- B. The costs for such tests shall be deducted from amounts owing to the Contractor and shall not be borne by the Owner.

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. Cleaning: Section 01710
 - 2. Project Record Documents: Section 01720
 - 3. Operating and Maintenance Data: Section 01730
 - 4. Warranties and Bonds: Section 01740

1.02 SUBSTANTIAL COMPLETION

- A. The Work will not be substantially complete, and Contractor may not request substantial completion inspection unless the following submittals and work is completed:
 - 1. All Operation and Maintenance manuals have been submitted and approved to the requirements of Section 01730.
 - 2. All equipment has been checked-out by the equipment manufacturer and Certificates of Manufacturer's Check-Out has been submitted.
 - 3. All start-up and demonstration testing completed and Certificates of Completed Demonstration submitted to the requirements of Section 01650.
 - 4. Project Record Documents are complete and have been submitted and reviewed to the requirements of Section 01720.
 - 5. All training of Owner's personnel completed.
 - 6. All areas to be used and occupied are safe, operable in automatic and complete.
 - 7. All building occupancy certificates have been issued by the appropriate building permitting agency.
 - 8. All painting, finishes, fencing, cleanup, final grading, grassing, planting, sidewalk construction, and paving shall have been completed and ready for inspection.
 - 9. All deficiencies noted on inspection reports or nonconformances are corrected or the correction plan approved.

- B. When the conditions of paragraph 1.02 A. are met the Contractor shall submit to the Engineer:
 - 1. A written notice that he considers the Work, or portion thereof, is substantially complete, and requests an inspection.
 - 2. A punchlist of items to be corrected. (Uncompleted work which is not related to the safe, effective, efficient use of the Project may be allowed on the punchlist with the Engineer's approval.)
- C. Within ten (10) working days after receipt of such notice, the Engineer will make an inspection to determine the status of completion.
- D. Should the Engineer determine that the Work is not substantially complete:
 - 1. The Engineer will promptly notify the Contractor in writing, giving the reasons therefore.
 - 2. Contractor shall remedy the deficiencies in the Work and send another written notice of substantial completion to the Engineer.
 - 3. The Engineer will, within ten (10) working days, reinspect the Work. The Contractor will be liable for reinspection fees as described in paragraph 1.04, herein.
- E. When the Engineer finds that the Work is substantially complete, he will:
 - 1. Schedule a walk-through of the facility to include the Owner. Engineer shall determine the completeness of the punchlist and readiness of the facility for occupancy by the Owner.
 - 2. Prepare and deliver to Owner a tentative Certificate of Substantial Completion with the tentative punchlist of items to be completed or corrected before final inspection.
 - 3. 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, he 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. Any incomplete work allowed on a punchlist must be reinspected upon completion and any deficiencies found will be added to the punchlist.

1.03 FINAL INSPECTION

- A. Prior to Contractor's request for a final inspection the following submittals and work must be complete:
 - 1. Project Record Documents must be approved.
 - 2. All spare parts and maintenance materials must be suitably delivered to the Owner per the requirements of the Technical Sections of the Specifications.

3. Contractor to submit evidence of compliance with requirements of governing authorities.
- B. After satisfying the requirements of paragraph 1.03 A. and when Contractor considers the Work complete, he shall submit written certification that:
1. Contract Document requirements have been met.
 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's representative and are operational.
 5. All punchlist items have been corrected or completed and the Work is ready for final inspection.
- C. The Engineer will, within ten (10) working days, make an inspection to verify the status of completion with reasonable promptness after receipt of such certification.
- D. Should the Engineer consider that the Work is incomplete or defective:
1. The Engineer will 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 another written certification to the Engineer that the Work is complete.
 3. The Engineer will, within ten (10) working days, reinspect the Work and the Contractor shall be liable for reinspection fees as described in paragraph 1.04, herein.
- D. When the Engineer finds that the Work is acceptable under the Contract Documents, the Contractor may make closeout submittals.

1.04 REINSPECTION FEES

- A. Should the Engineer perform reinspections due to failure of the Work to comply with the claims of status of completion made by the Contractor:
1. Contractor will compensate the Owner for such additional services.
 2. Owner will deduct the amount of such compensation from the final payment to the Contractor.

1.05 CONTRACTOR'S CLOSEOUT SUBMITTALS

- A. Warranties and Bonds: To requirements of Section 01740.
- B. Evidence of Payment and Release of Liens: To requirements of General and Supplementary Conditions.

C. Certificate of Insurance for Products and Completed Operations.

1.06 FINAL ADJUSTMENT OF ACCOUNTS

A. Submit a final statement of accounting to the Engineer.

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 reinspection payments
 - h. Other adjustments.
3. Total Contract Sum, as adjusted.
4. Previous payments.
5. Sum remaining due.

C. Engineer will 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 01720
PROJECT RECORD DOCUMENTS

PART 1 – GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Maintain at the site for the Owner one record copy of:
 - 1. Drawings.
 - 2. Specifications.
 - 3. Addenda.
 - 4. Change Orders and other modifications of the contract.
 - 5. Engineer's Field Orders or written instructions.
 - 6. Approved Shop Drawings.
 - 7. Field Test records.
 - 8. Construction photographs, preconstruction videos, and pipeline videos.
 - 9. Preliminary as-built drawings.

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 Engineer.
- E. As a prerequisite for monthly progress payments, the Contractor shall provide the currently updated "Record Documents" for review by the Engineer and Owner.

1.03 MARKING DEVICES

- A. Provide felt tip marking pens for recording information in the color code designated by the Engineer

1.04 RECORDING

- A. Label each document "PROJECT RECORD" in neat large printed letters.
- B. Record information concurrently with construction progress. Do not conceal any work until required information is recorded.
- C. Drawings: Legibly mark to record actual construction:
 - 1. Depths of various elements of foundation in relation to finish first floor datum.
 - 2. All underground piping with elevations and dimensions. Change to piping location. Horizontal and vertical locations of underground utilities and appurtenances referenced to permanent surface improvements. Actual installed pipe materials, class, etc.
 - 3. Location of internal utilities and appurtenances concealed in the construction, referenced to visible and accessible features of the structure.
 - 4. Field changes of dimensional and detail.
 - 5. Changes made by Field Order or by Change Order.
 - 6. Details not on original contract drawings.
 - 7. Equipment and piping relocations.
 - 8. Major architectural and structural changes including relocation of doors, windows, etc.
 - 9. Architectural schedule changes according to Contractor's records or shop drawings.
 - a. Contractor shall provide copies of all such recordings to the Contractor's surveyor for incorporation into the preliminary and final as-builts drawings.
- D. Specifications and Addenda: Legibly mark 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 Field Order or by Change Order.

- E. Shop Drawings (after final review and approval): Provide four (4) sets of record drawings for each process equipment, piping, electrical system, and instrumentation system.

1.05 SUBMITTAL

- A. Accompany each submittal with 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.
- B. Preliminary As-built Drawings: The Contractor shall submit to the Engineer two (2) paper copies of preliminary as-built drawings prepared and signed/sealed by the Contractor's surveyor with each monthly progress payment request. Preliminary as-built drawings shall conform to the requirements of final as-built drawings and shall represent the completed work to date. Preliminary as-built drawings shall include all work which the Contractor is requesting to be paid for.
- C. Final As-built Drawings: Upon project closeout and as a prerequisite to the final pay request, the Contractor shall submit to the Engineer final as-built drawings Administrative Code, pursuant to Section 472.027 of the Florida Statutes. The Engineer shall supply the Contractor copies of AutoCad files for the Contractor's use in the as-built drawing preparation. Final as-built drawings shall include all work which the Contractor is requesting to be paid for. The final as-built drawing submittal shall include:
 - 1. AutoCad drawing files shall include as-built information on layers separate from the original drawing layers and shall be named descriptively to represent the as-built features. (i.e.- Layer "wat ab" and "wat ab txt" for water as-built linework and text, respectively.) Drawing entities are to be shown on the correct layer. All as-built entities shall have color and line type set "bylayer". Text sizes shall be relative to the plotted scale. Additional details or exploded views shall be included to accurately and fully represent the as-built conditions.
 - 2. Certification by surveyor that the as-built information shown is accurate and that all improvements shown were constructed within or on public rights-of-way, easements or property specifically owned by the Owner. Certification shall be to the Owner, Engineer and St. Johns River Water Management (if applicable.)
 - 3. No linework and text shall be erased from the original design (construction) drawings during the as-built drawing preparation. Original

linework or text shall be circled if accurate or stricken (not erased) if not with the accurate information noted/shown. New linework and text shall be provided to accurately show the as-built information for the constructed improvements. Revisions to design dimensions alone will not be permitted.

4. **Pressure Pipeline and Utility Conduit Improvements:** For utility improvement projects, horizontal locations of the constructed pipelines with respect to the right-of-way lines or other readily visible, permanent features at 100-foot minimum intervals and at critical locations such as road intersections shall be shown. For treatment plant and pump station improvements, horizontal locations shall be provided at 20-foot intervals. Vertical locations of the constructed pipelines by elevation of centerline of pipe for above ground/exposed pipe or with respect to finished grade over buried pipe shall be shown at 100-foot minimum intervals. (i.e. final cover). For underground piping, all valves, blow-offs, stub-outs, pigging stations, fire hydrants, backflow preventers and services shall be located horizontally in relation to readily visible, permanent features with three-way horizontal dimensions less than 100 feet, each. Three-way dimensions to all buried fittings on treatment plant and pump station improvement projects shall be provided. If adequate features are not available, a station and offset dimensioning system can be used if prior approval is obtained from the Engineer. For above ground/exposed pipe, as-built dimensions between fittings or flanges shall be provided. Separations between sanitary hazards to potable water and reclaimed water mains per FDEP shall be shown.
5. **Gravity Pipeline Improvements:** Show elevations for all inverts, manhole tops, inlet throats/weirs, grate tops, etc. Show size and type of each structure. As-built length, size, and type of pipes between the structures shall be shown. All service laterals and cleanouts shall be located horizontally to readily visible, permanent features with three-way horizontal dimensions less than 100 feet, each. If adequate features are not available, a station and offset dimensioning system can be used if prior approval is obtained from the Engineer. A labeling and dimension table scheme is recommended for the three way or station/offset dimensioning. (i.e.-constructed feature labeled as "A", permanent feature labeled as "B", "A"- "B" dimension shown in table for distance measured between the two. Use continuous labeling and complete single table per plan sheet.) Separations between gravity "sanitary hazards" to potable water and reclaimed water mains per FDEP shall be shown.
6. **Roadway Improvements:** Elevation, size and location of swales, ditches, gutter flow-lines, edge of pavement, and road crown on both sides of the road if applicable shall be provided at 100-foot minimum intervals and at critical areas such as intersections and inlets/flumes. As-built points of curvature, tangent and vertical intersection, along with radii of road alignment, intersecting streets and driveways and other alignment information shall be provided.

7. Stormwater Improvements: The limits, slopes, and bottom depths of stormwater ponds, swales and other retention areas shall be provided. All stormwater piping information shall conform to the Gravity Pipeline Improvement requirements. Size, type, material, and elevations of all stormwater structures, including appurtenances such as weirs, orifices, skimmer plates, etc. shall be shown. As-built information shall conform to St. Johns River Water Management District requirements.
8. Treatment Facility Improvements: Location, size, number, and type of treatment equipment and structures shall be shown. Applicable requirements of as-built information listed herein for similar improvements shall be required.
9. Building Improvements: Finished floor elevations, ceiling heights, building locations, wall opening dimensions, equipment (electrical, mechanical, plumbing) locations, etc. shall be provided. Change of material shall be specifically noted as such.
10. Landscaping Improvements: Number, type, size, and general location of installed plant material shall be provided. Change of material shall be specifically noted as such. Location of irrigation meters, services, manual valves, automatic valves, controllers, rain shut off switches, etc. shall be shown. Changes to the designed irrigation system shall be shown.
11. Other Improvements: Changes from the original design of other improvements such as electrical, mechanical, and structural improvements shall be noted as such on the as-built drawings with the size, number, type, and location of the constructed/installed improvements noted.
12. Contractor may be required to reimburse the Owner for services rendered by the Engineer for review of multiple resubmittals per SC-6.17, 1. of Section 00 80 00: Supplementary Conditions.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

END OF SECTION

SECTION 01730
OPERATING AND MAINTENANCE DATA

PART 1 - GENERAL

1.01 DESCRIPTION

A. Scope of Work:

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.

B. Related Requirements Described Elsewhere:

1. Section 01340: Shop Drawings.
2. Section 01720: Project Record Documents.
3. Section 01740: Warranties and Bonds.

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 FORM OF SUBMITTALS

A. Prepare data in form of an instructional manual for use by Owner's personnel.

B. Hard Copy Format:

1. Size: 8½" 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 each piece of 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". List:
 - a. Title of project.
 - b. Identity of separate structure as applicable.
 - c. Identity of general subject matter covered in the manual.
- 7. Binders:
 - a. Commercial quality three-post binders with durable and cleanable plastic covers.
 - b. Maximum post width: 2 inches.
 - c. When multiple binders are used, correlate the data into related consistent groupings.

C. Electronic Format Copy

- 1. Provide electronic copy of operation and maintenance data on CD/DVD. File(s) should be organized/named to correspond with hard copy.

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.
 - 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.
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 MATERIALS AND FINISHES

A. Submit four (4) copies of the complete manual in final form.

B. Content: for architectural products, applied materials and finishes:

1. Manufacturer's data, giving full information on products
 - a. Catalog number, size, and composition.
 - b. Color and texture designations.
 - c. Information required for reordering special manufactured products.
2. Instructions for care and maintenance
 - a. Manufacturer's recommendation for types of cleaning agents and methods.

- b. Cautions against cleaning agents and methods which are detrimental to product.
 - c. Recommend schedule for cleaning and maintenance.
- C. Content, for moisture protection and weather-exposed products:
 - 1. Manufacturer's data, giving full information on products.
 - a. Applicable standards
 - b. Chemical composition
 - c. Details of installation
 - 2. Instructions for inspection, maintenance and repair
- D. Additional requirements for maintenance data: Applicable sections of the Specifications.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

SECTION 01740
WARRANTIES AND BONDS

PART 1 - GENERAL

1.01 DESCRIPTION

A. Scope of Work:

1. Compile specified warranties and bonds as specified in these Specifications.
2. Co-execute submittals when so specified.
3. Review submittals to verify compliance with Contract Documents.
4. Submit to Engineer for review and transmittal to Owner.

B. Related Work Described Elsewhere:

1. Instructions to Bidders: Bid Bonds
2. Performance Bond and Payment Bond

1.02 SUBMITTAL REQUIREMENTS

A. Assembly warranties, bonds and service and maintenance contracts, executed by each of the respective manufacturers, suppliers, and subcontractors.

B. Number of original signed copies required: Two each.

C. Table of Contents: Neatly typed, in orderly sequence. Provide complete information for each item.

1. Product of work item.
2. Firm, with name of principal, address and telephone number.
3. Scope.
4. Date of beginning of warranty, bond or service and maintenance contract.
5. Duration of warranty, bond or service maintenance contract.
6. Provide information for Owner's personnel:
 - a. Proper procedure in case of failure.
 - b. Instances which might affect the validity of warranty or bond.
7. Contractor, name of responsible principal, address and telephone numbers.

1.03 FORM OF SUBMITTALS

A. Prepare in duplicate packets.

- B. Format:
 - 1. Size 8 ½" x 11 inches, punch sheets for standard three-post binder.
 - a. Fold larger sheets to fit into binders.
 - 2. Cover: Identify each packet with typed or printed title "WARRANTIES AND BONDS". List:
 - a. Title of Project.
 - b. Name of Contractor.
- C. Binders: Commercial quality, three-post binder, with durable and cleanable plastic covers and maximum post width of two inches.

1.04 WARRANTY SUBMITTALS REQUIREMENTS

- A. For all major pieces of equipment, submit a warranty from the equipment manufacturer. Manufacturer's warranty period shall be concurrent with Contractor's for one (1) year, unless otherwise specified, commencing at the time of final acceptance by Owner.
- B. Contractor shall be responsible for obtaining certificates for equipment warranty for all major equipment which has at least a 1 hp motor or which lists for more than \$1,000. Engineer reserves the right to request warranties for equipment not classified as major. Contractor shall still warrant equipment not considered to be "major" in the Contractor's one-year warranty period even though certificates of warranty may not be required.
- C. In the event that the equipment manufacturer or supplier is unwilling to provide a one-year warranty commencing at the time of Owner acceptance, the Contractor shall obtain from the manufacturer a two-year warranty commencing at the time of equipment delivery to the job site. This two-year warranty from the manufacturer shall not relieve the Contractor of the one-year warranty starting at the time of Owner acceptance of the equipment.
- D. Owner shall incur no labor or equipment cost during the guarantee period.
- E. Guarantee shall cover all necessary labor, equipment and replacement parts resulting from faulty or inadequate design, improper assembly or erection, defective workmanship and materials, leakage, breakage or other failure of all equipment and components furnished by manufacturer.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

SECTION 02050
DEMOLITION

PART 1 - GENERAL

1.01 DESCRIPTION

A. Scope of Work:

1. This Section includes furnishing all labor, materials, equipment and incidentals required for selective site demolition.
2. This Section provides for the complete or partial removal and disposal of specified existing structures, foundations, piping, mechanical, and miscellaneous appurtenances encountered during construction operations.
3. This Section specifies certain activities necessary to maintain and facilitate operation during and immediately following construction and do not purport to cover all the activities necessary. The Contractor shall exercise due care for the existing system operation and shall maintain continuous operation of the existing lift station and the overall wastewater service and minimize operation inconvenience. In accordance with this requirement, a Demolition and Removal Plan shall be developed in accordance with Paragraph 1.06.
4. Demolition includes:
 - a. Demolition, complete or partial removal and cutting of existing piping and/or structures as required for the new construction.
 - b. Disposal of salvageable and excess unacceptable material as specified below.
 - c. Complete removal and off-site disposal of excess and unacceptable materials.
5. The Contractor shall examine the various drawings regarding the proposed site, visit the proposed site and determine for himself the extent of the work, the extent of work affected therein and all conditions under which he is required to perform the various operations.
6. Specific piping and/or structures to be partially or completely demolished are identified in the Construction Drawings.

1.02 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 companies or local residents located within the project site. Notices

shall be received with at least forty-eight (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.

1.03 CONDITIONS OF PIPING AND/OR STRUCTURES

- A. The Standard Building Codes shall control the demolition, modification or alteration of the existing piping and structures.
- B. No blasting shall be done on site. The Contractor shall not bring or store any explosives on site.

1.04 DISPOSAL OF MATERIAL

- A. Salvageable material shall become the property of the Owner, if the Owner requests any specific item. The Contractor shall dismantle all materials to such a size that it can readily handled, and deliver any of this salvageable material requested by the Owner to a storage area designated by the Owner.
- B. The following materials are examples of the type that the Owner may maintain ownership of:
 - 1. Valves greater than 3 inches in diameter.
 - 2. Water meters on service connections.
- C. Any materials that the Owner rejects shall become the Contractor's property and must be removed from the site.
- D. Concrete, concrete block and unsalvageable bricks shall be hauled to a waste disposal site by the Contractor.
- E. All other material shall be hauled to a waste disposal site by the Contractor.
- F. The storage of or sale of removed items on the site will not be allowed.

1.05 SUBMITTALS

- A. Submit to the Engineer for approval, two (2) copies of the proposed Demolition and Removal Plan for the modifications as shown on the Drawings or as specified herein prior to the start of work. Include in the schedule the coordination of shutoff, capping and continuation of utility service as required. The Demolition and Removal Plan shall include as a minimum, the following:
 - 1. A detailed sequence of demolition and removal work to ensure the uninterrupted operation of the Owner's utility systems, and the expeditious completion of the Contractor's work.

- 2. Evidence (by signature) of approval by the Owner of the work plan.
- B. Before commencing demolition work, all modifications necessary to bypass the affected portion of the system will be completed. Contractor shall coordinate with the residential Owner's personnel to determine the locations of the affected valves, fittings and water meters.
- C. The above procedure must be followed for each individual demolition operation.

1.06 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. Provided alternate traffic routes around closed or obstructed access ways.

1.07 DAMAGE

- A. Promptly repair damage caused to adjacent facilities by demolition operations at no cost to the Owner.

1.08 UTILITIES

- A. Maintain existing utilities to remain in service and protect 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.
- E. All utilities being abandoned shall be disconnected and terminated at the service mains in conformance with requirements of the utility companies or the municipality owning or controlling them.

1.09 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.

1.10 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 - MATERIALS (NOT USED)

PART 3 - EXECUTION

3.01 SEQUENCE OF WORK

- A. The sequence of demolition and removal of the existing facilities will be in accordance with the approved Demolition and Removal Plan as specified in Paragraph 1.05 of this Section. The Contractor is solely responsible for construction and demolition sequencing of the Work.

3.02 REMOVAL OF EXISTING PIPING AND APPURTENANCES

- A. Subject to the constraints of maintaining the existing systems in operation; existing piping and appurtenances not necessary for the operation of the new system shall be removed as shown or indicated on the Drawings.
- B. All piping and appurtenances shall be cleaned, flushed and drained. Equipment to be retained by the Owner as specified in Paragraph 1.04 above shall be dismantled sufficiently to permit thorough cleaning and draining. All valves shall be left open. All abandoned piping shall be capped, and sleeves and openings remaining after removal of the existing equipment, piping, and appurtenances shall be plugged and sealed as shown on the Drawings.
- C. All water meters on residential service connections located within the right-of-way that have not been relocated and connected to the new service lines shall be removed and given to the Owner.

3.03 STRUCTURES TO BE COMPLETELY DEMOLISHED

- A. Existing structures shall be completely demolished as shown on the Drawings. Structures shall be demolished to make room for construction of new facilities, unless otherwise shown on the Drawings. All demolished material and equipment shall be removed from site.

END OF SECTION

SECTION 03300
CAST IN-PLACE AND POURED CONCRETE

PART 1 - GENERAL

1.01 WORK INCLUDED

- A. The work included under this section consists of furnishing all materials, forms, transportation and equipment, and performing all necessary labor to do all the plain and reinforced concrete work shown on the Drawings, or incidental to the proper execution of the work, or as herein specified.
- B. Composition: Concrete shall be composed of cement, fine aggregate, coarse aggregate, and water so proportioned and mixed as to produce a plastic workable mixture in accordance with all requirements under this section suitable to the specific conditions of placement.

1.02 SUBMITTALS

- A. All materials specified shall be certified by the producer or manufacturer that the furnished material meets the specific requirements of the specifications. Concrete mix designs shall be submitted for approval prior to placement.

1.03 CODES AND STANDARDS

- A. ACI 301 "Specifications for Structural Concrete for Buildings", ACI 318" Building Code Requirements for Structural Concrete", ACI 347 "Recommended Practice for Concrete Formwork"; ACI 304 "Recommended Practice for Measuring, Mixing, Transporting, and Placing Concrete"; comply with applicable provisions except as otherwise indicated.

1.04 TESTING

- A. Air content shall be in accordance with American Society for Testing Materials Standard Methods C 173, one for each set of compressive strength specimens.
- B. Sampling of freshly mixed concrete shall be in accordance with ASTM C172.
- C. Slump: ASTM C-143
- D. Test results will be reported in writing to Engineer, Contractor, Owner and Concrete producer on same day tests are made.
- E. Laboratory Reports: Submit two (2) copies of laboratory test or evaluation reports for concrete materials and mix designs.

PART 2 - MATERIALS AND EQUIPMENT

2.01 PORTLAND CEMENT

- A. Shall comply with the standard specifications for Portland Cement, A.S.T.M. designation C-150, Type II, or Type III (high-early), where indicated on drawings.

2.02 CONCRETE AGGREGATE

- A. Shall conform to standard specifications for concrete aggregate, A.S.T.M. Designation C-33 or to ASTM C-330. Maximum size of aggregate shall not exceed one-fifth of the narrowest dimension between reinforcing bars.
- B. Fine Aggregate - Fine aggregate shall be clean, hard, strong, durable, uncoated particles of natural sand known as Lake Wales, Interlachen, or approved equal. The source, composition, quality and gradation of the fine aggregate shall be subject to the approval of the Engineer. Samples of the sand shall be furnished, together with certified copies of the gradation and analysis from the recognized testing laboratory.

1. The weight of extraneous or deleterious substances shall not exceed the following percentages:

Loss by Decantation	3%
Shale	1%
Clay Lumps	1%
Coal and Lignite	1%

2. The fine aggregate shall be reasonably well graded from coarse to fine and when tested by means of laboratory sieves shall meet the following requirements in percent of total weight:

<u>Total Retained On</u>	<u>Percent Retained</u>
No. 4 Sieve	0 - 5
No. 10 Sieve	3 - 30
No. 30 Sieve	30 - 70
No. 50 Sieve	65 - 95
No. 100 Sieve	95 - 100

- C. Deficiencies in the percentages of the fine aggregates passing the No. 50 and No. 100 Sieves may be remedied by the addition of pozzolanic or cementitious materials excepting Portland cement. Such materials must meet the approval of the Engineer.

D. Coarse Aggregate.

1. Coarse aggregate shall consist of hard, tough, durable components free from adherent coatings and vegetable matter, and shall not contain soft, friable, thin or elongated particles in quantities considered deleterious by the Engineer. Coarse aggregate shall be properly graded from fine to coarse to produce concrete of desired strength, density, and workability. The source, composition, quality and gradation of the coarse aggregate shall be subject to the approval of the Engineers. Samples of the coarse aggregate shall be furnished together with certified copies of the gradation and analysis from a recognized testing laboratory.
2. All coarse aggregate shall be washed and shall be free from disintegrated pieces, salt, alkali, vegetable matter and adherent coatings. The total percentage of all deleterious substances shall not exceed five percent (5%) by weight. The substances designated shall not be present in excess of the following amounts.

Loss by Decantation	1%
Clay Lumps or Other Soluble Materials	3%
Soft Fragments	5%

3. Where the cover over reinforcing is 2 inches or more, the maximum size of aggregate shall be 12 inches. Where the cover over reinforcing is less than 2 inches, the maximum size of aggregate shall be 3/4 inch. The maximum size of aggregate shall not exceed one-fifth of the narrowest dimension between forms nor three-fourths of the minimum clear spacing between reinforcing bars. The grading of the coarse aggregate in the concrete shall be within the following limits.

Percent Passing

Maximum Size Square Mesh Screen	97 - 100%
2 Maximum Size Square Mesh Screen	40 - 70%
No. 4 Sieve	0 - 6%

2.03 WATER

- A. Water shall be clean and free from oil, acids, alkalis, organic materials or other injurious substances.

2.04 REINFORCEMENT

- A. Reinforcing Bars: ASTM A615, Grade 60, deformed bars of USA manufacture.
- B. Welded Wire Fabric: ASTM A185, gauges, spacing and dimensions as indicated.
- C. Metal Bar Supports: CRSI MSP-1, Chapter 3, Class 2, Type B, Stainless Steel Protected Bar Supports, or otherwise approved by the Engineer. Use concrete supports for reinforcement in concrete placed on grade.
- D. Tie Wire: 16 gauge minimum, black, soft annealed.

- E. Coupler Splice Devices: Cadweld tensions couplers, capable of developing the ultimate strength of the bar as manufactured by Erico Products, Incorporated, Solon, Ohio, or equal.
- F. Epoxy coated or FRP rebar shall be used for all marine applications.

2.05 FORM WORK

- A. Lumber: Douglas Fir or Larch, No. 2 grade, seasoned and surfaced on four sides.
- B. Plywood: Plyform, Class 1, BB-Exterior type, mill oiled and edge sealed, with thickness not less than 3/4 inch.
- C. Medium Density Overlay (MDO) Plywood Forms: PS-1, B-B High Density Concrete Form Overlay, Class I, unoiled.
 - 1. Butt form panels, make contact surface fully flush and seal butting holes with sponge form tape. Chamfer edges of beams and ceilings.
 - 2. Where MDO plywood is used to form beams, do not use MDO plywood that has been patched or damaged.
- D. Drip Forms: Varnished ponderosa pine or equally rigid non-staining plastic, 2-inch-wide on each leg.
- E. Steel Forms. Uncoated steel, 3/16-inch minimum thickness, fabricated to close tolerances, protected only by the specified release agent, braced so as not to bend, dent, or dimple under wet concrete load, vibrator impact, and tool impact. Maintain steel form in rust-free condition by use of steel wool and light grinding, followed by coats of specified release agent. Use forms that can be adjusted into true alignment without stops or ridges.
- F. Glass Fiber Reinforced Plastic (FRP) Forms: Smooth coated forms, braced so as not to bend, dent or dimple under wet concrete loads, vibrator impact and tool impact, and at least 0.11 inch thick. Design forms for external bracing at piers and columns, without use of form ties.
- G. Plugged Cone Form Ties: Rod type, with ends or end fasteners which can be removed without spalling the concrete and which leave a hole equal in depth to the required reinforcement clearance. Form ties shall be of a design in which the hole left by the removed end or end fastener is easily filled to match the surface of the hardened concrete. Provide removable cones 13 inches in diameter by 12 inches deep. Provide preformed mortar plugs to match the color of the concrete, recessed 3 inches, adhered with an approved two-part epoxy.
- H. Weep Hole Forms: PVC polyethylene, or ABS pipe, matching color of the concrete, 4 inch inside diameter, with outlet projecting 12 inches from wall and cutoff in a plane parallel to it.

- I. Circular and Elliptical Column Forms: Fabricate of two pieces, clamped watertight using gaskets and without horizontal joints. Install horizontal construction joints only where indicated or as directed by the Engineer.
- J. Beam Forms: Provide in one length without form joints and suitable for cambering up to 1/160 of span without distortion of profile or opening of seams.
- K. Forms of Hammerhead Pier Caps: Provide in one length with adjustable soffits, bulkheads and screens as necessary to accommodate different hammerhead beam configurations. Provide no construction joints in hammerhead pier caps. Where three or fewer identical hammerhead pier caps occur within a line section, steel braced HDO plywood forms may be substituted for steel forms if:
 - 1. Working drawings of formwork are submitted.
 - 2. Internal form ties are regularly spaced no less than forty-eight (48) inches each way, and are made watertight.
 - 3. Form ties have removable cones, which are filled to match concrete.
 - 4. Joints in panels are fully watertight.
 - 5. The resulting surface matches the appearance of steel formed hammerhead caps, with no visible discoloration due to form leakage.
- L. Styrofoam Board: Expanded polystyrene extruded into board form, closed cell, moisture resistant, capable of maintaining indicated clear space between concrete structures.
- M. Control Joint Filler: Use epoxy joint filler equal to BurkEpoxy Joint Filler to fill voids left by saw cuts and to resist against spalling caused by vehicle traffic in concrete slabs.
- N. Inserts: Galvanized cast steel or galvanized welded steel, complete with anchors to concrete and fittings such as bolts, wedges and straps. Provide hanger inserts spaced to match grid of suspended ceilings.
- O. Shoring: As designed and executed by Contractor to support all loads.
- P. Chamfer Strips: Polyvinyl strips designed to be nailed in the forms to provide a 3/4-inch chamfer at exposed edges of concrete members.
- Q. Form Release Agent: A blend of natural and synthetic chemicals that employs a chemical reaction to provide quick, easy and clean release of concrete from forms, and equal to Eucoslip, by the Euclid Chemical Company, or Release #1, by The Burke Company. Use a non-staining release agent that leaves the concrete with a paintable surface.

2.06 ADMIXTURES

- A. Air Entraining Admixture: ASTM C260.
- B. Water Reducing and Retarding Admixture:
 - 1. Concrete Without Superplasticizer:
 - a. Water Reducing Admixtures: ASTM C494, Type A, equal to Eucon WR-75 by the Euclid Company, Pozzolith 200N by Master Builders, Plastocrete 161 by Sika Chemical Corporation, and containing no calcium chloride.
 - b. Water Reducing and Retarding Admixtures: ASTM C494, Type D, equal to Eucon Retarder-75 by the Euclid Company, Pozzolith 100 XR by Master Builders, Plastiment by Sika Chemical Corporation, and containing no calcium chloride.
 - c. Accelerating Admixtures: ASTM C494, Type C or E, equal to Accelguard 80 by the Euclid Company, Darex Set Accelerator by W.R. Grace, and containing no calcium chloride.
 - 2. Concrete with Superplasticizer:
 - a. Water Reducing, High Range Admixtures: ASTM C494, Type F or G, equal to Eucon 37 by the Euclid Company, Rheobild 716 by Master Builders, Daracem 100 by W.R. Grace, Sikament by Sika Chemical Corporation, and consisting of a second generation admixture, free of chlorides and alkalis (except for those attributable to water) composed of a synthesized sulfonated complex polymer, enabling the concrete to maintain its rehoplastic state in excess of two (2) hours if necessary.
 - b. Manufacturer's Job Site Representation: Provide the services of a competent field service representative from the manufacturer of each of the admixtures selected for use to provide at the job site advice and consultation on the use of the admixture materials, including the effect on the concrete in place, including recommending maximum discharge time for superplasticizer method and procedure to induce superplasticizer into mixer, quantities of admixtures to be used if variations are required because of temperature/humidity, wind or other environmental considerations, and to be available on short call at any time requested by the Owner, Contractor, or concrete producer.
 - 3. Concrete used in Marine Applications:
 - a. Micro Silica admixtures shall be used for concrete installed in marine and coastal applications. Concrete designs shall meet the appropriate requirements of EN206-1, BS 8500 and BS 5075. Contractor shall provide plant certification for all mix designs used in marine and coastal applications.

2.07 GROUT

- A. Nonshrink, Nonmetallic Grout: The Burke Company's Non-Ferrous, Non-Shrink Grout, Sauereisen F-100 Level Fill, Master Builders Masterflow 713, Euclid NS Grout, or equal pre-mixed type.
- B. Nonshrink Metallic Grout: The Burke Company's Metallic Spec Grout, Master Builders Embeco 636 Grout pre-mixed type, or equal.
- C. Epoxy Grout: Sikadur 42 Grout-Pak, or equal, for grouting sleeves for anchor bolts, etc.
- D. Clarifier Basin Grout: Class B concrete of coarse aggregate shall pass the 3/4-inch sieve.

2.08 MEMBRANE CURING COMPOUND.

- A. Membrane curing compound shall be wax-free, pigmented, 100 percent (100%) resin base compound such as A.C. Horn's "Horncure 30 C", Hunt Process Corporation; Southern's "All-Resin", or equal.

2.09 BONDING AGENT.

- A. Bonding agent shall be Colma Fix, as manufactured by Sika Chemical Corporation, of Passaic, New Jersey or equal. To be considered equal, the material must be a two-component epoxy-polysulphide resin system, and it must have a demonstrated record of strong adhesion to both wet and dry concrete in either the hardened or the plastic state. It must also be of equal strength.

2.10 ACCESSORIES

- A. Precast Concrete Block Supports for Reinforcing Bars: Comply with ACI 315. Provide blocks with No. 4 dowels bent 90° to support top bars.
- B. Membrane: 6 mil polyethylene film.
- C. Water Stops: Polyvinyl chloride meeting all requirements of U.S. Army Corps of Engineer's Specification CRD-C-572 and equal to Burke Water Stops as manufactured by The Burke Company. Provide flat dumbbell type and center bulb type, 9 inches x 3/8 inch at wall thickness of 12 inches or greater, and 6 inches x 3/8 inches at wall thickness less than 12 inches. Provide 6-inch split-ribbed with center bulb type at connections of new concrete structures with existing concrete. Provide water stops as indicated on the Drawings.
- D. Preformed Expansion Joint Filler:
 - 1. Bituminous type conforming to the requirements of ASTM D994.
 - 2. Nonextruding type, self-expanding cork, 3/4-inch-thick or as otherwise shown on the Drawings, conforming to the requirements of ASTM D1752, Type III, and compatible with the specified joint sealant compound.

- E. Joint Sealant: A multipart gray polyurethane sealant, meeting U.S. Federal Specification TT-S-00227E (3) Type 1, Class A self-leveling for horizontal joints, and Type II, Class A, non-sag for vertical joints, and recommended by the manufacturer for continuous immersion in water. Provide sealants as manufactured by Products Research and Chemical Corporation, Mameco International, The Burke Company, W.R. Meadows, or equal.
- F. Tongue and Groove Joint Forms: 24-gauge steel forms complete with steel stakes and splice plates, designed for joints not to receive a poured seal, and equal to Burke Keyed Kold Joint as manufactured by The Burke Company.
- G. Inserts: Galvanized steel to fit the proposed hanger or support.
- H. Mortar for Repair of Concrete: Same materials as used for concrete, except omit coarse aggregate and use not more than one-part cement to two and on-half parts sand by damp loose volume. Use no more mixing water than is necessary for handling and placing.
- I. Burlap Mats: Conform to AASHTO Specification M182.
- J. Epoxy Bonding Agent: Euco #452, BurkEpoxy MV, Sikadur Hi Mod, Concrecive 1001-LPL, or equal.
- K. Powdered Epoxy Coating for Anchor Bolts: Powdered epoxy resin as manufactured by the 3M Company, Scotchkote No. 213, Armstrong No. R349.

2.11 CONDUITS AND PIPES EMBEDDED IN CONCRETE

- A. Conduits, pipes and sleeves of any material not harmful to concrete shall be permitted to be embedded in concrete with approval of the engineer, provided they are not considered to replace structurally the displaced concrete.
- B. Conduits and pipes of aluminum shall not be embedded in structural concrete unless effectively coated or covered to prevent electrolytic action between aluminum and steel.
- C. Conduits and pipes, with their fittings, embedded within a column shall not displace more than four percent (4%) of the area of cross section on which strength is calculated or which is required for fire protections.
- D. Conduits, pipes, sleeves passing through a slab, wall or beam shall not impair significantly the strength of the construction.
- E. Except when plans for conduits and pipes are approved by the engineer, conduits and pipes embedded within a slab, wall, or beam shall satisfy the following:
 - 1. They shall not be larger in outside dimension than one-third overall thickness of slab, wall, or beam in which they are embedded.
 - 2. They shall not be spaced closer than three diameters or widths on center.

2.12 PIPES CONTAINING LIQUID, GAS, OR VAPOR

- A. Pipes that will contain liquid, gas or vapor may be embedded in structural concrete under the following conditions:
1. Pipes and fittings shall be designed to resist effects of the material, pressure, and temperature to which they will be subjected.
 2. No liquid, gas, or vapor, except water not exceeding 90°F (32C) nor 50 psi (345 kPa) pressure, shall be placed in the pipes until the concrete has attained its design strength.
 3. Concrete cover for pipes, conduits and fittings shall be not less than 12 inches (38 mm) for concrete exposed to earth or weather or in contact with ground.
 4. Reinforcement with an area of not less than 0.002 times area of concrete section shall be provided normal to piping.
 5. Piping and conduit shall be so fabricated and installed that cutting, bending or displacement of reinforced from its proper location will not be required.

PART 3 - EXECUTION

3.01 PROPORTIONING

- A. The proportions of aggregate to cement shall be such as to produce a thoroughly plastic mixture which will work readily into the corners and angles of the forms and around the reinforcement but without permitting the materials to segregate or excess free water to collect on the surface. The percentage of sand shall not be less than thirty percent (30%) nor more than fifty percent (50%) of the total weight of the aggregate.
- B. The total content, including the surface water contained in the aggregate, shall not exceed 5.7 gallons per sack of cement. The slump shall not exceed four inches. Air-entraining admixture shall be Darex AEA as manufactured by the Dewey and Almy Chemical Company.
- C. The amount of air entrained in the freshly mixed concrete shall not be less than three percent (3%) nor more than six percent (6%). The minimum cement content in sacks per cubic yard of concrete shall not be less than six (6) sacks per cubic yard for Class "A" concrete.
- D. Concrete materials shall be accurately measured by weight. Measurement of materials for ready-mixed concrete shall conform to the "Standard Specifications for Ready-Mixed Concrete", (A.S.T.M. designation C-94).
1. Class "A" concrete for all structures shall have minimum compressive strength of 4000 psi at twenty-eight (28) days.
 2. Class "B" concrete for sidewalks shall have minimum compressive strength of 3000 psi at twenty-eight (28) days.

3. All concrete shall be Class "A" unless otherwise shown on the drawings.

3.02 MIXING AND PLACING

- A. Concrete shall be mixed, conveyed and deposited in accordance with the "A.C.I. Building Code" (A.C.I. 318).
- B. Prior to placing any concrete, the Contractor shall submit for the Engineer's approval a design mix, calculated by a recognized testing laboratory, and using the approved aggregates to produce a workable mix of the desired strength, together with certified copies of 7-day and 28-day tests of cylinders taken from concrete made according to the design mix. The mixes shall be designed to secure concrete having a minimum compressive strength at age twenty-eight (28) days.
- C. Ready-mixed concrete delivered shall be accompanied by delivery tickets showing the following:
- | | | |
|----|----------------------------------|--------------------|
| 1. | Date and time leaving plant | Additives (if any) |
| 2. | Type of cement and weight | Site arrival time |
| 3. | Quantity of water and time added | Site leaving time |
- D. Concrete.
1. Ready-mixed concrete shall be used. All mixing requirements specified herein shall be enforced, and the Owner's laboratory representative and the Engineer shall have free access to the mixing plant at all times.
 2. Except for materials and/or procedures otherwise specified herein, ready-mixed concrete shall be mixed and delivered in accordance with the requirements of ASTM C 94.
 3. No water shall be added to the concrete after it leaves the plant except where part of the design water was purposely omitted at the plant, and then only as approved by the Engineer.
- E. Mixer Speed.
1. Neither the speed of any mixer nor the quantity of material loaded into any mixer shall exceed the recommendations of the manufacturer.
 2. Excessive over-mixing, required additions of water to preserve the required consistency, shall be cause for rejection of the batch.
 3. Concrete shall not remain in a transit mixer or agitator truck more than ninety (90) minutes after the water has been introduced, and not for more than forty-five (45) minutes if any approved retarding agent is not used.
 4. Minimum mixing time shall be fifty (50) revolutions of drum at rated speed.
- F. Measurement.

1. Equipment necessary to determine and control the actual amounts of all materials entering the concrete shall be provided by the concrete manufacturer.
2. All materials shall be measured by weight, except that water may be measured by volume calculated at 8-1/3 pounds per gallon. One bag of cement will be considered as 94 pounds in weight.

G. Mixes.

1. Mix Design: Conform to ACI 318, Section 4.3. Submit data on consecutive tests and standard deviation.
2. Maximum Water-Cement Ratio:
 - .37 (lbs/lb) - Concrete with superplasticizer
 - .38 (lbs/lb) - Concrete in Marine Environments
 - .45 (lbs/lb) - Class A concrete without superplasticizer
 - .55 (lbs/lb) - Class B concrete without superplasticizer
 - .65 (lbs/lb) - Class C concrete without superplasticizer
3. Air Content: 5 percent plus or minus 1.5 percent (Class A and B).
4. Slump: 4 inches plus or minus 1 inch for Class A and B without superplasticizer.
 - 7 inches plus or minus 1 inch for Class A and B with superplasticizer.
 - 8 inches plus or minus 1 inch for tremie concrete or as specified by details.

H. Placing Concrete.

1. All concrete shall be placed in clean, damp forms that are not hot to the touch.
2. To prevent segregation, concrete shall be deposited as nearly as practicable in final position and not allowed to drop freely more than necessary and in no case more than five feet, except in an approved funnel or tremie. All concrete shall be placed during daylight unless otherwise authorized at least four hours in advance. Where the reinforcing steel above the top of the concrete being placed becomes coated with laitance or partially set-up concrete, all such concrete shall be removed from the reinforcing steel prior to placing concrete around the bars.
3. Concrete shall be packed carefully and tightly around pipe and other items to secure maximum adhesion.
4. Concrete shall be placed in layers not over 12 inches deep before compacting. Concrete shall be compacted by internal vibrating equipment supplemented by spading and hand-rodming between reinforcing steel and form to eliminate air bubbles and honeycomb. Vibrators shall not be used to move the concrete laterally inside the forms. Duration of vibration shall be limited to the time necessary to provide satisfactory consolidation without

causing segregation, not less than 5 and not more than 15 seconds per square foot of exposed top surface. The vibrator shall be constantly relocated and shall be placed in each specific spot only once for each layer. The Contractor shall take steps to assure that sufficient personnel are available to devote full time to operating vibrator, spading and rodding.

5. Wall concrete shall be placed in layers as indicated above, with the first lift preceded by a 1-inch minimum layer of 1:2-1/2 cement-sand grout, with a 6-inch to 8-inch slump, placed on existing concrete not more than 20 minutes before concrete placement. The surface of previously placed hardened concrete shall be clean and wet before grouting, or shall be treated with a bonding agent as required. Puddles of water in horizontal recessed keys shall be avoided by the use of drain recesses to outside edge of concrete. Concrete in walls and deep beams shall be placed in lifts not to exceed three layers at 12 inches each for the full length of the pour before proceeding higher. The placing of concrete shall not be delayed more than twenty (20) minutes between layers or lifts.
6. Slab forms shall be thoroughly cleaned after placing wall concrete below. Concrete in beams or walls shall be placed to bottom of floor slab. After concrete in walls below floor slab has been in place for approximately thirty (30) minutes, the concrete for the floor slab and upper portion of the beam shall be placed and vibrated.
7. When concrete is conveyed by chutes, the equipment shall be of proper size and design to insure a continuous flow in the chute. The chutes shall be metal or metal lined, and the different portions shall have approximately the same slope. The slope shall not be less than one vertical to three horizontal or more than one vertical to two horizontal, and there shall be provision for a baffle at the discharge end of the chute to prevent segregation. If the vertical distance between the discharge end of the chute and the surface of the concrete is more than five feet, a spout shall be used. The lower end of the spout shall be kept as near the surface of the deposit as is practicable. All chutes and spouts shall be thoroughly cleaned before and after each run. All debris and water shall be discharged outside the forms.

3.03 CURING AND PROTECTION

A. Curing:

1. Immediately after surface defects have been repaired, apply a spray coat of curing compound to all exposed surfaces, including slabs, walls, beams and columns in accordance with the manufacturer's recommendations. Protect exposed steel keyways and other embedded items from the curing compound. Water cure, as specified in paragraph B hereunder, all concrete surfaces that are to be exposed to wastewater, surfaces that are to be coated with a coal tar epoxy system, and concrete floors requiring a bond for special finishes.
2. Do not apply compound during periods of rainfall. Should the film become damaged from any cause within the required curing period, immediately repair the damaged portions with additional compound. Upon removal of

forms, immediately coat the newly exposed surfaces to provide a curing treatment equal to that provided for the surface.

3. Curing and Sealing Compound: Use clear compound conforming to Federal Specification TT-C-800A, 30% solids content minimum, having test data from an independent laboratory indicating a maximum moisture loss of 0.030 grams per sq. cm. when applied at a coverage rate of 300 sq. ft per gallon, and equal to Super Floor Coat or Super Pliocure by The Euclid Chemical Company or Masterseal 66 by Master Builders. Furnish manufacturer's certification as required.
 4. Apply specified clear curing and sealing compound to all horizontal areas so noted on the Drawings or in the Specifications. Apply immediately after final finishing. Apply this compound to non-structural construction joints of slabs on grade to act as a bond breaker prior to placement of adjacent concrete.
- B. Water Curing Method: Cure all concrete that is to be water cured by either the wet burlap method, by continuous fogging or by covering with waterproof sheet.
1. Wet Burlap Method: Cover concrete surface with a double thickness of burlap, cotton mats, or other approved material, kept thoroughly saturated with water. Keep the forms wet until removed and upon removal, start the curing specified herein immediately. Cure the concrete for a period of seven (7) days for normal Portland cement or four (4) days for high early strength cement. Do not submerge concrete poured in the dry until it has attained sufficient strength to adequately sustain the stress involved and do not subject it to flowing water across its surface until it has cured four (4) days.
 2. Continuous Fogging: Perform continuous fogging by fogging with a nozzle which so atomizes the flow of water that a mist, and not a spray, is formed. Fog the concrete surface regularly without allowing any part of the surface to become dry. Take all necessary precautions to prevent erosion of the concrete surface by the water.
 3. Covering with Waterproof Sheets: Keep the entire area to be cured continuously wet by fogging, as specified in the fogging paragraph above, for at least eighteen (18) hours and then immediately cover with waterproof curing sheet conforming to ASTM C171, waterproof paper and polyethylene film, free of holes or tears. Keep sheet fully flat, without wrinkles or air bubbles, held down tautly at all edges. Do not use this method on slabs which will be exposed to view.

3.04 PLACING REINFORCEMENT

- A. All reinforcement shall be detailed, fabricated and erected in accordance with the A.C.I. "Manual of Standard Practice for Detailing Reinforced Concrete Structure", (A.C.I. 315), including bar supports and spacers. At splices all reinforcing bars shall be lapped a minimum of 24 bar diameters but not less than 12 inches.
- B. The reinforcing shall be fabricated to the shapes and dimensions shown and shall be placed where indicated on the drawing. Before placing, all reinforced steel shall be thoroughly cleaned of rust, mill scale or coatings, which would reduce or destroy

the bond. Reinforcing bars shall conform to the requirements of the latest editions of the A.C.I. Code and the CRSI Manuals.

- C. Wire mesh, unless otherwise shown on the drawings or specified, shall be 6" x 6" No. 10 woven or electrically welded wire fabric conforming to the requirements of ASTM Designation A185, latest revision.
- D. Space chairs and bolsters in accordance with ACI 315 and 318 using height to furnish cover over reinforcing required. Chairs with plastic feet or stainless steel shall be used in all beams and elevated slabs. Chairs for other concrete adjacent to or on the ground may be pieces of concrete block or concrete brick compressed into subgrade with the rebars bearing directly on the pointed edge of the masonry supports, or chairs set on precast concrete pads compressed into the subgrade.
- E. When placed in the forms, reinforcement shall be clean and free of all loose rust, scale, dust, dirt, paint, oil or other foreign material, and shall be accurately and securely positioned both laterally and vertically before placing concrete. Minimum clearances between the steel and face of concrete shall be maintained as shown.
- F. The rebars shall be fastened together at every intersection or at intervals not greater than 24 bar diameters by wire ties or by some alternate method acceptable to the Engineer. In areas where large bars are closer together, the wire ties may be spaced not more than 30 bar diameters apart, rather than as specified above.

3.05 FORMS

- A. Installation and erection shall be in accordance with ACI 347 and as specified hereinafter.
- B. Forms shall conform to shape, lines and dimensions of numbers indicated, and shall be sufficiently tight to prevent leakage of mortar. They shall not deflect under dead load weight of construction as a liquid or of construction load. Forms shall be properly braced or tied together so as to maintain position and shape within specified tolerances. Construct forms so that they can be removed steadily without hammering or prying against the concrete. Forms for exposed concrete shall be carefully made and accurately placed to obtain correct shape and line.
- C. Forms shall be of wood, metal, or other approved materials. Metal forms shall be of a type and manufacture acceptable to the Engineer. Plywood, fiberboard, or absorptive type form linings may be used where appropriate. Sectional forms shall produce a uniform surface and shall be assembled in a modular pattern. Pours will not be scheduled until all erection and bracing is complete. Walers, ties and braces shall be required for all forms.

Chamfer strips made from nominal dimensional 1" x 1" lumber cut on the diagonal shall be installed at the top of the forms on all exposed edges of walls, slabs, beams and other structures above grade.

- D. Drip edge shall be made from wood quarter round and installed where shown. Extruded plastic fillets shall be used where detailed. Circular structures shall be formed with special care, and attention to the appearance of the finished structure.

Random location of fillers, non-modular sections, and excessive deviations from true circular segments shall be cause for rejection of the forms.

- E. The Contractor shall be fully responsible for the adequacy of formwork in its entirety. Forms shall support required loads and shall maintain their dimensional and surface correctness to produce members required by drawings.
- F. Slots, chases, recesses or other openings as shown on the drawings or as needed for the work of any other trades shall be boxed out.
- G. Box out for all temporary openings and build forms to seal them up when and as required.
- H. After sealing and immediately before the placing of reinforcing, faces of all forms in contact with the concrete shall receive a thorough coating of the liquid form releasing agent, applied in compliance with the Manufacturer's instructions.
- I. Reused forms shall be thoroughly cleaned out of dirt, debris, concrete and foreign matter. Forms shall not be reused if they have developed defects which would affect their tightness and strength or desired surface finish. Used forms shall not be used for architectural concrete.
- J. Forms shall be removed in a manner that will prevent injury to concrete. Supporting forms or shoring shall not be removed until the members have acquired sufficient strength to support their weight and any load thereon.
- K. Removal shall be in sequence as approved by the Engineer. Unless test cylinders warrant another procedure, the forms shall not be removed from members prior to the time listed in the schedule hereinafter unless otherwise directed.
- L. Bonding To Existing Surfaces: Clean existing concrete surfaces that are to have new concrete bonded thereto of all grease, oil, dust, dirt and loose particles and coat with an epoxy bonding agent just prior to placing of the new concrete. Apply the bonding agent as recommended by the manufacturer and allow the agent to become tacky before the new concrete is placed. Do not allow the bonding agent to overlap or be spilled on the surfaces to be exposed after the work is completed.

3.06 FORM REMOVAL

- A. Maintain formwork in place for the following structural conditions until the concrete has attained the minimum percentage of indicated design compressive strength or for the period of time specified in the following table.

Note: Time periods in the table include all days except those in which the temperature falls below 40 degrees F.

<u>Structural Member or Condition</u>	<u>Normal Strength Concrete</u>	<u>High-Early Strength Concrete</u>	<u>Minimum Compressive Strength for Form Removal (% Design Strength)</u>
Cantilevers	12 days	7 days	90
Over 20 feet between supports	12 days	7 days	90
Stairway	10 days	5 days	80
Floor Slabs	5 days	3 days	70
Free standing walls, column and piers	5 days	3 days	70
Walls, piers columns, sides of beams, footings slabs on grade, and vertical surfaces	24-48 hours	12-24 hours	70
Front face form of curbs	6-24 hours	6 hours	70

3.07 CONCRETE FINISHINGS

- A. Repair of Surface Defects:

1. General: Repair surface defects, including tie holes immediately after form removal. Dampen the area to be patched and an area at least 6 inches wide surrounding it to prevent absorption of water from the patching mortar. Notify the Engineer prior to commencing operations.
2. Removal of Defective Concrete: Remove all honeycombed and other defective concrete down to sound concrete. Cut edges perpendicular to the surface or slightly under cut. Sand blast surfaces to receive repair.
3. Bonding Grout: Thoroughly dampen surfaces to be patched and apply a coat of bonding grout consisting of one-part cement to one part fine sand passing a No. 30 sieve and having the consistency of thick cream.

4. **Placing Patching Mortar:** After the bonding grout begins to lose its water sheen, apply a premixed patching mortar, thoroughly consolidating it into place and striking it off so as to leave the patch slightly higher than the surrounding surface. Leave mortar undisturbed for one hour to permit initial shrinkage and then finally finish.
5. **Tie Holes:** After being cleaned and thoroughly dampened, fill the tie holes solid with patching mortar.

B. **Concrete Finishes:**

1. **Formed Surfaces:** After removal of forms, chip off all irregular projections, grind flush with adjacent surfaces and finish concrete surfaces in accordance with the following schedule:

<u>Finish Designation</u>	<u>Area Applied</u>
F-1	Exterior walls below grade not exposed to water: Repair defective concrete, fill depressions deeper than 2 inches, and fill tie holes.
F-2	Exterior and interior walls exposed to water: Repair defective concrete, remove fins, fill depressions 3 inches or deeper, and fill tie holes.
F-3	Walls of structures of buildings exposed to view and underside of formed floors or slabs: In addition to Finish F-2, fill depressions and airholes in mortar. Dampen surfaces and then spread a slurry consisting of one-part cement and one and one-half parts sand by damp loose volume on the surface with clean burlap pads or sponge rubber floats. Remove any surplus by scraping and then rubbing with clean burlap.
F-4	Tops of walls, beams and similar unformed surfaces occurring adjacent to formed surfaces: Strike smooth after concrete is placed and float to a texture reasonably consistent with that of formed surfaces.

2. **Slab Surfaces:**

- a. **General:** After concrete has been consolidated, finish all concrete slabs with a floated finish. After floating, trowel finish all concrete slabs, except for areas to receive roofing, insulation, tile or topping, and immediately light broom finish. Where a finish is not indicated, provide a troweled finish.

<u>Finish Designation</u>	<u>Area Applied</u>
S-1	Slabs and floors not water bearing: Smooth steel trowel finish.

- S-2 Slabs and floors which are water bearing and slab surfaces on which mechanical equipment moves: Steel trowel finish free from trowel marks and all irregularities.
 - S-3 Slabs, floors and stair treads of structures or buildings exposed to view: Steel trowel finish without local depressions or high points and apply a light hair-broom finish. Do not use stiff bristle brooms or brushes. Leave hair-broom lines parallel to the direction of slab drainage.
 - S-4 Slabs and floors at slopes greater than ten percent (10%): Steel trowel finish without local depressions or high points. Apply a stiff bristle broom finish. Leave broom lines parallel to the direction of slope drainage.
 - S-5 Exposed edges of slabs, floors and tops of walls: Finish with a 3-inch radius edge if a chamfer is not indicated.
- C. Floated Finish: After concrete has been placed, consolidated, struck off and leveled, do not work the surface further until water sheen has disappeared and the surface has hardened sufficiently to permit floating. During the first floating, check the planeness of the slab with a 10-foot straightedge applied at no less than two angles. Cut down all high spots and fill all low spots to produce a surface having the required tolerance. Then refloat the slab to a uniform sandy texture.
 - D. Light Broomed Finish: After floating, power trowel slabs to receive a light broomed finish to produce a smooth surface, relatively free of defects. Before the surface sets, pass a soft broom drag over the surface to produce a surface uniform in texture and appearance.
 - E. Troweled Finish: After floating, power trowel slabs to receive a troweled finish to produce a smooth surface, relatively free of defects. Hand trowel after the surface has hardened sufficiently. When a ringing sound is produced as the trowel is moved over the surfaces, perform final troweling by hand to produce a surface which is thoroughly consolidated, free from trowel marks, uniform in texture and appearance and plane to a tolerance of 1/8 inch in 10 feet as determined by a 10-foot straightedge placed anywhere on the slab in any direction.
 - F. Hardener Finish: Where indicated to receive a troweled hardener finish, water cure slabs without application of curing and sealing agent. When slab is at least twenty (20) days old and thoroughly dry, apply the hardener in accordance with the manufacturer's recommendations. Where dry-shake hardener or slip resistant finish is required, apply the hardener or slip-resistant product prior to complete curing and finishing, in accordance with the requirements and recommendations of the product manufacturer.
 - G. Saw Cut Joints: Cut joints that are to be saw cut not sooner than two (2) hours after the concrete is poured and not later than eight (8) hours after the pour.

3.07 TESTS

- A. Compressive strength tests shall be made by breaking standard 6-inch diameter by 12-inch high test specimens prepared, cured and broken in accordance with the American Society for Testing Materials Standard Methods C-31 and C-39, latest revision. Four (4) specimen test cylinders shall be taken from each pour of five cubic yards or more. One additional test shall be taken from each 30 cubic yards or fraction thereof in each pour in excess of 30 cubic yards.
- B. Test specimens shall be taken from manhole bottom pours of less than five cubic yards as directed by the Engineer. Test specimens shall be taken in the presence of the Engineer. One cylinder from each pour shall be broken at seven (7) days, the remainder at twenty-eight (28) days. Additional test cylinders may be ordered for determining the characteristics of a new design mix or changes in equipment or methods, and under adverse weather or curing conditions.
- C. Slump test shall be made in accordance with ASTM C143, latest revision, and shall be made with each load and at time of cylinders.
- D. The Contractor shall supply all cylinder molds, slump cones, tools and labor for preparing specimen, and shall provide clean, moist sand or burlap for curing. Cylinder shall not be shipped to the testing laboratory until the third day following preparation, and shall be protected from accidental damage at all times.
- E. The test cylinders shall be tested in a recognized commercial testing laboratory at the expense of the Contractor.

3.08 EXPANSION JOINTS, CONSTRUCTION JOINTS AND WATER STOPS

- A. Expansion Joints shall be places as indicated on the drawings. Joint materials for surfaces exposed to water and sewage shall conform to ASTM D175, Preformed Joint Filler, non-extruding and resilient (bituminous type), thickness as shown on the drawings. Joint materials for isolation joints, slab-on-grade joints and wall joints not exposed to water and sewage shall conform to ASTM D994, preformed expansion joint filler for concrete (bituminous type), thickness as shown on the drawings.
- B. Construction Joints shall be located in accordance with a schedule of pours which shall be prepared and submitted by the Contractor. Vertical construction joints shall be held to the minimum number consistent with good standard practice.
- C. Water Stops. Material for water stops shall be 9-inch PVC multi-rib center-bulb type for expansion joints, and 1/4" x 4" and 1/8" x 4" structural steel sheets for construction joints. PVC joint material shall be as manufactured by The Burke Company, or approved equal.

END OF SECTION

SECTION 03600 GROUT

PART 1 - GENERAL

1.01 WORK INCLUDED

- A. Provide all labor, materials, tools and equipment and perform all grouting as specified hereinafter and indicated on the Drawings.

1.02 RELATED WORK

- A. Section 03300: Cast-In-Place and Poured Concrete

1.03 SUBMITTALS

- A. Submit manufacturer's literature for review on the following items:
 - 1. Nonshrink grout data including grout properties, mixing, surface preparation and installation instructions.

1.04 DELIVERY AND STORAGE

- A. Deliver and store grouting materials in unbroken containers with seals and labels intact as packaged by the manufacturer.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Nonshrink, Nonmetallic Grout: The Burke Company's Non-Ferrous, Non-Shrink Grout, Sauereisen F-100 Level Fill, Master Builders Masterflow 713, Euclid NS Grout, or equal pre-mixed type.
- B. Nonshrink Metallic Grout: The Burke Company's Metallic Spec Grout, Master Builders Embeco 636 Grout pre-mixed type, or equal.
- C. Epoxy Grout: Sikadur 42 Grout-Pak, or equal, for grouting sleeves for anchor bolts, etc.

PART 3 - EXECUTION

3.01 PREPARATION

- A. Clean all bonding surfaces of dust and oil.

3.02 INSTALLATION

- A. Nonshrink Grout:
 - 1. Use nonshrink, nonmetallic grout for grouting precast concrete wall panel connections, column base plates, anchor bolts, reinforcing bars, pipe

sleeves, machinery supports and pump base plates. Use epoxy grout for anchor bolts, etc., where indicated on the Drawings.

2. Mix and place nonshrink grout as recommended by the manufacturer.
3. Mix grout as close to the work area as possible and transport quickly to its final position in a manner which will not permit segregation of materials.
4. Cure nonshrink grout with water saturated burlap for at least three days or with an application of Super Rez Seal cure and seal compound applied immediately after grout placement.
5. Do not operate machinery set on grout pads until the grout has cured for at least twenty-four (24) hours.

END OF SECTION

SECTION 03700
MODIFICATIONS AND REPAIR TO EXISTING CONCRETE

PART 1 - GENERAL

1.01 WORK INCLUDED

- A. Furnish all labor, materials, equipment and incidentals required to cut, repair, demolish, excavate or otherwise modify parts of existing structures or appurtenances as shown on the Drawings and as specified herein, including connecting new concrete to existing concrete, as necessary to complete the work under this Contract.

1.02 RELATED WORK DESCRIBED ELSEWHERE

- A. Section 03300: Cast-In-Place and Poured Concrete

1.03 QUALITY ASSURANCE

- A. Do not cut, remove, or otherwise alter existing structures or concrete until authorization is given by the Engineer.
- B. When removing materials or portions of existing structures, and when making openings in existing structures, take all precautions and use all necessary barriers and other protective devices so as not to damage the structures beyond the limits necessary for the new work, nor to damage the structures or contents by falling or flying debris. Unless otherwise permitted, line drilling will be required in cutting existing concrete.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Epoxy Bonding Compound: Two component, moisture insensitive, heavy viscosity, high strength, rigid epoxy system that will bond under dry, damp or wet conditions, and is equal to BurkEpoxy MV or BurkEpoxy Mortar as manufactured by The Burke Company, Sikadur Hi-Mod as manufactured by Sika Chemical Corp., or Eurco 615 Epoxy as manufactured by Euclid Chemical Company.

PART 3 - EXECUTION

3.01 INSTALLATION

- A. Take field measurements in the required structures to determine the amount of concrete to be removed and/or repaired and the amount of patching to be done.

3.02 CONSTRUCTION METHODS

- A. Where new concrete is to be made integral with existing concrete, use the methods shown in the Drawings.

- B. Mix and apply all bonding and patching materials in accordance with the manufacturer's instructions and recommendations.

3.03 MODIFYING OR REPAIRING EXISTING CONCRETE

- A. Remove concrete to the depths shown or required. Roughen contact surface by chipping, sandblasting, scarifying or other approved methods. Thoroughly clean the surface, removing loose particles and dust.
- B. Cut off projecting reinforcement when required to provide at least 2-inch cover. Where shown, bend reinforcement across cut face and cover with new concrete.
- C. Thoroughly wash the roughened concrete surfaces and keep the surfaces saturated for at least six (6) hours before placing new concrete. Remove all free water prior to placing the concrete. An epoxy bonding compound, as specified, may be used in lieu of saturating surface for six (6) hours.
- D. Place cement mortar, where required, to a thickness slightly in excess of the finished surface, and steel-trowel-finish, flush with the adjacent surface.
- E. When the finish surface of new concrete in exposed surfaces is not specified to be coated, match the color of the existing adjoining concrete as closely as possible.
- F. Mix cement mortar in the proportions of one part Portland cement to two parts of sand by volume. Do not use accelerating admixtures in surface treatment. Where shown on the Drawings, use a non-shrink grout for patching and filling.

3.04 CONNECTIONS, NEW CONCRETE TO EXISTING CONCRETE

- A. Make connections to existing concrete as shown on the Drawings.
- B. Where it is necessary to expose existing reinforcement, clean the reinforcing rods or wire mesh by wire brushing and hook new reinforcement into existing reinforcement and lap or weld as directed. Provide at least 3/4-inch clearance around each bar.
- C. Mix and apply the epoxy in strict accordance with the printed instructions of the approved manufacturer.
- D. Preparation of Concrete Surfaces:
 - 1. Surfaces must be clean and sound. Surfaces may be dry, damp, or wet, but free of standing water. Remove dust, laitance, grease, curing compounds, impregnations, waxes, foreign particles, and disintegrated materials by mechanical abrasion methods such as sandblasting. Sandblast steel to appropriate finish.
 - 2. If the concrete surfaces are sound and it is only necessary to remove laitance, grease or dust, the Contractor may, with the prior written approval of the Engineer, forego sandblasting and wash the concrete with a degreasing and etching chemical applied in accordance with the manufacturer's written instructions and as stipulated in these Specifications hereinafter.

3. Degreasing and Etching Chemical: ProSoCo, Inc., Sure-Klean Degreaser & Etch, or equal, with water white color, flash point above 150°F, and consisting of a blend of organic and inorganic acids with a special solvent system incorporating wetting agents for emulsification.
 4. Application of Degrease and Etching Compound: Prewet concrete surfaces with clean water. Brush concentrated cleaner onto concrete surface. Let stand 3 to 4 minutes and reapply, brushing stained areas vigorously. Rinse off with fresh water applied at a minimum volume of five gallons per minute.
- E. Application of Bonding Compound:
1. Cover the area to be overlayed with one (1) coat of the epoxy compound applied with long-nap paint rollers, brushes, brooms or by spray as per manufacturer's instructions.
 2. Place the concrete while the epoxy compound is still tacky. If the bonding compound should harden before the concrete is placed, apply a fresh coat over the hardened coat and proceed.
- F. Application of Grouting: To prepare a grout for anchor bolts or to level base plates, mix the compound as recommended by the manufacturer.
- G. Weather Limitation: Place the epoxy compound only when both the concrete surface temperature and the ambient temperature are as recommended by the manufacturer.

3.05 OPENINGS IN CONCRETE

- A. Where openings are required for pipes, thimbles for gates, gate stems or other installations in existing concrete structures, cut the existing concrete within the limits required, as shown on Drawings or specified, expose the existing reinforcing steel and perform the work in such a manner as to prevent damage to the existing adjacent structures or equipment.
- B. Unless otherwise permitted, line drilling will be required.
- C. Where concrete is cut to provide openings for gate stems, accurately install pipe sleeves and grout in place in an approved manner.
1. Clean the exposed reinforcement by wire brushing, then cut and bend to permit the installation and finally bend around the new pipe or thimble. Provide additional reinforcement as shown on the drawings for typical reinforcing details of openings in walls and slabs, otherwise shown, specified or required.
 2. After installation of pipelines and thimbles, etc., prepare the existing concrete as specified above and fill the void between the outside of the pipe or thimble and the existing concrete with non-shrink non-metallic grout.

END OF SECTION

SECTION 05500
MISCELLANEOUS METALS

PART 1 - GENERAL

1.01 WORK INCLUDED

- A. Scope of Work: This Section covers the use of miscellaneous metals, shapes and sheets, fittings, fasteners, wirework, Contractor fabricated pipe supports, etc., not specified elsewhere in these Specifications.

1.02 QUALITY ASSURANCE

- A. Standards: Unless otherwise specified, all materials, workmanship and practices shall conform to the current editions of the BOCA Building Code, OSHA Standards, AISC Specifications for the Design, Fabrication and Erection of Structural Steel for Buildings, Code of Standard Practice, American Welding Society Code AWS D1.1, Aluminum Construction Manual and the other Standards referenced in this Section.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Steel: Miscellaneous steel plates, shapes, bars and connections shall conform to the requirements of ASTM Designation A36 and shall be galvanized by the hot dip method after fabrication in accordance with the requirements of ASTM Designation A123. Steel shall comply with the provisions of Section 05120.
- B. Steel Pipe: Steel pipe used for miscellaneous members and connections shall conform to the requirements of ASTM Designation A53, Schedule 40, galvanized except as otherwise indicated.
- C. Anchor Bolts and Fasteners:
1. Anchor bolts securing equipment or any assemblies subject to vibrations or movements, shall be stainless steel hook anchors conforming to ANSI 316 and ASTM A193 grade B8M, unless otherwise noted. Hook anchors shall be to the farthestmost layer of reinforcing. The minimum length protruding for the face of concrete shall be 6 inches and the minimum length of hook shall be 6 inches. All dimensions and sizes of anchor bolt shall comply with manufacturer's recommendations.
 2. Anchor bolts and fasteners not securing equipment or assemblies subject to vibration shall be stainless steel wedge or adhesive anchors conforming to ANSI 316 and ASTM A193 grade B8M, unless otherwise noted. Wedge anchors shall be as manufactured by "HILTI" or equal. Adhesive anchors shall consist of a self-contained vinyl ester adhesive cartridge and anchor rods. Adhesive anchor shall be AVA adhesive anchoring system as manufactured by "HILTI", or equal.

- D. Welding Electrodes: Welding electrodes for structural steel shall conform to AWS A5.5, E70XX. Use 4043 filler metal for aluminum. Use type E308 electrode where the base metal is type 304 stainless steel and type E309 where the base metal is type 316 stainless steel or where stainless steel is welded to carbon steel. Field welding of galvanized steel shall not be acceptable.
- E. Castings: Castings for manhole frames, covers and other items shall conform to the requirements of ASTM Designation A48, Class 30 and the details shown on the drawings. Castings shall be true to pattern in form and dimensions and free of blow holes, cracks and other pouring faults and defects. The seating surfaces between frames and covers shall be machined to fit true as not to rock or rattle. Lifting or "pick" holes shall be provided, but shall not penetrate through the cover. No plugging or filling will be allowed. If the area is subject to flooding, the castings shall be of a waterproof design with rubber gasket and stainless steel bolts to fasten lid to frame.
- F. Aluminum Stairs: Aluminum stairs shall be as indicated on the Drawings. Stairs shall be connected to the appropriate structural members. Stair members shall be constructed to support dead loads and additional live working stresses permitted for materials in BOCA Building Code. Size of various members and number of parts indicated on the Drawings are minimum and shall be increased as necessary to meet requirements. Stairs shall comply with OSHA Standards.
- G. Aluminum Stair Treads: Aluminum stair treads shall be of the same pattern and alloys as the aluminum grating and shall have a 1 1/3 inch wide abrasive nosing. Aluminum bars shall have a standard mill finish.
- H. Miscellaneous Aluminum: Miscellaneous aluminum shapes, bars and plates shall be Alloy 6061-T6, except when otherwise specified.

2.02 FABRICATION

- A. Insofar as possible, fabricated material shall be fitted and shop assembled ready for erection. Welding and equipment shall conform to American Welding Society's Code for Welding in Building Construction, latest edition. All work shall be square, plumb and true, accurately fitted with tight joints and intersections. Exposed work shall be finished smooth with welds ground smooth.
- B. Painting and Protective Coating:
 - 1. All ferrous metal, except stainless steel and galvanized surfaces, shall be properly cleaned and given one shop coat of the fabricator's standard primer. Anchors that are built into masonry shall be coated with asphalt paint unless specified to be galvanized. Metal work to be encased in structural concrete shall be left unpainted unless specified or noted otherwise.
 - 2. Hot-dip galvanizing or zinc coatings applied on products fabricated from rolled, pressed or forged steel shapes, plates, bars and strips shall comply with ASTM Designation A123. Hot-dip galvanizing or zinc coatings on assembled steel products shall comply with ASTM Designation A386. The

weight of coatings shall be designated in Table 1 for the class and thickness of material to be coated. Galvanized surfaces for which a shop coat of paint is specified shall be chemically treated to provide a bond for the paint. Except for bolts and nuts, all galvanizing shall be done after fabrication.

PART 3 - EXECUTION

3.01 ERECTION

- A. Where the contact of dissimilar metals may cause electrolysis and where aluminum will contact concrete, mortar or plaster, the contact surface of the metals shall be coated in accordance with Section 09900.
- B. All work shall be adequately anchored in place a proper elevations, planes and locations.

END OF SECTION

SECTION 09900 PAINTING

PART 1 – GENERAL

1.01 Scope

- A. This specification defines the methods of surface preparation, coating systems, and methods of application for painting as outlined herein.
- B. The Contractor shall furnish all supervision, labor, tools, materials, equipment, scaffolding or other structures, and supervision required for the transportation, unloading, storage, and application of the paint and associated products covered by this specification.
- C. The work includes painting and finishing of interior and exterior exposed items above and below grade surfaces, such as structural steel, miscellaneous metals, ceilings, walls, floors, doors, frames, pipe, handrails, posts, fittings, valves, pumps, 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.
- D. The following items will not be painted:
 - 1. Any code requiring labels, such as Underwriters' 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, walkways, windows, louvers, and grating unless otherwise specified herein.
 - 4. Signs and nameplates.
 - 5. Finish hardware.
 - 6. Stainless steel angles, tubes, pipe, etc.
 - 7. Products with polished chrome, aluminum, nickel, or stainless steel finish.
 - 8. Plastic switch plates and receptacle plates.
 - 9. Flexible couplings, lubricated bearing surfaces, insulation and metal and plastic pipe interior.
 - 10. Sprinkler heads.
- E. All work shall be done in strict accordance with this specification, the design drawings and the painting package, including manufacturer's printed instructions.
- F. 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."

- G. Wherever the word “Engineer” occurs in this specification, it shall apply to the authorized representative of Quentin Hampton Associates, Inc. Where the word “Contractor” occurs in this specification, it shall apply to the contractor performing any part of or all of this work.
- H. Surfaces to be painted: (Refer to 17.0 Coating Schedule for description of surfaces to be painted and their specified coating systems and colors).

1.02 Definitions

- A. Field Painting is the painting of new or rebuilt items at the job site. Field painting shall be the responsibility of the Contractor.
- B. Shop Painting is the painting of new or rebuilt items in the shop prior to delivery to the jobsite.

1.03 Abbreviations

- A. The abbreviations and definitions listed below, when used in this specification, shall have the following meanings:
 1. SSPC – Society for Protective Coatings
 2. Exterior – Outside, exposed to weather
 3. Interior Dry – Inside, not subject to immersion service
 4. Interior Wet – Inside, subject to immersion service
 5. ASTM – American Society of Testing Materials
 6. NACE – National Association of Corrosion Engineers
 7. NSF – National Sanitation Foundation
 8. AWWA – American Water Works Associates

PART II - 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 Contractors, the Paint Manufacturer whose products are to be used, and the Engineer. 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 Engineer when instructions are lacking, conflicts occur in the specification, or the procedure seems improper or inappropriate for any reason.
- C. Copies of all manufacturer’s instructions and recommendations shall be furnished to the Engineer 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 Engineer 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 Engineer.

PART III - 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 Engineer. 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 Engineer.
- C. When any appreciable time has elapsed between coatings, previously coated areas shall be carefully inspected by the Engineer, 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-
- E. 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.

PART IV - 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 practical 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 Engineer 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 Engineer and Contractor. The gauges may be used by the Contractor and returned each day to the Engineer. Engineer will return gauges to Contractor at completion of job.

PART V - MATERIALS

- A. All materials specified herein are manufactured by the TNEMEC Company, Inc., Xypex Chemical Corporation, or Chemprobe Technologies, Inc. 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 Engineer. 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. Unless otherwise stated, the latest revision of identified specifications shall be used.
 - 1. Abrasion – Fed. Test Method Std. No. 141, Method 6192, CS-17 Wheel, 1,000 grams load

2. Adhesion – Elcometer Adhesion Tester
 3. Exterior Exposure – Exposed at 45 degrees facing the ocean (South Florida Marine Exposure)
 4. Hardness – ASTM D3363
 5. Humidity – ASTM D2247
 6. Salt Spray (Fog) – ASTM B117
- C. Bidders desiring to use coatings other than those specified shall submit their proposal in writing to the Engineer at least ten (10) days prior to the bid opening. Substitutions which decrease the film thickness, the number of coats applied, change the generic type of coating, or fail to meet the performance criteria of the specified materials will not be approved. Prime and finish coats of all surfaces shall be furnished by the same manufacturer.
- D. 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.
- E. Colors, where not specified, shall be as selected by the Owner or their Representative.
- F. All coatings in contact with potable water need to be NSF Certified in accordance with ANSI/NSF Standard 61.

PART VI - WORKMANSHIP AND MATERIALS

A. Surface Preparation

1. The surface shall be cleaned as specified for the paint system being used. All cleaning shall be as outlined in the Steel Structures Painting Council's Surface Preparation Specification, 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.

B. Standards for Surface Preparation

1. SSPC-SP1 Chemical and/or Solvent Cleaning
 - a. 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.
2. SSPC-SP2 Hand Tool Cleaning
 - a. Removal of loose rust, loose mill scale, and loose paint to a clean sound substrate by hand chipping, scraping, sanding, and wire brushing.
3. SSPC-SP3 Power Tool Cleaning
 - a. 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.

4. SSPC-SP4 Flame Cleaning
 - a. Dehydrating and removal of rust, loose mill scale, and some light mill scale by use of flame, followed by wire brushing.
5. SSPC-SP5 (NACE-1) White Metal Blast Cleaning
 - a. Complete removal of all mill scale, rust, rust scale, previous coating, etc., leaving the surface a uniform gray-white color.
6. SSPC-SP6 (NACE-3) Commercial Grade Blast Cleaning
 - a. Complete removal of all dirt, rust scale, mill scale, foreign matter, and previous coatings, 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.
7. SSPC-SP7 (NACE-4) Brush-Off Blast Cleaning
 - a. 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, bug holes, air pockets, and other subsurface irregularities, but so as not to expose underlying aggregate.
8. SSPC-SP8 Pickling
 - a. 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).
9. SSPC-SP10 (NACE-2) Near-White Blast Cleaning
 - a. 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.
10. SSPC-SP11-87 Power Tool Cleaning to Bare Metal
 - a. 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-SP6, NACE-3) by means of power tools that will provide the proper degree of cleaning and surface profile.

11. SSPC-SP13 (NACE-6) Surface Preparation of Concrete

- a. Surface preparation of concrete by mechanical, chemical, or thermal methods prior to the application of bonded protective coating or lining systems.

C. Visual standards

1. SSPC-VIS-1 (Swedish SIS OS 5900), "Pictorial Surface Preparation Standards for Painting Steel Surfaces," and the National Association of Corrosion Engineers, "Blasting Cleaning Visual Standards" TM-01-70 and TM-01-75 shall be considered as standards for proper surface preparation.
2. Oil, grease, soil, dust, etc., deposited on the surface preparation that has been completed shall be removed prior to painting according to SSPC-SP1 Solvent Cleaning.
3. Weld flux, weld spatter and excessive rust scale shall be removed by Power Tool Cleaning as per SSPC-SP11-87T.
4. All weld seams, sharp protrusions, and edges shall be ground smooth prior to surface preparation or application of any coatings.
5. All areas requiring field welding shall be masked off prior to shop coating, unless waived by the Engineer.
6. 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 SSPC-SP11-87T.
7. "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 Engineer's attention; otherwise, Contractor assumes full responsibility.

PART VII – PRE-TREATMENTS

- A. When specified, the surface shall be pretreated in accordance with the specified pretreatment prior to application of the prime coat of paint.

PART VIII - 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 Engineer and required for use. All painting materials shall be stored in a clean, dry, well-ventilated place, protected from sparks, flame, and 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 areas designated by the Engineer and removed from the job site on a schedule determined by the Engineer. Engineer may request a notarized statement from contractor detailing all materials used on the project.

PART IX - 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.

PART X - 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° 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° above dew point; temperature must be maintained during curing.

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	103	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
30%	-6	4	13	20	28	36	44	52	61	69	77
-----SURFACE TEMPERATURE AT WHICH CONDENSATION OCCURS-----											

C. Dew Point

1. Temperature at which moisture will condense on surface. No coatings should be applied unless surface temperature is a minimum of 5° above this point. Temperature must be maintained during curing.

D. Example

1. If air temperature is 70° F and relative humidity is 65%, the dew point is 57° F. No coating should be applied unless surface temperature is 62° F minimum.

E. No coatings shall be applied unless the relative humidity is below 85%.

F. 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.

G. 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 Engineer.

H. 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.

I. 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 observations shall be cleaned immediately after paint application.

J. Painting shall not be performed on insulated pipe within three (3) feet of insulation operations or on insulation where 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 Engineer.

K. 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.

L. 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.

- M. 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.
- N. 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 Engineer).
- O. All edges and weld seams in immersion service shall receive a "stripe coat" (applied by brush) of the 1st coat prior to application of the full 1st coat.
- P. 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.

PART XI - 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 Engineer, shall be corrected at the expense of the Contractor.
- C. The Contractor shall provide the names of at least 6 other projects of similar size and scope that they have successfully completed under their current company name.
- D. Application of Paint
 - 1. BY BRUSH AND/OR ROLLERS
 - a. Top quality, properly styled brushes and rollers shall be used. Rollers with a baked phenohl core shall be utilized.
 - b. 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.
 - c. Surfaces not accessible to brushes or rollers may be painted by spray, by dauber or sheepskins, and paint mitt.
 - d. It may require 2 coats to achieve the specified dry film thickness if application is by brush and roller.
- E. 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 crosshatch 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 backrolled.

PART XII - PROTECTION AND CLEAN-UP

- 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 Engineer 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 Engineer, 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, splattered, 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 jobsite in accordance with Local, State, and Federal requirements as outlined by the Environmental Protection Agency.
- G. A notarized statement shall be presented to the Engineer 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.

PART XIII - 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 Engineer for future touch-up. Two gallons may be required for (2) component materials.

PART XIV - ON-SITE INSPECTION

- A. During the course of this project the Engineer will reserve the option of incorporating the services of a qualified inspection service. The inspection service will be responsible for assuring the proper execution of this specification by the successful contractor.

PART XV - COATING SYSTEM SCHEDULE

- A. STEEL – STRUCTURAL, TANKS, PIPES, AND EQUIPMENT

1. EXTERIOR EXPOSURE (NON-IMMERSION)

A.1 System No. 73-1 Epoxy/High Build Urethane

Surface Preparation: SSPC-SP6 Commercial Blast Cleaning

	<u>DFT-Mils</u>
<u>1st Coat:</u> 66-1255 Epoxoline Primer	3.0 – 4.0
<u>2nd Coat:</u> 66-Color Hi-Build Epoxoline	2.0 – 3.0
<u>3rd Coat:</u> 73-Endura-Shield	<u>2.0 – 3.0</u>
	7.0-10.0
Minimum 8.0 Mils	

NOTE: This system is highly resistant to abrasion, wet conditions, corrosive fumes, and chemical contact. Provides 2-3 times the color and gloss retention of conventional paints. Second coat to be same color or close to finish color. Specify Series 1074 Endura-Shield for a gloss finish. Specify Series 161 in lieu of the 66 for faster recoats or lower temperature curing.

A.2 System No. 73-2 High Build Urethane For Marginally Cleaned Surfaces or Topcoating Existing Systems.

Surface Preparation: SSPC-SP6 Commercial Blast Cleaning or SSPC-SP3 Power Tool Cleaning Feather all edges.

	<u>DFT-Mils</u>
<u>Shop Coat:</u> Manufacturer Standard Primer (or existing coating)	1.5 – 2.0
<u>Tie Coat:</u> 135 Chembuild	3.0 – 5.0
<u>Topcoat:</u> 73-Color Endura-Shield	<u>2.0 – 3.0</u>
	6.5-10.0
Minimum 7.5 Mils	

NOTE: This system can be used over factory finish paint or over non-sandblasted steel and offer the high performance of a urethane coating. Specify Series 1074 Endura-Shield for gloss finish. A test patch is always recommended to insure proper application.

A.3 System No. 82-1 Silicone Alkyd Enamel – GlossSurface Preparation: SSPC-SP6 Commercial Blast Cleaning

	<u>DFT-Mils</u>
<u>1st Coat:</u> 37H-77 Chem-Prime H.S.	2.0 – 3.5
<u>2nd Coat:</u> 23-Color Enduratone	1.5 – 2.5
<u>3rd Coat:</u> 82-Color Silicone Alkyd Enamel	<u>1.0 – 2.5</u>
	4.5 – 8.5
Minimum 5.5 Mils	

A.4 System 90-97 Zinc/Epoxy/UrethaneSurface Preparation: SSPC-SP6 Commercial Blast Cleaning

	<u>DFT-Mils</u>
<u>Primer:</u> 90-97 Tneme-Zinc	2.5 – 3.5
<u>2nd Coat:</u> 66-Color Hi-Build Epoxoline	2.0 – 3.0
<u>3rd Coat:</u> 73 Endura-Shield III	<u>2.0 – 3.0</u>
	6.5 – 9.5
Minimum 8.0 Mils	

NOTE: This system offers the added corrosion protection of a zinc rich primer. 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. You can substitute Series 91-H₂O Hydrozinc for the 90-97. You can substitute Series 1074 for the Series 73 if a gloss finish is desired.

A.5 System No. 30-1 DTM Acrylic Overcoat System

Surface Preparation: Pressure Clean @ 3500 PSI
Spot SP2, SP3, SP6, or SP7
Feather all edges.

	<u>DFT-Mils</u>
<u>Spot Primer:</u> 135 Chembuild	2.0 – 4.0
<u>2nd Coat:</u> 30 Spra-Saf EN	2.0 – 4.0
<u>3rd Coat:</u> 30 Spra-Saf EN	<u>2.0 – 4.0</u>
Total	4.0 – 8.0
Total	6.0 – 12.0 (Spots)

NOTE: This is an excellent coating system to overcoat existing unknown coating systems with limited surface preparation, using a non-stressful coating with excellent color and gloss retention. This coating should be spray applied and has excellent dry fall properties. The brush and roller version of Series 30 with a SG finish is the Series 29 Tufcryl. A test patch is always recommended to assure proper adhesion.

B. INTERIOR EXPOSURE (NON-IMMERSION)

B.1 System No. N69-1 High Solids Epoxy

Surface Preparation: SSPC-SP6 Commercial Blast Cleaning

	<u>DFT Mils</u>
<u>1st Coat:</u> N69-Color Hi-Build Epoxoline II	5.0 – 7.0
<u>2nd Coat:</u> N69-Color Hi-Build Epoxoline II	5.0 – 7.0
	10.0 – 14.0
Minimum	12.0 Mils

NOTE: This coating will provide maximum protection. It offers chemical and corrosion resistance for long-term protection against salt spray, moisture, corrosive fumes, and chemical attack. Series N69 is a polyamidoamine cured epoxy. Primer coat must be touched-up before 2nd coat is applied.

B.2 System No. 66-2 Polyamide Epoxy

Surface Preparation: SSPC-SP6 Commercial Blast Cleaning

	<u>DFT-Mils</u>
<u>1st Coat:</u> 66-Color Hi-Build Epoxoline	3.0 – 5.0
<u>2nd Coat:</u> 66-Color Hi-Build Epoxoline	4.0 – 6.0
	7.0 – 11.0
Minimum	9.0 Mils

NOTE: This system will provide chemical and corrosion resistance against abrasion, moisture, corrosion fumes, chemical contact, and immersion in non-potable water. Primer coat must be touched-up before 2nd coat is applied. Substitute Series 161 for low temperature cure or quick recoats.

B.3 System No. 66-6 High Build Epoxy (Over OEM Finishes)

Surface Preparation: Spot SSPC-SP6 Commercial Blast Cleaning or
SSPC-SP11 Power Tool Cleaning To Bare Metal

	<u>DFT-Mils</u>
<u>1st Coat:</u> Manufacturer's Standard (or existing coating)	1.0 – 2.0
<u>2nd Coat:</u> 135 Chembuild	3.0 – 5.0
<u>3rd Coat:</u> 66-Color Hi-Build Epoxoline	3.0 – 5.0
	6.0 – 10.0
Minimum	7.0 Mils

NOTE: This system is to be used over standard manufacturer's primer to offer a high performance epoxy finish. Excellent for areas of rust not able to be completely cleaned.

B.4 System No. 23-1 Alkyd Enamel – Semi-GlossSurface Preparation: SSPC-SP6 Commercial Blast Cleaning

	<u>DFT-Mils</u>
<u>1st Coat:</u> 37H-77 Chem-Prime H.S.	2.0 – 3.5
<u>2nd Coat:</u> 23-Color Enduratone	1.5 – 2.5
<u>3rd Coat:</u> 23-Color Enduratone	1.5 – 2.5
	5.0 – 8.5
Minimum	6.0 Mils

C. IMMERSION**C.1 System No. N69-2 High Solids High Build Epoxy (Non-Potable Water)**Surface Preparation: SSPC-SP10 Near White Blast Cleaning

	<u>DFT-Mils</u>
<u>Stripe Coat:</u> N69-Color Hi-Build Epoxoline II by brush and roller to all weld Seams and plate edges	3.0 – 5.0
<u>1st Coat:</u> N69-Color Hi-Build Epoxoline II	5.0 – 7.0
<u>2nd Coat:</u> N69-Color Hi-Build Epoxoline II	5.0 – 7.0
	10.0 -14.0 (Excluding stripe coat)
Minimum	12.0 Mils

NOTE: This system provides maximum protection in immersion service. Scarify the surface before topcoating if the Series N69 has been exterior-exposed for 60 days or longer. If primer coat is damaged, it must be touched-up before 2nd coat is applied.

C.2 System No. 66-2 High Build Epoxy (Non-Potable Water)Surface Preparation: SSPC-SP10 Near White Blast Cleaning

	<u>DFT-Mils</u>
<u>Stripe Coat:</u> 66-Color to all weld seams and plate edges	2.0 – 4.0
<u>1st Coat:</u> 66-Color Hi-Build Epoxoline	3.0 – 5.0
<u>2nd Coat:</u> 66-Color Hi-Build Epoxoline	3.0 – 5.0
<u>3rd Coat:</u> 66-Color Hi-Build Epoxoline	3.0 – 5.0
	9.0 –15.0 (Excluding stripe coat)
Minimum	11.0 Mils

NOTE: This system will provide chemical and corrosion resistance for protection against abrasion, moisture, corrosive fumes, chemical contact, and immersion. Primer coat must be touched-up before 2nd coat is applied. Scarify the surface before topcoating if the Series 66 has been exterior-exposed for 60 days or longer. Substitute Series 161 for low temperature cure or quick recoats.

C.3 System No. 20-1 Epoxy-Polyamide (Potable Water)Surface Preparation: SSPC-SP10 Near White Blast Cleaning

		<u>DFT-Mils</u>
<u>Stripe Coat:</u>	20-1255 Pota-Pox (Beige) to all weld seams and plate edges	2.0 – 4.0
<u>1st Coat:</u>	20-15BL Pota-Pox (Tank White)	3.0 – 5.0
<u>2nd Coat:</u>	20-1255 Pota-Pox (Beige)	4.0 – 6.0
<u>3rd Coat:</u>	20-15BL Pota-Pox (Tank White)	<u>4.0 – 6.0</u>
		11.0–17.0 (Excluding stripe coat)
	Minimum	12.0 Mils

Caulk: Seal all open roof seams with
a flexible NSF Certified
caulking such as Sika Flex 1A

NOTE: This system meets American Water Works Association AWWA D 102 Inside Paint System Number 1. Series 20 meets the new requirements of approval for potable water use as established by the National Sanitation Foundation Standard 61. Substitute Series FC20 for low temperature cure or quick recoats.

C.4 System No. N140 High Solids Epoxy (Potable Water)Surface Preparation: SSPC-SP10 Near White Blast Cleaning

		<u>DFT-Mils</u>
<u>Stripe Coat:</u>	N140-15BL Pota-Pox Plus (by brush and roller to all weld seams and plate edges)	3.0 – 5.0
<u>1st Coat:</u>	N140-1255 Pota-Pox Plus (Beige)	6.0 – 8.0
<u>2nd Coat:</u>	N140-15BL Pota-Pox Plus (Tank White)	<u>6.0 – 8.0</u>
		12.0 -16.0 (Excluding stripe coat)
	Minimum	14.0 Mils

NOTE: Series N140 meets the new requirements of approval for potable water use as established by the National Sanitation Foundation Standard 61.

C.5 System No. 46-30 Coal Tar-Epoxy (Non-Potable Water)Surface Preparation: SSPC-SP10 Near White Blast Cleaning*

		<u>DFT-Mils</u>
<u>One Coat:</u>	46H-413 Hi-Build Tneme-Tar	16.0 – 20.0

NOTE: May be applied in a two-coat application. Review critical recoat time if utilized.

*SSPC-SP6 Commercial Blast Cleaning may be used for non-immersion service.

C.6 System No. 91-H₂O Zinc/Epoxy (Potable Water)

Surface Preparation: SSPC-SP10 Near White Metal Blast

	<u>DFT-Mils</u>
<u>Stripe Coat:</u> 91-H ₂ O Hydrozinc 2000	2.5 – 3.5
(by brush & roller to all weld seams and plate edges.)	
<u>1st Coat:</u> 91- H ₂ O Hydrozinc 2000	2.5 – 3.5
<u>2nd Coat:</u> 20-1255 Pota-Pox (Beige)	4.0 – 6.0
<u>3rd Coat:</u> 20-15BL Pota-Pox (Tank White)	4.0 – 6.0
	10.5 -15.5
	Minimum 12.0 Mils

Caulk: Seal all open roof seems with a flexible NSF Certified caulking such as Sika-Flex 1A.

NOTE: Can substitute Series N140, or FC20 for Series 20 if preferred. Meets AWWA D102-97 Inside Coating System No. 3.

15.2 OVERHEAD METAL DECKING, JOIST

D. INTERIOR EXPOSURE

D.1 System No. 115-1 Uni-Bond DF

Surface Preparation: Surfaces must be dry, clean, and free of oil, grease, and other contaminants. Allow concrete to cure 28 days. Galvanized metal decking must be scarified.

	<u>DFT-Mils</u>
<u>Coating:</u> 115-Color Uni-Bond DF	2.0 – 4.0

NOTE: This system should be used on ceiling areas where a one-coat system is desired. Can be applied over steel, galvanized, and aluminum decking, joist, beams, conduits, and concrete.

E. EXTERIOR EXPOSURE

E.1 System No. 135-5 Epoxy/DTM Acrylic

Surface Preparation: Pressure clean to remove all dirt, oil, grease, chemicals, and foreign contaminants. Remove loose paint and all rust by hand and power tool cleaning (SSPC-SP 2 & 3). Feather all edges.

	<u>Dry Film-Mils</u>
<u>Spot Primer:</u> 135 Chembuild	3.0 – 5.0
<u>1st Coat:</u> 30 Spra-Saf EN	2.0 – 4.0
<u>2nd Coat:</u> 30 Spra-Saf EN	2.0 – 4.0
TOTAL	4.0 – 8.0 (For (2) Coats)

NOTE: This system can be applied over a wide variety of coatings and factory finishes. It can also be applied direct to galvanized aluminum decking, joists, conduits, and tight rust.

15.3 MILL COATED STEEL PIPE

F. EXTERIOR/INTERIOR EXPOSURE (NON-IMMERSION)

F.1 System No. 66-3 Epoxy-Polyamide

Surface Preparation: Surface shall be clean and dry. Scarify by Brush Blasting if surface is hard and glossy.

	<u>DFT-Mils</u>
<u>1st Coat:</u> 66-Color Hi-Build Epoxoline	3.0 – 4.0
<u>2nd Coat:</u> 66-Color Hi-Build Epoxoline	4.0 – 6.0
<u>*3rd Coat:</u> 73 Endura-Shield	(2.0 – 3.0)
	(9.0 – 13.0)
Minimums	11.0 Mils for 3 coats
	9.0 Mils for 2 coats

*Optional topcoat for exterior exposure

NOTE: This system can be applied directly to mill coated steel pipe without sandblasting for use in non-immersion. There may be some bleed through with the 1st coat. Do not apply over glossy varnish type mill coatings without thorough scarification.

15.4 GALVANIZED STEEL – PIPE AND MISCELLANEOUS FABRICATIONS

G. EXTERIOR/ (NON-IMMERSION)

G.1 System No. 73-2 Epoxy/High Build Urethane

Surface Preparation: SSPC-SP1 Solvent Cleaning and Scarify by Brush Off Blasting, Hand Sanding, or Chemical Treatment

	<u>DFT-Mils</u>
<u>1st Coat:</u> 66-Color Hi-Build Epoxoline	2.0 – 4.0
<u>2nd Coat:</u> 73-Color Endura-Shield	2.0 – 4.0
	4.0 – 8.0
Minimum	5.0 Mils

NOTE: Series 66 has excellent adhesion to galvanized steel. This system is highly resistant to abrasion, wet conditions, corrosive fumes, and chemical contact. Provides 2-3 times the color and gloss retention of conventional paints. First coat to be same color as or close to the finish color. Specify Series 1074 Endura-Shield for gloss finish.

H. INTERIOR EXPOSURE (NON IMMERSION)**H.1 System No. 66-6 Polyamide Epoxy**

Surface Preparation: SSPC-SP1 Solvent Cleaning and Scarify by Brush Off Blasting, Hand Sanding, or Chemical Treatment

	<u>DFT-Mils</u>
<u>1st Coat:</u> 66-Color Hi-Build Epoxoline	2.0 – 4.0
<u>2nd Coat:</u> 66-Color Hi-Build Epoxoline	2.0 – 4.0
	4.0 – 8.0
Minimum 5.0 Mils	

I. IMMERSION (POTABLE WATER)**I.1 System No. 20-1 Epoxy-Polyamide (Potable Water)**

Surface Preparation: Solvent Clean Per SSPC-SP1 & Abrasive Blast per SSPC-SP7

	<u>DFT-Mils</u>
<u>1st Coat:</u> 20-1255 Pota-Pox Primer	4.0 – 6.0
<u>2nd Coat:</u> 20-15BL Pota-Pox Finish	4.0 – 6.0
	8.0 – 12.0
Minimum 10.0 Mils	

NOTE: Series 20 meets the new requirements of approval for potable water use as established by the National Sanitation Foundation Standard 61. Substitute Series FC20 for low temperature cure or quick recoat.

15.5 CHAIN-LINK FENCES**J. GALVANIZED STEEL & NON-FERROUS METAL****J.1 System No. 6-2 Oil Based Enamel**

Surface Preparation: Surface shall be clean and dry

	<u>DFT-Mils</u>
<u>1st Coat:</u> 80 Galv-Gard	2.5 – 4.0
<u>2nd Coat:</u> 80 Galv-Gard	2.5 – 4.0
	5.0 – 8.0
Minimum 5.0 Mils	

15.6 CONCRETE**K. EXTERIOR – ABOVE GRADE****K.1 System No. 180-1 High Build Acrylic Emulsion – Smooth**

Surface Preparation: Surface shall be clean and dry.

	<u>DFT-Mils</u>
<u>1st Coat:</u> 180-Color W.B. Tneme-Crete	4.0 – 6.0*
<u>2nd Coat:</u> 180-Color W.B. Tneme-Crete	4.0 – 6.0*
	8.0 – 12.0 Mils
Minimum 10.0 Mils	

*This coating should be spray applied to achieve the recommended DFT. Application by roller would possibly require additional coats to achieve the recommended DFT for the system.

NOTE: Series 180 is a high build decorative acrylic coating in a smooth finish. Substitute Series 181 if a sand texture finish is desired.

K.2 **System No. 6-1 Acrylic Emulsion**

Surface Preparation: Surface must be clean and dry.

	<u>DFT-Mils</u>
<u>1st Coat:</u> 6-Color Tneme-Cryl	2.0 – 3.0
<u>2nd Coat:</u> 6-Color Tneme-Cryl	2.0 – 3.0
	4.0 – 6.0
Minimum	5.0 Mils

NOTE: If semi-gloss finish is desired, use Series 29 Tuf-Cryl as the 2nd coat @ 1.5 – 2.0 mils DFT.

K.3 **System No. 156-1 Modified Acrylic Elastomer**

Surface Preparation: Surface must be clean and dry.

	<u>DFT-Mils</u>
<u>1st Coat:</u> 156-Color Enviro-Crete	4.0 – 8.0
<u>2nd Coat:</u> 156-Color Enviro-Crete	4.0 – 8.0
	8.0 – 16.0
Minimum	10.0 Mils

NOTE: If texture is needed, use 157 Enviro-Crete TX (medium texture). For application over previously applied coatings, use TNAMEC Series 151 Elasto-Grip at 1.0 – 2.5 mils DFT prior to the application of Series 156 Enviro-Crete.

K.4 **System No. 100 Concrete Stain**

Surface Preparation: The surface must be clean, dry, sound, and free of cracks, and paint.

	<u>SF/Gal/Ct</u>
<u>Sealer:</u> Chemprobe Prime A Pell H ₂ O	65-200
<u>Concrete Stain:</u> Two coats of Chemprobe Conformal Stain	75-200

L. **EXTERIOR – BELOW GRADE**

L.1 **System No. 46-61 Coal Tar Pitch Solution**

Surface Preparation: Surface must be clean and dry. Allow new concrete to cure at least 28 days.

	<u>DFT-Mils</u>
<u>1st Coat:</u> 46-465 H.B. Tnemecol	8.0 – 12.0
<u>2nd Coat:</u> 46-465 H.B. Tnemecol	8.0 – 12.0

16.0 - 24.0
Minimum 16.0 Mils

L.2 System No. 46-31 Coal Tar Epoxy

Surface Preparation: Surface shall be clean and dry. Allow New concrete to cure at least 28 days.

	<u>DFT-Mils</u>
<u>One Coat:</u> 46H-413 Hi-Build Tneme-Tar	14.0-20.0

L.3 System No. 100-1 Crystalline Waterproofing

Surface Preparation: Surface to be clean and opened up by Brush Blasting, Acid Etching, or Water Blasting w/Turbo Tips. Surface must be pre-wetted prior to application.

1st Coat: XYPEX Concentrate @ (1.5 #/SY)
2nd Coat: XYPEX Modified @ (1.5 #/SY)

NOTE: This system can be applied to concrete that is still wet or hasn't developed final cure. It can be used where wet surface conditions exist or where there is the potential for water intrusion due to hydrostatic pressure. Application shall be per XYPEX specification manual.

M. INTERIOR EXPOSURE (NON-IMMERSION)

M.1 System No. 6-1 Acrylic Emulsion (Interior/Exterior)

Surface Preparation: Surface shall be clean and dry. Allow concrete to cure for 28 days.

	<u>DFT-Mils</u>
<u>1st Coat:</u> 6-Color Tneme-Cryl	2.0 – 3.0
<u>2nd Coat:</u> 6-Color Tneme-Cryl	<u>2.0 – 3.0</u> 4.0 – 6.0
	Minimum 5.0 Mils

NOTE: This system will provide a decorative coating with good exterior durability, color retention, and a high vapor transmission rate. For Semi-Gloss finish, substitute Series 29 Tuf-Cryl for the 2nd coat at 1.5 – 2.0 mils DFT. Apply both the Series 6 & 29 in the same color.

M.2 System No. 66-4 Epoxy-Polyamide (Interior)

Surface Preparation: Surfaces shall be clean and dry. Allow concrete to cure for 28 days.

	<u>DFT-Mils</u>
<u>1st Coat:</u> 66-Color Hi-Build Epoxoline	3.0 – 5.0
<u>2nd Coat:</u> 66-Color Hi-Build Epoxoline	<u>4.0 – 6.0</u> 7.0–11.0
	Minimum 9.0 Mils

M.3 System No. 84-1 High Solids Glazed Epoxy (Interior)

Surface Preparation: Surfaces shall be clean and dry. Allow concrete to cure for 28 days.

	<u>DFT-Mils</u>
<u>1st Coat:</u> 84-Color Ceramlon II	6.0 – 10.0
<u>2nd Coat:</u> 84-Color Ceramlon II	6.0 – 10.0
	12.0 - 20.0
Minimum	14.0 Mils

M.4 System No. 113-2 Acrylic Epoxy Semi-Gloss

Surface Preparation: Surface must be clean and dry.

	<u>DFT-Mils</u>
<u>1st Coat:</u> 113-Color Tneme-Tufcoat	4.0 – 6.0
<u>2nd Coat:</u> 113-Color Tneme-Tufcoat	4.0 – 6.0
	8.0 – 12.0
Minimum	8.0 Mils

NOTE: Substitute Series 114 Tneme-Tufcoat for gloss finish. Multiple coats may be required if application is by roller.

N. IMMERSION – POTABLE & NON-POTABLE WATER**N.1 System No. 66-4 Epoxy-Polyamide (Non-Potable Water)**

Surface Preparation: Allow concrete to cure for 28 days. Abrasive blast clean per SSPC-SP13.

	<u>DFT-Mils</u>
<u>1st Coat:</u> 66-Color Hi-Build Epoxoline	4.0 – 6.0
<u>2nd Coat:</u> 66-Color Hi-Build Epoxoline	4.0 – 6.0
	8.0 – 12.0
Minimum	10.0 Mils

NOTE: Surface irregularities and bug holes should be filled to a smooth uniform appearance as required with TNE MEC Series 63-1500 Filler & Surfacer. First coat should be spray applied and backrolled.

N.2 System No. 104-5 High Solids Epoxy (Non-Potable Water)

Surface Preparation: Allow concrete to cure for 28 days. Abrasive blast clean per SSPC-SP13.

	<u>DFT-Mils</u>
<u>1st Coat:</u> 104-1255 H.S. Epoxy Primer	6.0 – 10.0
<u>2nd Coat:</u> 104-Color H.S. Epoxy	6.0 – 10.0
	12.0 - 20.0
Minimum	14.0 Mils

NOTE: Surface irregularities and bug holes should be filled to a smooth uniform appearance as required with TNE MEC Series 63-1500 Filler & Surfacer. First coat should be spray applied and backrolled.

N.3 System No. 46-31 Coal Tar-Epoxy (Non-Potable Water)

Surface Preparation: Allow concrete to cure for 28 days. Abrasive blast clean per SSPC-SP13.

	<u>DFT-Mils</u>
<u>One Coat:</u> 46H-413 Hi-Build Tneme-Tar	14.0 – 20.0

NOTE: May be applied in a two-coat application. Review critical recoat time if utilized. Surface irregularities and bug holes should be filled to a smooth uniform appearance as required with TNEMEC Series 63-1500 Filler & Surfacer.

N.4 System No. 20-2 Epoxy-Polyamide (Potable Water)

Surface Preparation: Allow concrete to cure for 28 days. Abrasive blast clean per SSPC-SP13.

	<u>DFT-Mils</u>
<u>1st Coat:</u> 20-1255 Pota-Pox	4.0 – 6.0
<u>2nd Coat:</u> 20-15BL Pota-Pox Finish	4.0 – 6.0
	8.0 – 12.0
	Minimum 10.0 Mils

NOTE: This system meets American Water Works Association AWWA D 102 Inside System No. 1. Series 20 meets the new requirements of approval for potable water use as established by the National Sanitation Foundation Standard Surface irregularities and bug holes should be filled to a smooth uniform appearance as required with TNEMEC Series 63-1500 Filler & Surfacer. (NSF Standard 61 approved). Substitute Series FC20 for low temperature cure or quick recoats.

N.5 System No. N140-2 Epoxy-Polyamidoamine (Potable Water)

Surface Preparation: Allow concrete to cure for 28 days. Abrasive blast clean per SSPC-SP13.

	<u>DFT-Mils</u>
<u>1st Coat:</u> N140-1255 Pota-Pox Plus	6.0 – 8.0
<u>2nd Coat:</u> N140-15BL Pota-Pox Plus	6.0 – 8.0
	12.0-16.0
	Minimum 14.0 Mils

NOTE: Series N140 meets the new requirements of approval for potable water use as established by the National Sanitation Foundation Standard 61. Surface irregularities and bug holes should be filled to a smooth uniform appearance as required with TNEMEC Series 63-1500 Filler & Surfacer. (NSF Standard 61 approved). First coat should be sprayed and backrolled.

N.6 System No. 264-1 Elastomeric Polyurethane

Surface Preparation: Surfaces shall be clean and dry. Allow new concrete to cure for 28 days. Abrasive blast clean per SSPC-SP13 (Surface Preparation of Concrete)

DFT-Mils

Primer:	20-15BL (Tank White)	5.0 Mils
Coating:	264 Elasto-Shield (Black)	<u>60.0 Mils ±</u> 65.0 Mils

NOTE: This system is NSF Certified for Potable Water. This flexible liner can be used to rehab tanks with leaks. Multiple passes may be required to achieve the desired thickness that can range from 50-100 mils. See Elasto-Shield Application Guide for detailed instructions.

**O. INTERIOR EXPOSURE (NON-IMMERSION)
OVER EXISTING COATINGS**

O.1 System No. 6-1 Acrylic Emulsion

Surface Preparation: Surface must be clean and dry.

	<u>DFT-Mils</u>
<u>1st Coat:</u>	6-Color Tneme-Cryl
	2.0 – 3.0
<u>2nd Coat:</u>	6-Color Tneme-Cryl
	<u>2.0 – 3.0</u> 4.0 – 6.0
	Minimum 5.0 Mils

NOTE: If semi-gloss finish is desired, use Series 29 Tuf-Cryl as the 2nd Coat @ 1.5 – 2.0 mils DFT.

O.2 System No. 113-1 Acrylic-Epoxy Semi-Gloss

Surface Preparation: Surface must be clean and dry.

	<u>DFT-Mils</u>
<u>1st Coat:</u>	113-Color Tneme-Tufcoat
	2.0 – 3.0
<u>2nd Coat:</u>	113-Color Tneme-Tufcoat
	<u>2.0 – 3.0</u> 4.0 – 6.0
	Minimum 5.0 Mils

NOTE: This system will provide high performance and can be applied directly over existing coatings without lifting. Can be used when low odor is required during application. Specify Series 114 Tneme-Tufcoat for Gloss Finish. This coating can be spray applied in a single coat at 4.0 – 6.0 mils DFT.

15.7 CONCRETE FLOORS

P. EPOXY FLOOR COATING

P.1 System No. 205-1 Epoxy-Polyamide

Surface Preparation: Allow concrete to cure 28 days. Acid Etch or Brush Off Blast Cleaning per SSPC-SP13.

	<u>DFT-Mils</u>
<u>1st Coat:</u>	205 Terra-Tread FC
	3.0 – 5.0
<u>2nd Coat:</u>	205 Terra-Tread FC
	<u>3.0 – 5.0</u> 6.0–10.0

Minimum 6.0 Mils

NOTE: This system will provide a durable, longwearing coating that bonds tightly to concrete and stands up under heavy foot traffic, frequent cleaning, and spillage of water, oil, grease, or chemical. For floors exposed to the sun, add a 3rd coat of Tnemec Series 291 CRU at 2.0 – 3.0 mils DFT.

NOTE: For a skid resistant finish broadcast 50 mesh dry washed silica sand into the 1st coat.

P.2 System No. 287-1 Waterborne Epoxy-Amine

Surface Preparation: Allow concrete to cure 28 days. Acid Etch or Brush Off Blast Cleaning per SSPC-SP13.

	<u>DFT-Mils</u>
<u>1st Coat:</u> 287-Color Enviro-Tread	2.0 – 4.0
<u>2nd Coat:</u> 287-Color Enviro-Tread	2.0 – 4.0
	4.0 – 8.0
Minimum 5.0 Mils	

NOTE: For a non-skid finish, add 287-300C skid resistance sand into the first coat. For floors exposed to the sun add a 3rd coat of Tnemec Series 291-CRU at 2.0 – 3.0 mils DFT.

P.3 System No. 291-12 Epoxy/Urethane

Surface Preparation: Allow concrete to cure 28 days. Acid Etch or Brush Off Blast Cleaning per SSPC-SP13.

	<u>DFT-Mils</u>
<u>1st Coat:</u> 66-Color Hi-Build Epoxoline	2.0 – 3.0
<u>2nd Coat:</u> 66-Color Hi-Build Epoxoline	2.0 – 3.0
<u>3rd Coat:</u> 291-Color CRU	2.0 – 3.0
	6.0 – 9.0
Minimum 7.0 Mils	

NOTE: This system offers a hard, chemically resistant floor coating with excellent flow properties and color and gloss retention.

P.4 System No. 280-1 High Build Polyamine-Epoxy Glaze Floor

Surface Preparation: Allow concrete to cure 28 days. Abrasive Blast Cleaning (Refer to Installation Guide of manufacturer.)

	<u>DFT-Mils</u>
<u>1st Coat:</u> 201 Epoxoprime	6.0 – 8.0
<u>2nd Coat:</u> 280 Tneme-Glaze	6.0 – 8.0
<u>3rd Coat:</u> 280 Tneme-Glaze	6.0 – 8.0
	18.0 – 24.0
Minimum 18 Mils	

Please refer to manufacturer's Installation Guide and Technical Data for proper installation.

P.5 System No. 237/281 Double Broadcast Flooring (Non-Slip)

Surface Preparation: Abrasive Blast Cleaning (Refer to Installation Guide of manufacturer.)

	<u>DFT-Mils</u>
<u>1st Coat:</u> 201 Epoxoprime	6.0 – 8.0
<u>2nd Coat:</u> 237 Power-Tread	1/8" (2 cts. @ 1/16" each)
<u>3rd Coat:</u> 280 Tneme-Glaze	8.0 – 12.0
	Minimum 1/4" +

Please refer to manufacturer's Installation Guide and Technical Data for proper installation.

P.6 System No. 222/284 Multi-Color Quartz Broadcast Floor and Cove Base

Surface Preparation: Abrasive blast cleaning (Refer to Tnemec Surface Preparation and Installation Guide).

	<u>DFT-Mils</u>
<u>1st Coat:</u> 222 Deco-Tread	1/8" (2 cts. @ 1/16" each)
<u>2nd Coat:</u> 284 Deco-Clear	8.0-10.0
	Total 1/8" +

15.8 POROUS MASONRY**Q. EXTERIOR/INTERIOR EXPOSURE****Q.1 System No. 180-2 Acrylic Emulsion – Smooth**

Surface Preparation: Surface shall be clean and dry.

	<u>DFT-Mils</u>
<u>Block Filler:</u> 54-562 Modified Epoxy 80 SF/Gal Masonry Filler	
<u>1st Coat:</u> 180-Color W.B. Tneme-Crete	4.0 – 8.0
<u>2nd Coat:</u> 180-Color W.B. Tneme-Crete	4.0 – 8.0
	8.0 -16.0*

*Total DFT of topcoats only

NOTE: Also available in Series 181 in a sand finish. The Series 180 has to be spray applied to achieve recommended dry film thickness application; by roller would require additional coats.

Q.2 System No. 6-2 Acrylic Emulsion, Low Sheen

Surface Preparation: Surface shall be clean and dry.

	<u>DFT-Mils</u>
<u>Block Filler:</u> 54-562 Modified Epoxy 80 SF Gal Masonry Filler	

<u>1st Coat:</u>	6-Color Tneme-Cryl	2.0 – 3.0
<u>2nd Coat:</u>	6-Color Tneme-Cryl	<u>2.0 – 3.0</u>
		*4.0 – 6.0

*Total dry film thickness of topcoats only.

NOTE: This system will fill the block and provide a sealed surface. For semi-gloss finish, use Series 29 Tufcryl (SG) for the 2nd coat @ 1.5 – 2.0 mils DFT.

Q.3 System No. 66-15 Epoxy-Polyamide (Interior)

Surface Preparation: Surface shall be clean and dry.

		<u>DFT-Mils</u>
<u>Block Filler:</u>	54-660 Epoxy Masonry Filler	100 SF Gal
<u>1st Coat:</u>	66-Color Hi-Build Epoxoline	4.0 – 6.0
<u>2nd Coat:</u>	66-Color Hi-Build Epoxoline	<u>4.0 – 6.0</u>
		*8.0–12.0

*Total dry film thickness of topcoats only.

NOTE: Block filler is a polyamide epoxy designed for high moisture.

Q.4 System No. 104-6 High Solids Epoxy (Interior Only)

Surface Preparation: Surface to be clean and dry.

		<u>DFT-Mils</u>
<u>1st Coat:</u>	104-Color H.S. Epoxy	6.0 – 10.0
<u>2nd Coat:</u>	104-Color H.S. Epoxy	<u>6.0 – 10.0</u>
		12.0 – 20.0
		Minimum 14.0 Mils

NOTE: The surface will be tile-like for easy cleaning and will provide protection against chemical attack, corrosive fumes, and high humidity and wash down. Spray and backroll first coat to fill porosity.

Q.5 System No. 113-1 Acrylic-Epoxy Semi-Gloss (Interior Only)

Surface Preparation: Surface must be clean and dry.

		<u>DFT-Mils</u>
<u>Block Filler:</u>	54-562 Modified Epoxy Masonry Filler	80 SF/Gal
<u>1st Coat:</u>	113-Color Tneme-Tufcoat	4.0 – 6.0
<u>2nd Coat:</u>	113-Color Tneme-Tufcoat	<u>4.0 – 6.0</u>
		8.0-12.0

NOTE: Series 113 can be spray applied @ 4.0 – 6.0 mils DFT. Application by brush and roller will require additional coats.

NOTE: Series 113 Tneme-Tufcoat has very low odor and can be used when painting in occupied areas. Specify Series 114 Tneme-Tufcoat for a gloss finish.

Q.6 System No. 156-1 Modified Acrylic Elastomer (Exterior)Surface Preparation: Surface must be clean and dry.

	<u>DFT-Mils</u>
<u>Block Filler:</u> 54-562 Modified Masonry Filler	80 SF/Gal
<u>1st Coat:</u> 156-Color Enviro-Crete	4.0 – 8.0
<u>2nd Coat:</u> 156-Color Enviro-Crete	<u>4.0 – 8.0</u>
	8.0–16.0
Minimum	10.0 Mils
(For 2 nd & 3 rd Coats)	

NOTE: If texture is needed, use 157 Enviro-Crete TX (medium texture). For application over previously applied coatings, use TNEMEC 151 Elasto-Grip at 1.0 – 2.5 mils DFT in place of the 54-562 block filler.

15.9 GYPSUM WALLBOARD**R. INTERIOR EXPOSURE****R.1 System No. 113-5 Acrylic-Epoxy**Surface Preparation: Surface must be clean and dry.

	<u>DFT-Mils</u>
<u>1st Coat:</u> 51-792 PVA Sealer	1.0 – 2.0
<u>2nd Coat:</u> 113 H.B. Tneme-Tufcoat	2.0 – 3.0
<u>3rd Coat:</u> 113 H.B. Tneme-Tufcoat	<u>2.0 – 3.0</u>
	5.0 – 7.0
Minimum	6.0 Mils

NOTE: Series 113 can be spray applied in a single coat at 4.0 – 6.0 mils DFT. Substitute Series 114 if a gloss finish is desired.

R.2 System No. 66-22 Hi-Build EpoxolineSurface Preparation: Surface must be clean and dry.

	<u>DFT-Mils</u>
<u>1st Coat:</u> 51-792 PVA Sealer	1.0 – 2.0
<u>2nd Coat:</u> 66-Color Hi-Build Epoxoline*	<u>4.0 – 6.0</u>
	5.0 – 8.0
Minimum	5.0 Mils +

NOTE: *Two coats may be required if applied by roller.

**R.3 System No. 6-1 Acrylic Emulsion, Low Sheen
(Interior / Exterior Exposure)**Surface Preparation: Surface must be clean and dry.

	<u>DFT-Mils</u>
<u>1st Coat:</u> 6-Color Tneme-Cryl	2.0 – 3.0
<u>2nd Coat:</u> 6-Color Tneme-Cryl	<u>2.0 – 3.0</u>

4.0 – 6.0
Minimum 5.0 Mils

NOTE: This system is designed for mild use areas like office walls, laboratory ceilings, stairwells, etc. For semi-gloss finish, use Series 29 Tufcryn at 1.5 – 2.0 mils DFT.

15.10 WOOD

S. EXTERIOR/INTERIOR EXPOSURE

S.1 System No. 23-4 Alkyd Semi-Gloss

Surface Preparation: Surface shall be clean and dry.

	<u>DFT-Mils</u>
<u>1st Coat:</u> 36-603 Undercoater	2.5 – 3.5
<u>2nd Coat:</u> 23 Enduratone	1.5 – 3.5
<u>3rd Coat:</u> 23 Enduratone	<u>1.5 – 3.5</u>
	5.5–10.5
Minimum 6.0 Mils	

NOTE: Specify Series 2H Hi-Build Thene-Gloss for High Gloss finish.

S.2 System No. 6-5 Acrylic Latex

Surface Preparation: Surface shall be clean and dry.

	<u>DFT-Mils</u>
<u>1st Coat:</u> 36 Undercoater	2.0 – 3.5
<u>2nd Coat:</u> 6-Color Thene-Cryl	2.0 – 3.0
<u>3rd Coat:</u> 6-Color Thene-Cryl	<u>2.0 – 3.0</u>
	6.0 – 9.5
Minimum 7.5 Mils	

NOTE: Substitute Series 29 Tufcryn for the third coat at 1.5 – 2.0 mils DFT if semi-gloss finish is desired.

15.11 PVC PIPE

T. EXTERIOR OR INTERIOR

T.1 System No. 73-23 Epoxy-Polyamide

Surface Preparation: Solvent clean per SSPC-SP1 & Scarify by Brush Blast or Hand Sanding.

	<u>DFT-Mils</u>
<u>1st Coat:</u> 66-Color Hi-Build Epoxoline	2.0 – 3.0
<u>2nd Coat:</u> 73 Endura-Shield	<u>2.0 – 3.0</u>
Total	4.0 – 6.0
Minimum 5.0 Mils	

15.12 INSULATED PIPE**U. INTERIOR EXPOSURE****U.1 System No. 6-1 Acrylic Emulsion, Low Sheen**

Surface Preparation: Surface shall be clean and dry.

	<u>DFT-Mils</u>
<u>1st Coat:</u> 6-Color Tneme-Cryl	2.0 – 3.0
<u>2nd Coat:</u> 6-Color Tneme-Cryl	2.0 – 3.0
	4.0 – 6.0
Minimum	5.0 Mils

NOTE: For semi-gloss finish, use Series 29 Tufcryl for the 2nd coat.

15.13 HIGH HEAT COATING**V. EXTERIOR/INTERIOR EXPOSURE****V.1 System No. 39-2 Silicone Aluminum (1200° F Maximum)**

Surface Preparation: SSPC-SP10 Near White Blast Cleaning –
1.0 Mil Surface Profile

	<u>DFT-Mils</u>
<u>1st Coat:</u> 39-1261 Silicone Aluminum	1.0 – 1.5
<u>2nd Coat:</u> 39-1261 Silicone Aluminum	1.0 – 1.5
	2.0 – 3.0
Minimum	2.0 Mils

NOTE: Coating must be heat cured @ 400°F for 1 hour.

V.2 System No. 39-4 Silicone Aluminum (600° F Maximum)

Surface Preparation: SSPC-SP10 Near White Blast Cleaning –
1.0 Mil Surface Profile

	<u>DFT-Mils</u>
<u>1st Coat:</u> 39-661 Silicone Aluminum	1.0 – 1.5
<u>2nd Coat:</u> 39-661 Silicone Aluminum	1.0 – 1.5
	2.0 – 3.0
Minimum	2.0 Mils

NOTE: Coating must be heat cured @ 400°F for 1 hour.

V.3 System No. 90E-92 Inorganic Zinc (750°F Max)

Surface Preparation: SSPC-SP10 Near White Metal Blast Cleaning

	<u>DFT-Mils</u>
<u>Coating:</u> 90E-02 Tneme-Zinc	2.0 – 3.5

NOTE: Coating will have a greenish gray color but will not require curing at elevated temperatures.

15.14 SURFACES EXPOSED TO H_2S/H_2SO_4 (SEVERE EXPOSURE/IMMERSION)**W. CEMENTITIOUS SURFACES****W.1 System No. 120-1 Vinyl Ester (Concrete)**

Surface Preparation: Abrasive blast clean per SSPC-SP13 to remove all laitance, fines, and contamination.

	<u>DFT-Mils</u>
<u>1st Coat:</u> 120-5002 Vinester Primer	6.0 – 10.0*
<u>2nd Coat:</u> 120-5003 Vinester F&S	As Required**
<u>3rd Coat:</u> 120-5002 Vinester Primer	12.0 – 18.0
<u>4th Coat:</u> 120-5001 Vinester Topcoat	<u>12.0 – 18.0</u>
	30.0 - 46.0
	Minimum 36.0 Mils +

NOTES:

*First coat to be applied by roller application or spray applied followed by backrolling.

**All surface voids, cracks, pinholes, and other defects must be filled flush with the adjacent surfaces by putty knife, trowel, float, squeegee, or other suitable method.

X. FERROUS METAL SURFACES**X.1 System No. 120-2 Vinyl Ester (Steel)**

Surface Preparation: SSPC-SP5 White Metal Blast Cleaning (3.0 Mil Profile)

	<u>DFT-Mils</u>
<u>1st Coat:</u> 120-5002 Vinester Primer	12.0 – 18.0
<u>2nd Coat:</u> 120-5001 Vinester Topcoat	<u>12.0 – 18.0</u>
	24.0 – 36.0
	Minimum 30.0 Mils

NOTE: Application of a stripe coat to all weld seams and plate edges is recommended.

15.15 EXTERIOR OF PRESTRESSED CONCRETE TANKS**Z.1 System No. 156-3 (New Tanks)**

Surface Preparation: Surface to be clean and dry.

	<u>DFT-Mils</u>
<u>1st Coat:</u> 156-Color Envirocrete	4.0 – 6.0
<u>2nd Coat:</u> 156-Color Envirocrete	<u>4.0 – 6.0</u>
	8.0–12.0
	Minimum 10.0 Mils

Z.2 System No. 180-3 (New Tanks)Surface Preparation: Surface to be clean and dry.

	<u>DFT-Mils</u>
<u>1st Coat:</u> Thoroseal or equal	1/16"
<u>2nd Coat:</u> 180 W.B. Tneme-Crete	2.0-4.0
<u>3rd Coat:</u> 180 W.B. Tneme-Crete	2.0-4.0
	1/16"+

Z.3 System No. 6-6 (New Tanks)Surface Preparation: Surfaces to be clean and dry.

	<u>DFT-Mils</u>
<u>1st Coat:</u> Thoroseal or equal	1/16"
<u>2nd Coat:</u> 6-Tneme-Cryl	2.0-3.0
<u>3rd Coat:</u> 6 Tneme-Cryl	2.0-3.0
	1/16"+

Z.4 System No. 156-4 Existing Tanks (Previously Painted)Surface Preparation: Remove all dirt, oil, grease, chalk, and loose paint per High Pressure Water Blast (Min 3500 PSI).

	<u>DFT-Mils</u>
<u>1st Coat:</u> 151 Elasto-Grip	1.0-2.5
<u>Stripe Coat:</u> Stripe all hairline cracks with a	3.0-5.0
Brushed coat of Series 156 Envirocrete	
<u>Topcoat:</u> 156-Envirocrete	4.0-6.0
	(Cracks) 8.0-13.5
	(Other) 5.0- 8.5

Z.5 System 180-4 Existing Tanks (Previously Painted)Surface Preparation: Remove all dirt, oil, grease, chalk, and loose paint per High Pressure Water Blast (Min 3500 PSI).

	<u>DFT-Mils</u>
<u>Stripe Coat:</u> 180 W.B. Tneme-Crete	2.0-4.0
Applied by roller to all	
Visible cracks	
<u>1st Coat:</u> 180 W.B. Tneme-Crete	2.0-4.0
<u>2nd Coat:</u> 180 W.B. Tneme-Crete	2.0-4.0
	4.0-8.0
	Minimum 5.0 mils (2 coats)

NOTE: May be spray applied in a single coat at 4.0 – 8.0 mils.**15.16 SECONDARY CONTAINMENT AREAS****AA.1 System No. 61-4 Epoxy Polyamide (For Fuel Oils)**Surface Preparation: Surface shall be clean and dry. Allow new concrete to cure for 28 days. Abrasive Blast Clean per SSPC-SP7 (Brush Off Blast).

	<u>DFT-Mils</u>
<u>Primer:</u> 61-5002 Tneme-Liner (Beige)	4.0 – 6.0
<u>Topcoat:</u> 61-5001 Tneme-Liner (Gray)	4.0 – 6.0
	8.0–12.0
Minimum	10.0 Mils

NOTE: This system will provide excellent resistance to most chemicals including petrochemicals. Use Tnemec Series 63-1500 between coats as a filler and surfacer wherever it is required.

AA.2 System No. 61-1 Amine Epoxy (For Caustics)

Surface Preparation: Surfaces shall be clean and dry. Allow new concrete to cure for 28 days. Abrasive Blast Clean per SSPC-SP6 (Brush Off Blast).

	<u>DFT-Mils</u>
<u>Primer:</u> 61-5002 Tneme-Liner (Beige)	8.0 – 12.0
<u>Topcoat:</u> 61-5001 Tneme-Liner (Gray)	8.0 – 12.0
	16.0 - 24.0

NOTE: This system offers superior chemical resistance to a wide range of chemicals. Use Tnemec Series 63-1500 between coats as a filler and surfacer wherever it is required.

AA.3 System 262-1 Flexible Polyurethane

Surface Preparation: Surfaces shall be clean and dry. Allow new concrete to cure for 28 days. Abrasive Blast Clean per SSPC-SP7 (Brush Off Blast).

	<u>DFT-Mils</u>
<u>Primer:</u> 66 Hi-Build Epoxoline	5 Mils
<u>Coating:</u> 262 Elasto-Shield (Black)	50 Mils
Total	55

NOTE: Multiple passes may be required to achieve recommended film thickness. See Elasto-Shield Application Guide for additional instructions. This product is only available in black. Repair all cracks, bugholes, and spalled areas with Series 265 Elasto-Shield TG prior to application of Series 262.

AA.4 System No. 120-3 Vinyl Ester (For Acids)

Surface Preparation: Abrasive blast clean per SSPC-SP13.

	<u>DFT-Mils</u>
<u>Filler Surfacer:</u> 120-5003 Vinester F & S	as Required
<u>1st Coat:</u> 120-5002 Vinester Primer	15.0-18.0
<u>2nd Coat:</u> 120-5001 Vinester Topcoat	15.0-18.0
	30.0-36.0
Minimum	30.0 Mils

NOTES: Use 120-5003 Vinester F & S to fill all cracks, bugholes, and other surface voids, and smooth all rough areas.

AA.5 System No. 275 Fiber Reinforced Novolac Epoxy

Surface Preparation: Allow new concrete to cure 28 days. Abrasive blast clean per SSPC-SP13.

Filler Surfer: Fill all voids with Tnemec Series 201 Epoxoprime mixed with fumed silica.

Prime Coat: Tnemec Series 201 Epoxoprime @ 6.0 – 8.0 mils DFT.

Body Coat: Tnemec Series 275 Stranlok (Fiber Reinforced Novolac Epoxy) applied by spray or trowel at 30-35 mils DFT.

Topcoat: Tnemec Series 282 Tneme-Glaze (Novolac Epoxy) applied at 6.0 – 8.0 mils DFT.

15.17 CLEAR WATER REPELLENT FOR CONCRETE, MASONRY & BRICK**BB.1 Silane/Siloxane Sealer (Water Based)**

Surface Preparation: Allow new concrete to cure 28 days. Clean surfaces to be sealed by abrasive blasting or waterblasting.

COATING: BRICK, CONCRETE

Chemprobe PRIME A PELL H₂O 125-200 SF/GAL

SPLIT FACED OR POROUS MASONRY

Chemprobe PRIME A PELL H₂O. 65-100 SF/GAL

BB.2 Silane/Siloxane Sealer w/Concrete Stain

Sealer: Chemprobe Prime A Pell H₂O 65-200 SF/Gal

Concrete Stain: Two Coats of Chemprobe 75-200 SF/Gal/Ct

Conformal Stain

15.18 MANHOLES, WET WELLS & LIFT STATIONS**CC.1 System No. 120-1 Vinyl Ester**

Surface Preparation: Abrasive blast clean to remove all laitance, fines, and contamination.

	DFT-Mils
<u>1st Coat:</u> 120-5002 Vinester Primer	6.0 – 10.0*
<u>2nd Coat:</u> 120-5003 Vinester F&S	As required**
<u>3rd Coat:</u> 120-5002 Vinester Primer	12.0 – 18.0
<u>4th Coat:</u> 120-5001 Vinester Topcoat	<u>12.0 – 18.0</u>
	30.0 – 46.0
	Minimum 36.0 Mils +

*First coat to be applied by roller application or spray applied followed by backrolling.

**All surface voids, cracks, pinholes, and other defects must be filled flush with the adjacent surfaces by putty knife, trowel, float, squeegee, or other suitable method.

CC.2 System No. 100-1 Crystalline Waterproofing

Surface Preparation: Surface to be clean and roughened by Brush Blasting, Acid Etching, or High Pressure Water Blasting (3500 PSI) with turbo tips.

1st Coat: XYPEX Concentrate @ (1.5#/SY) – 1/16"±

2nd Coat: XYPEX Modified @ (1.5#/SY) – 1/16"±

NOTE: This system can be applied to concrete that is still wet or hasn't developed final cure. It can be used where wet surface conditions exist or where there is the potential for water intrusion due to hydrostatic pressure.

15.19 CANAL PIPE CROSSINGS

DD.1 System 90-97 Zinc/Epoxy/Urethane for New Pipe or Pipe Requiring Removal of Existing Coatings

Surface Preparation: SSPC-SP6 Commercial Blast Cleaning

	<u>DFT-Mils</u>
<u>Primer:</u> 90-97 Tneme-Zinc	2.5 – 3.5
<u>2nd Coat:</u> 66-Color Hi-Build Epoxoline	2.0 – 3.0
<u>3rd Coat:</u> 73-Color Endura-Shield	2.0 – 3.0
	6.5 – 9.5
Minimum 8.0 Mils	

DD.2 System No. 135-2 High Build, High Gloss Urethane for Marginally Cleaned Surfaces or Topcoating Over Existing Systems

Surface Preparation: High Pressure Water Blast (Min 3500 PSI) or Solvent Clean (SSPC-SP1) and Spot Hand and Power Tool Clean (SSPC-SP2 & 3) or Brush Blast (SSPC-SP7). Existing coatings must be clean, dry, and tightly adhering prior to application of coatings.

	<u>DFT-Mils</u>
<u>Spot Primer:</u> 135 Chembuild	3.0 – 4.0 (Spots)
<u>Tie Coat:</u> 135 Chembuild	3.0 – 4.0
<u>2nd Coat:</u> 73-Color Endura-Shield	2.0 – 3.0
	5.0 – 7.0
Minimum 5.0 Mils	

NOTE: A test Patch is always recommended to insure proper adhesion to existing coatings without lifting of existing coatings.

15.20 REPAINTING OF METAL BUILDING PANELS

EE.1 Exterior of Metal Building Panels

Surface Preparation: Pressure clean (3000 PSI) and spot SP2 & 3 Hand and Power Tool Cleaning.

	<u>DFT-Mils</u>
<u>Spot Primer:</u> 135 Chembuild	3.0 – 5.0
<u>1st Coat:</u> 30 Spra-Saf EN	2.0 – 4.0
<u>2nd Coat:</u> 30 Spra-Saf EN	2.0 – 4.0
	4.0 – 8.0

Minimum 4.0 Mils

NOTE: Test patch is strongly recommended.

EE.2 Exterior Miscellaneous Metal Trim

Surface Preparation: Pressure clean (3000 PSI) or solvent clean per SSPC-SP1. Spot SP2 & 3 Hand & Power Tool Cleaning.

		<u>DFT-Mils</u>
<u>Spot Primer:</u>	135 Chembuild	2.0 – 4.0
<u>Tie Coat:</u>	135 Chembuild	2.0 – 4.0
<u>Topcoat:</u>	73 Endura-Shield	2.0 – 3.0
	Total	4.0 – 7.0

NOTE: Test patch is strongly recommended.

COATING SCHEDULE

N.5 System No. N140-2 Epoxy-Polyamidoamine (Potable Water)

Surface Preparation: Allow concrete to cure for 28 days. Abrasive blast clean per SSPC-SP13.

Chlorine Contact	SP-13	N140-1255	N140-15BL
new baffle walls,		(6.0-8.0)	(6.0-8.0)
batches and cut areas			

NOTE: Series N140 meets the new requirements of approval for potable water use as established by the National Sanitation Foundation Standard 61. Surface irregularities and bug holes should be filled to a smooth uniform appearance as required with TNEMEC Series 63-1500 Filler & Surfacer. (NSF Standard 61 approved). First coat should be sprayed and backrolled.

END OF SECTION

SECTION 11200 SLIDE GATES

PART 1 - GENERAL

1.01 DESCRIPTION

- A. Scope of Work: Furnish all labor, materials, equipment and incidentals required and install the slide gates and appurtenances as shown on the Drawings and specified herein:
- B. General Design:
 - 1. All slide gates specified herein shall be either wall or flush mounted as shown on the Drawings.
 - 2. Gate leakage shall not exceed 0.1 gallons per minute (gpm) per foot of seating perimeter for slide gates in a seating head arrangement. Gate leakage shall not exceed 0.2 gpm per foot of seating perimeter for slide gates in an unseating head arrangement.
 - 3. The slide gate shall not deflect more than 1.360 of the span of the gate under design head measured from water surface to mid-height of gate.
 - 4. Slide gates shall be supplied in accordance with the Slide Gate Schedule, Table 11200, as specified in this Section. The schedule shall be verified by the Contractor against the Drawings.

1.02 QUALITY ASSURANCE

- A. Qualifications:
 - 1. The slide gates specified under this section shall be furnished by a manufacturer who is fully experienced, reputable and qualified in the manufacture of the equipment furnished.
 - 2. Liberal safety factors shall be used in the design of all of the equipment. Working stresses shall not exceed the lower value of the one-third (1/3) of the yield strength or one-fifth (1/5) of the ultimate strength of the material. The gates and appurtenances shall be designed for installation in the structures shown on the Drawings.
 - 3. All work shall be performed in accordance with the best modern practice for the manufacture of high-grade machinery. All parts shall have accurately machined mounting and bearing surfaces so that they can be assembled without fitting, chipping or re-machining. All parts shall conform accurately to the design dimensions and shall be free of all defects in workmanship or material that will impair their service. The slide gates shall be completely shop assembled to insure the proper fit and adjustment of all parts.

4. All materials shall be new and both workmanship and materials shall be of the very best quality, entirely suitable for the service to which they are to be subjected.
5. All materials shall be of a quality to withstand the corrosion, abrasion and stresses to which this equipment will be subjected during fabrication, erection and continuous operation.
6. Testing:
 - a. The completely assembled slide gates, in vertical or horizontal position, shall be shop inspected for proper seating.
 - b. The gate shall be fully opened and closed in its guide system to insure that it operates freely. Floor stands and bench stands shall be shop operated to insure proper assembly and operation.

B. Standards:

1. Aluminum Slide Gates: Frame, slides, rails and yokes shall be ASTM B-209 and ASTM B-221 Alloy 6061-T6.
2. Flush Bottom Seals and "J" Bulb Seals: ASTM D-2000 rubber.
3. Stems, Fasteners and Anchor Bolts: Stainless Steel - ASTM A-276.
4. Iron castings for benchstands: ASTM A-126, Class B.

- C. Equipment Manufacturers: The slide gates and all related equipment shall be designed, constructed and installed with the best practices and methods and shall be manufactured by Rodney Hunt Company, Orange, Massachusetts; Waterman Industries, Inc., Exeter, California, Washington Aluminum Company, Inc., Baltimore, Maryland, or equal.

.03 SUBMITTALS

A. Materials and Shop Drawings:

1. Copies of all materials required to establish compliance with the specifications shall be submitted in accordance with the provisions of the General Conditions: Shop Drawings, Working Drawings and Samples. Submittals shall include at least the following:
 - a. Certified shop and erection drawings and data regarding slide gates.
 - b. Literature or drawings describing the equipment and showing all important details of construction and dimensions.

2. In the event that it is impossible to conform to certain details of the specifications, identify those details.
- B. Operating Instructions: Operating and maintenance instructions for each type of slide gate, shall be furnished to the Engineer as provided in Section 01730 Operating and Maintenance Data:

PART 2 - PRODUCTS

2.01 GENERAL

- A. Aluminum Slide Gates (as indicated on the Drawings):
 1. The slide gate, where shown on the Drawings, shall be fabricated aluminum self-contained type with the guides designed to mount on the face of or embedded in concrete.
 2. The guides shall be of extruded aluminum incorporating a dual slot design. The primary slot shall accept the plate of the disc and the secondary slot will be sufficiently wide to accept the reinforcing ribs of the disc. The guides shall be designed for maximum rigidity, shall have a weight of not less than three pounds per foot and will be provided with holes for anchor bolts every 18 inches for face mounted units or embedding key ways for embedded units. Guides shall extend beneath the opening a sufficient amount to support the disc in the fully down or open position for downward opening gates.
 3. An aluminum angle shall be welded to the guides across the invert of the opening on face mounted gates and up both sides of all gates. A hollow bulb J-seal will be attached to this angle with stainless steel strips and attaching bolts. The seal shall be arranged so that it will deflect a minimum of 1/16 inch.
 4. The invert of embedded unit frames shall have an angle welded to the lower ends of the guides to form a seating surface for a resilient seal mounted on the disc.
 5. Where the guides extend above the operating floor, they shall be sufficiently strong so that no further reinforcing will be required. Where required, the yoke to support the operating benchstand will be formed by two (2) angles welded at the top of the guides to provide a one (1) piece rigid frame. The arrangement of the yoke will be such that the disc and stem can be removed without disconnecting the yoke.
 6. The disc or sliding member shall be of aluminum plate reinforced with "U" shaped aluminum extrusions welded to the plate. The disc shall not deflect more than 1/360 of the span of the gate under the design head. Reinforcing ribs shall extend into the guides so that they overlap the seating surface of the guide. A specially molded resilient seal shall be mounted on the bottom of embedded unit discs to provide flush bottom closure. Seals on the invert

will not be accepted. The shape of the seal shall extend into the secondary slot of the guide. The vertical face of the seal shall be in contact with the seating surface of the guide to provide a proper seal at the corners.

7. All parts of the gate shall have a minimum thickness of 1/4 inch.
8. All necessary attaching bolts and anchor bolts shall be Type 302 or 304 stainless steel and shall be furnished by the slide gate manufacturer.

B. Stainless Steel Slide Gates (as indicated on the Drawings):

1. The stainless steel slide gates and accessories, where shown on the Drawings, shall be fabricated 316L or 304L stainless steel self-contained type with the disc arranged to lower or raise to open (according to the Drawings) and with the guides designed to mount on the face of or embedded in concrete (according to the Drawings).
2. The guides shall be of 316L or 304L stainless steel manufactured from structural shapes or formed plates designed for in-channel or wall mounting. The guide shall be designed for maximum rigidity and will be provided with holes for anchor bolts every 18 inches for face mounted units or embedding key ways for embedded units. Guides shall extend beneath or above the opening of sufficient amount to support the disc in the fully open position.
3. A stainless steel angle shall be welded to the guides across the invert of the opening on face mounted gates and up both sides of all gates. A hollow bulb J-seal will be attached to this angle with stainless steel strips and attaching bolts. The seal shall be arranged so that it will deflect a minimum of 1/16 inch. On downward opening slide gates, J-seals shall be installed on the entire perimeter of the disc.
4. The invert of embedded unit frames shall have an angle welded to the lower ends of the guides to form a seating surface for a resilient seal mounted on the disc.
5. Where the guides extend above the operating floor, they shall be sufficiently strong so that no further reinforcing will be required. Where required, the yoke to support the operating benchstand will be formed by two (2) angles welded at the top of the guides to provide a one (1) piece rigid frame for gates over 48 inches wide. The arrangement of the yoke will be such that the disc and stem can be removed without disconnecting the yoke.
6. The disc or sliding member shall be of stainless steel plate reinforced with structural shaped stainless steel welded to the plate not more than 16 inches apart. The disc shall not deflect more than 1/360 of the span of the gate under the design head. Reinforcing ribs shall extend into the guides so that they overlap the seating surface of the guide. A specially molded resilient seal shall be mounted on the bottom of embedded unit discs to provide flush bottom closure. The shape of the seal shall produce a seating surface having a minimum width of 3/4 inch and the seal shall extend into the

secondary slot of the guide. The vertical face of the seal shall be in contact with the seating surface of the guide to provide a proper seal at the corners.

7. All parts of the gate shall have a minimum thickness of 1/4 inch.
8. All necessary attaching bolts and anchor bolts shall be stainless steel and shall be furnished by the slide gate manufacturer.
9. Stainless steel slide gates shall have all materials of construction consistent with the type of stainless steel (316L or 304L) specified for each gate in the schedule.

C. Weir Gates:

1. Self-contained, aluminum, weir type slide gates shall be provided where indicated on the Drawings.
2. Weir gates shall be mounted as shown on the Drawings with the guides extending below the invert of the opening and shall serve the purpose of lowering to open.
3. Materials of construction of the weir gates shall be the same as those gates that raise to open.
4. A resilient J-seal shall be placed along the invert of the opening and up both side so that the gate will be tight in the fully raised position and all of the flow will be over the disc in partially opened positions.

D. Operators:

1. Gate operators shall be mounted on the yoke of the gate and shall be of the type indicated on the drawings.
2. Benchstand:
 - a. Benchstands shall be geared and shall have a weatherproof, cast iron housing with a bronze operating nut, mounted on a high strength cast iron base plate.
 - b. The benchstands shall have the same construction features and shall be suitable to handle the same capacities as the floorstands.
3. Crank Operator:
 - a. Crank operators supplied with floorstands and benchstands shall be self-locking at any position of stem travel.
 - b. Crank operated floorstands and benchstands shall be selected so that no more than a 40 pound (lb.) effort on the crank will be required to open or close a gate.

- c. Cranks shall be cast iron with rotating grips, and shall be no less than 12 inches long and shall be keyed to the operating nut.
 - 4. Interconnected Crank Operated Benchstands and Floorstands: Shall be provided for gates arranged for two (2) stem operation. The floorstands or benchstands shall be interconnected by cold-rolled steel shafting with a flexible coupling connector to the floorstand or benchstand pinion shafts. The floorstands or benchstands shall be unchanged except for an additional pinion shaft.
- E. Operator Accessories:
 - 1. Where required for proper installation stem couplings shall be provided. Stem couplings shall be of high tensile strength bronze. Couplings shall be internally threaded and keyed to match the stem end-threads. The coupling key shall be locked in place by a set screw.
 - 2. Cast iron wall brackets shall be used to support floorstands and benchstands at locations shown on the Drawings. Wall brackets shall be capable of withstanding all normal operating loads, and shall be attached with approved anchor bolts, to the vertical face of the concrete wall directly above the gate. The Contractor shall follow all gate and operator manufacturer's installations requirements.
 - 3. Where the l/r ratio is greater than 200, stem guides shall be provided for intermediate support. Stem guides shall consist of a cast iron guide with a bronze bushing, mounted on a cast iron bracket attached to the wall. The inside diameter of the guide shall be 1/16 inch larger than the stem diameter. This shall provide adjustable ability in two directions while still supplying close support. The stem guide shall be supplied in two pieces which shall allow installation after the stem is in place.

PART 3 - EXECUTION

3.01 INSTALLATION

- A. Installation of all gates and guides shall be done by the Contractor in a manner acceptable to the manufacturer and Engineer. It shall be the responsibility of the Contractor to handle, store and install the equipment specified in this Section in strict accordance with the manufacturer's drawings and recommendations and with Section 01600: Materials and Equipment. Frames and guides shall be installed in a true vertical plane with 90-degree corners.

3.02 INSPECTION AND TESTING

- A. Furnish the services of a factory representative for two (2) days who has complete knowledge of proper operating and maintenance to inspect the final installation and supervise a test run of the equipment. With the Owner's permission, these services may be combined with those provided under Paragraph 1.03B., herein.

- B. Maximum gate leakage shall be as defined in the General Design Criteria of this specification, Paragraph 1.01C.2., herein. If gates, operators and appurtenances do not meet specified requirements, corrective measures shall be taken by the Contractor, or the equipment shall be removed and replaced with equipment that satisfies the conditions specified.

TABLE 11200
SLIDE GATE SCHEDULE

Structure:	Chlorine Contact Chamber
Location:	Effluent Gate
Type:	Slide
Mtg:	Face
Width:	12'-0"
Const.:	Aluminum
Quantity:	1

END OF SECTION

SECTION 13300
INSTRUMENTATION AND CONTROLS

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, plant facilities and equipment, performance of all work necessary to complete the manufacturer, to make factory tests, to prepare and load for shipment, to deliver to the site, to provide programming, calibration, installation supervision, system start-up, services and incidentals required to completely furnish and install a control system as specified herein and shown on the Contract Drawings.
- 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 drawings and loop diagrams.
- 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. Attention is directed to the fact that the Instrumentation and Control System shall be furnished by a single pre-qualified system integrator 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.
- E. Substitutions on functions or equipment specified will not be acceptable. In order to ensure the interchangeability of parts, the maintenance of quality, the ease of interfacing between the various sub-systems and the establishment of minimums with regard to ranges and accuracy, strict compliance with the above requirements shall be maintained. In order to ensure compatibility between all equipment, it shall be the responsibility of the system supplier hereunder to coordinate all interface requirements with existing equipment and with mechanical and electrical system suppliers and furnish any signal isolation devices that might be required.
- F. 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.
- G. Equipment removed in the course of this work shall become the property of the owner.

- H. All equipment and installations shall satisfy applicable national, state and local mechanical and electrical codes.

1.02 QUALIFICATIONS

- A. The Contractor shall use only the approved system suppliers and must name his proposed system suppliers on the bid document.

1.03 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. Certified calibration data on all flow metering devices.
 11. 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.
 5. Where graphic screen displays are required, submit detailed color screen print displays including symbols icons and line widths, as well as color selection samples and details of fabrication.
- 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.

1.04 FINAL DOCUMENTATION

- A. Prior to final acceptance of the system, eight (8) 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 operating instructions 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.

1.05 SOURCE QUALITY CONTROL

- A. The manufacturers of the equipment and fabricators of panels and/or cabinets supplied under this section shall allow the engineer and/or owner to inspect and witness the testing of the equipment at the site of fabrication. Equipment shall include the cabinets, special control systems and other pertinent systems and/or devices. A minimum of ten (10) working days notification shall be provide to the Engineer prior to testing. No shipments shall be made without the Engineer's approval.

1.06 PRODUCT HANDLING

A. Shipping Precautions

1. After completion of shop assembly, factory test and approval all equipment, cabinets, panels and consoles shall be packed in protective crates and enclosed in heavy duty polyethylene envelopes or secured sheeting to provide complete protection from damage, dust and moisture. Dehumidifiers shall be placed inside the polyethylene coverings. The equipment shall then be skid-mounted for final transport. Lifting rings shall be provided for moving without removing protective covering. Boxed weights shall be shown on shipping tags together with instructions for unloading, transporting, storing and handling at jobsite.
2. 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 damages, 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 outlined shall have 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. Equipment installed in a hazardous area shall meet Class, Group and Division as shown on the contract electrical drawings to comply with the National Electrical Code.
- F. All indicators and readouts shall be linear in process units.
- G. 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.
- H. All equipment, cabinets and devices furnished hereunder shall be heavy-duty type designed for continuous industrial service. The system shall contain products of a single manufacturer, insofar as possible, and 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.
- I. 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 ten percent (10%)t, 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. UPS System shall be provided under this Division for control panel (CP). Refer to Division 16 Specifications for UPS requirements.

2.03 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. Instruments shall be housed in a suitable metallic case, properly grounded. Ground wires for all surge protectors shall be connected to a good earth ground and where practical, each ground wire run individually and insulated from each other. These protectors shall be mounted within the instrument enclosure or a separate NEMA 4X junction box coupled to the enclosure. The units shall be as manufactured by Innovation Technologies or approved equal.

B. Power Supply

1. Protection of all alternating current (AC) instrument power supply lines shall be provided. Cabinet(s)/panel(s) and groups of field instruments, as approved by the Engineer, shall be protected by isolation transformers and surge suppressors. Individual field instruments shall be protected by individual gas tube surge suppressors.

C. Signal Line

1. Protection of all field analog, discrete, digital and telemetered signal lines 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 in the interface cabinet.

D. Warranty

1. A five-year warranty shall be provided by the surge/lightning suppression equipment manufacturer. The warranty shall cover the replacement of all protected equipment for a period of five (5) years after the date of acceptance.

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 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 instrumentation loop diagrams indicate the intent of the interconnections between the individual instruments. Any exceptions should be noted.
- D. 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.
- E. 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.
- F. 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.
- G. 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.
- H. All piping to and from field instrumentation shall be provided with necessary unions, test tees, couplings, adapters and shut-off valves.
- I. Field instruments requiring power supplies shall be provided with local electrical shut-offs and fuses as required.
- J. 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.
- K. The system supplier shall investigate each space in the building through which equipment must pass to reach its final location. If necessary, the system supplier shall be required to ship his material in sections sized to permit passing through restricted areas in the building. The system supplier shall also investigate and make

any field modifications to the allocated space for each cabinet, enclosure and panel to assure proper space and access (front, rear, side).

- L. 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.
- M. Lifting rings from cabinets/assemblies shall be removed. Hole plugs shall be provided for the holes of the same color as the cabinet.

3.03 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 ensure 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.

3.04 TESTS

- A. The Contractor shall furnish the services of the system supplier's servicemen, all special tools, calibration equipment and labor to perform the tests. Certified copies of the tests shall be furnished in duplicate to the Engineer.
- B. 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 percent, 25 percent, 50 percent, 75 percent, 100 percent, and 1001 percent of scale, as required. 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.
- C. 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 ensure compliance.

3.05 INSTRUCTION

- A. The Contractor shall furnish a system supplier's representative for a field training program to be run at the owner's plant site and consist of up to two (2) days instruction for two (2) of 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

13300-8

SECTION 13310
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 with the PICS. This work supplements the requirements of Section 13300 and it is to be included in the lump sum price for the PICS as provided through the PICS supplier in accordance with these specifications.

1.02 SUBMITTALS

- A. Materials and Shop Drawings:
1. Furnish, as prescribed under the General Requirements, Shop Drawings covering the items included under this section or work.
 2. Submit Shop Drawings at one time, as a package, for complete interface checking. Partial submittals will not be accepted. However, a separate submittal for the field instruments and the control panels will be allowed.
 3. Specifically, include the following information:
 - a. Catalog information, descriptive literature, wiring diagrams, and shop drawings on all components of the field instruments.
 - b. Individual data sheets for all components of the field instruments and control panels to supplement the above information by citing all specific features for each specific component (e.g., scale range, materials of construction, special options included, etc.). Each component data sheet shall bear the component name and instrument tag number designation shown in the Drawings and Specifications.
 - c. Catalog information on all miscellaneous electrical and mechanical devices furnished under this section.
 - d. Shop drawings and catalog material for all control panels and enclosures. Include panel elevation (front, side, interior), construction shop drawings, schedules, and sizing, calculations.
 - e. Panel wiring diagrams of all control panels. Diagrams shall be complete electrical wiring diagrams showing all components and all auxiliary devices such as relays, alarms, fuses, lights, fans, heaters, etc. All wires and terminals shall be numbered on the diagrams, and line cross references shall be labeled. Include wiring interface to I/O of the PLCs. Include on the drawings, a tag number to identify each component, referenced to a component identification list.

- f. Loop diagrams, consisting of individual wiring and/or plumbing diagram for each analog loop showing all terminal numbers, the location of the DC power supply, the location of any booster relays or common dropping resistors, surge arrestors, etc. The loop diagrams shall meet the minimum requirements of ISA S5.4 plus divide each loop diagram into three areas for identification of element locations: panel face, face-of-panel, and field, respectively. On each diagram present a tabular summary of: (1) the output capability of the transmitting instruments; (2) the input impedance of each receiving instrument; (3) an estimate of the loop wiring impedance based on the wire sizes and lengths shown; (4) the total loop impedance; and (5) reserve output capacity.
 - g. Power requirements and heat dissipation summary for all control panels. Power requirements shall state required voltages, currents, and phase(s). Heat dissipations shall be maximums and shall be given in BTU/HR. Summary shall be supplemented with calculations.
 - h. System interconnect diagram that shows all connections required between component parts of the items covered in this section and between the various other systems specified in this Contract. Number all electrical terminal blocks and field wiring. Identify each line at each termination point with the same number. Do not use this number again for any other purpose in the complete control scheme. Coordinate the electrical interconnect wiring diagram with Division 16, Electrical.
 - i. Installation details for all field mounted devices and panels to show conformance with those shown on the Drawings.
 - j. Configuration documentation for all programmable devices to indicate actual settings used to set the device scale, range, trip points, and other control parameters.
 - k. Submit the proposed layout, wiring diagram, mounting details, color section, dimensional data, and materials data for the graphic panel.
4. Submit a list of manufacturer's recommended spare parts and expendables to be supplied with the field instruments and control panels, with the manufacturer's current price for each item.
- B. Operating and Maintenance Manuals: See Section 13300 for general requirements. For each field device and panel mounted control device provided, assemble the fully updated approved submittal information plus all available service manuals for the devices in binders with identifying tabs and data sheets.

1.03 WARRANTY AND GUARANTEES

- A. The PICS shall furnish to the Owner a written one-year guarantee commencing with final acceptance, that all equipment and parts thereof, material and/or workmanship

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for the field elements, instruments, and control panels are of top quality and free from defects.

PART 2 - PRODUCTS

2.01 GENERAL

- A. See Section 13300 for general requirements for name tags, corrosion protection, lightning/surge suppression, electronic transmission, and other electrical considerations.

2.02 CONTROL PANELS

- A. PICS Control Panels: Provide the control panels shown on the drawings in materials and rating noted below. Size free-standing control panel(s) as shown on the Drawings. Smaller surface mount panels shall be sized to adequately dissipate heat generated by equipment mounted inside or on the panel face.

1. Finish:

- a. Smoothly finish panel face openings for panel-mounted equipment. Cut with counter boring, and provide with trim strips as required to give a neat finished appearance.
- b. After fabrication, provide all steel panel surfaces (excluding stainless steel) with a phosphatized treatment inside and out, and then finish with two coats of baked enamel. Paint the panel interiors white, ANSI No. 51. The exterior color shall be selected by the Engineer.

2. Access and Identification:

- a. Provide a continuous piano hinge door for ease of access on all control panels. Expose a minimum of 80 percent (80%) of the panel interior for door openings. NEMA 12, 4, and 4X rated panel door openings shall be sealed and fully gasketed. Provide print pockets on each door. Two (2) door enclosures shall have a removable center post. Sealed panel doors shall be equipped with quick release latches. NEMA 1 rated panel doors shall be equipped with a three-point latching mechanism.
- b. All components and terminals shall be accessible without removing other components except for covers.
- c. Surface mounted panels shall have conduit entry from the bottom only. Freestanding, NEMA 1 panels shall have an open area in the bottom for conduit entry.
- d. Provide fully gasketed glass window on the panel door when noted or shown to allow viewing of internally mounted devices without opening the door.

- e. Provide laminated plastic nameplates for all front face panel mounted controls to completely define their use.
 - f. Provide identification tags and wire number tags as specified elsewhere for all internal components, wires, and terminals.
3. Corrosion Control: Protect all panels from internal corrosion by the use of corrosion inhibiting vapor capsules, Hoffman, model A-HCI, or equal. Provide sealed panels with combination drain/breathers, Crouse-Hinds model ECD18; or equal.
 4. Temperature Control: Provide panels mounted in outdoor or unheated areas with thermostatically controlled space heaters to maintain internal temperatures above dew point. Provide outdoor panels with integral sun shields.
 5. Construction: All panels shall be manufactured items, Hoffman Engineering, or equal. Minimum metal thickness shall be 14 gauge. Provided stiffeners as required to prevent deflection under instrument loading and permit lifting without racking or distortion. When required, provide removable lifting rings and fill plugs to replace rings after installation.
 6. Electrical:
 - a. Provide a main circuit breaker and branch circuit breaker for each branch circuit as required to distribute power within each panel from the main power feed. Make provisions for bottom feeder conduit entry and provide terminal board for termination of all wiring. Provide access to the breakers when the panel door is open. The following rules apply for actual circuit wiring:
 - 1) No more than 20 devices on any single circuit.
 - 2) Do not group multiple units of parallel operations on the same board circuit.
 - 3) Do not exceed an amp capacity of 12 amps for any branch circuit.
 - 4) Panel (or site) lighting, receptacles, heaters, controls, telemetry, and fans shall be on a separate branch circuit.
 - b. The PICS supplier shall design, furnish and install all interior wiring within the control panels and furnish complete wiring diagrams showing the electrical circuits inside the panel and interconnections between the panel and the external instruments and components. Identify and number all terminals and wires. Attach plastic, snap on numbered tags to each panel wire for identification. Inside each panel, provide a copy of the panel wiring diagram. No power shall be applied until the PICS supplier has approved the installation.

- c. Wiring within panels shall meet the following requirements:
 - 1) Discrete wiring shall be 300-volt, type THWN stranded copper, sized for the current carried, but not smaller than No. 16 AWG.
 - 2) Power wiring shall be 300-volt type, stranded copper No. 14 AWG size, for 120V service.
 - 3) Analog signal wiring shall be 300-volt, stranded copper in twisted shielded pairs, no smaller than No. 16 AWG.
 - 4) Restrain wiring with plastic ties or ducts. Hinge wiring shall be secured at each end with bend area protected with a plastic sleeve.
 - 5) Separate analog or DC circuits at least six inches from any AC power or control wiring.
- d. All relays shall be the compact, general purpose, plug in type. Contacts shall be rated for not less than 10 amperes at 120V. Provide relays with neon status lights and test buttons. Time delay relays shall have integral adjustment knob and rangeability of at least 10:1. All relays shall have permanent, legible identification.
- e. Terminal blocks shall meet the following requirements:
 - 1) Provide the greater of twenty percent (20%) of all connected terminals or four unused spare terminals for each type supplied.
 - 2) Provide terminal blocks for DC and analog signals separate from AC circuit terminal blocks.
 - 3) Screw type terminal connections shall be locking, fork-tongue or ring-tongue lugs crimped with proper sized anvil. Terminate no more than two plugs per terminal with no more than one wire per lug.
 - 4) Compression clamp terminal connections shall be stripped and prepared per manufacturer's recommendations. Terminate no more than one wire per screw and yoke.
 - 5) Use of aluminum connectors shall not be permitted without prior approval of the Engineer. Connectors shall be either copper or steel.
 - 6) Terminate data highway and other communications cable connections per manufacturer's recommendations, located near the bottom of the panel at the point of entrance to the panel.

- f. Provide power supplied as required to power instruments of circuits requiring DC power. Convert 120V AC to DC power of appropriate voltage, voltage regulation, and ripple control to operate within equipment tolerances. DC power supplies shall be of the linear type and design to eliminate switching RFI. Output over voltage and over current protection devices shall be provided. Provide NEMA 1 enclosures for all power supplies within panels.
- g. Provide, when shown on the wiring diagrams, the indicated control panels with an internal, hand switch controlled, 40-watt fluorescent light and a 120V, 15 amp, duplex receptacle.
- h. Provide all panels with an isolated copper grounding buss to ground all signal and shield connections. Ground each analog signal shield on one end at the receiver end only. Properly ground all surge and transient protection devices. Coordinate grounding system with Division 16, Electrical.
- i. For 480V panels, provide a 120V dry type control transformer for the panel control and other 120V circuits. Transformers shall be sized to meet higher service rating than actually applied and shall be provided with fused primary and secondary.
- j. Install surge suppression devices so that they may be easily identified and replaced. A permanent I.D. # or nameplate shall be affixed to each device.

2.03 MATERIALS AND EQUIPMENT

- A. The following are the component specifications followed by specific device descriptions and unique settings or materials for specific devices identified on the drawings:
 - 1. Alarm, Audible Horn:
 - a. Provide audible horn that generates a loud audible alarm when activated by 115V AC power. The horn shall surface mount remotely as noted, suitable for outdoor use.
 - b. Outdoor units with sealed conduit entry, shall be Ronon Model 350W, or equal.
 - 2. Alarm, Visual Beacon:
 - a. Warning lights shall be flashing type units that produce 360 degree beams of colored light. Flashing light shall be 60 to 80 flashes per minute. Unit shall be a solid state strobe source. Light color shall be red and unit shall have simple technique for re-lamping. Units shall be suitable for remote mounting, as note, and shall operate on 120V AC power, unless otherwise notes or shown. Housing shall be weatherproof, suitable for use in outdoor environments without other

protection. General purpose units shall be Benjamin Electric Manufacturing, Series KL-4000; or equal.

3. Counter, Totalizer:

- a. Totalizers shall have counting rate, and other appropriate characteristics, to suit application. Unit shall be "silent" and non-mechanical, self-powered electronic type. Units shall accept speed counts up to 3000 cpm and be nominally 4" x 2" in size.
- b. Units shall be non-resettable and sealed suitable for panel mounting as shown. Units shall mount flush with the panel mounting front face. Units shall operate on self-contained battery power with a minimum of 10-year life. Units shall be labeled showing units and multipliers. Unit shall have a 6-digit, 2-inch LCD digital display and shall register unit digit values noted. Counter-Totalizers shall be Veeder-Root Series 7997, or equal.

4. Indicator, Digital Panel, Oil or Watertight:

- a. Units shall be oiltight NEMA 12, or watertight NEMA 4, as noted. Units shall surface mount as noted and indicate process variable value in engineering units on a 32-digit LCD, backlit display. Process indicators shall be horizontal digital indicators nominally 2.0 inches high by 4.0 inches wide with display digits nominally 0.5 inches in height. These indicators shall accept a 4 to 20 mA DC input signal and shall display the value of the represented analog variable in engineering units with scale range as noted. Decimal point shall be field selectable. Unit shall be provided with a permanent service legend to display the engineering units of the process variable. Unit shall operate loop power or on 120V line power.
- b. Digital panel indicators shall be mounted to the panel mounting front face. Units shall be Crompton Modutec Series 2000 or equal.

5. Indicator, Digital Field, Watertight:

- a. Units shall be watertight, mounted as shown and indicate process variable value in engineering units on 32-digit LCD display. Process indicators shall be horizontal digital indicators nominally 4.0 inches high by 6.0 inches wide with display digits not smaller than 0.8 inch in height. These indicators shall accept a 4 to 20 mA DC input signal and shall display the value of the represented analog variable in engineering units with scale range as noted. Decimal point shall be field selectable. Unit shall be provided with a permanent service legend to display the engineering units of the process variable. Unit shall be loop powered in 24V powered loop.
- b. Digital field indicators shall be Action Instruments Model V560; or equal.

6. Indicating Light, Oiltight:

- a. Units shall be heavy duty, oiltight, push to test industrial type with integral transformer for 120V AC application. The lights shall be rated for NEMA 1 service. Units shall have screwed on flat faced lenses in colors shown and factory engraved legend plates as noted. Units shall be Square D type K, Allen Bradley Type 800H, or approved equal.

<u>Type</u>	<u>Color</u>
LT-1	Green
LT-2	Red
LT-3	Amber

7. Indicating Light, Watertight: Units shall be heavy duty, watertight, push to test, industrial type with integral transformer for 120-volt AC applications. The lights shall be rated for NEMA 4X service. Units shall have screwed on prismatic lenses in colors shown and factory engraved legend plates as and when shown. Units shall be Square D Type SK, Allen Bradley Type 800H or approved equal.

<u>Type</u>	<u>Color</u>
LT-1	Green
LT-2	Red
LT-3	Amber

8. Level Float Switch, Suspended:

- a. Units shall be direct acting float type level switches consisting of a mercury switch enclosed in a float connected to a two conductor, combination support and signal cable. The entire assembly shall be watertight and impact resistant. Floats shall be formed of a chemical resistant plastic material. Cable shall be rugged and flexible with heavy neoprene or PVC jacket. The actuation/deactuation differential shall not exceed 1 inch. The switch shall be rated at 5 amperes at 120 volts. Units shall be stainless steel bracket suspended type. Provide each float with 10 feet of cable.

- b. Units shall be supplied with integral weight assemblies for stabilization and positive operation of suspended units.
 - c. Units shall be Consolidated Electric Co., Model LS; Anchor Scientific, Inc., Model Roto-Float Type S; or approved equal.
- 9. Potentiometer, Oiltight: Units shall be three terminal potentiometers with a total resistance of 1000 ohms and a power dissipation rating of 2 watts. Units shall have oiltight construction, rated NEMA 13, resolution of 1 percent, and linearity of plus or minus five percent (55)5 percent. Units shall be single hole, panel mounting accommodating panel thicknesses between 1/16 to 1/4 inch. Units shall have legend plates with markings as noted. Units shall be Allen-Bradley, Type 800T; or equal.
- 10. Potentiometer, Watertight: Units shall be three terminal potentiometers with a total resistance of 1000 ohms and a power dissipation rating of 2 watts. Units shall have watertight construction, rated NEMA 4X, resolution of 1 percent, and linearity of plus or minus 5 percent. Units shall be single hole, panel mounting accommodating panel thicknesses between 1/16 to 1/4 inch. Units shall have legend plates with marking as noted. Units shall be Allen-Bradley, Type 800H; or equal.
- 11. Switch, Maintained Contact, Oiltight:
 - a. Units shall be heavy duty, oiltight, industrial type selector switches with contacts rated for 120-volt AC service at 10 amperes continuous. The switches shall be rated for NEMA 1 service. Units shall have factory engraved legend plates indicating position definition. Operators shall be black knob type. Units shall have the number of positions and contact arrangements as required. Units shall be single hole mounting in panel thicknesses of 1/16 or 1/4 inch.
 - b. Units shall be Square D Class 9001, Type K, Allen Bradley Type 800H; or equal.

<u>Type</u>	<u>Contacts</u>
SS-1	2
SS-2	3
SS-3	4
SS-4	5

12. Switch, Maintained Contact, Watertight:

- a. Units shall be heavy duty, watertight, industrial type selector switches with contact rated for 120-volt AC service at 10 amperes continuous. The switches shall be rated for NEMA 4X service. Units shall have factory engraved legend plates indicating position definition. Operators shall be black knob type. Units shall have the number of positions and contact arrangements as required. Units shall be single hole mounting in panel thicknesses of 1/16 to 1/4 inch.
- b. Units shall be Square D Class 9001, Type K, Allen Bradley Type 800H; or equal.

<u>Type</u>	<u>Contacts</u>
SS-1	2
SS-2	3
SS-3	4
SS-4	5

13. Switch, Momentary Contact, Oiltight:

- a. Units shall be heavy duty, oiltight, industrial type push buttons with momentary contact rated for 120-volt AC service at 10 amperes continuous. The push buttons shall be rated for NEMA 1 service. Units shall have factory engraved legend plates indicating service definition. Units shall have contact arrangements as required and be black. Units shall be single hole mounted in panel thicknesses of 1/16 to 1/4 inch.
- b. Units shall be Square D Type K, Allen Bradley Type 800H, or equal.

<u>Type</u>	<u>Color</u>
PB-1	Green
PB-2	Red
PB-3	Black

- B. The following are the general components descriptions for the miscellaneous components of the PICS that are required to implement the various control functions of the field elements and control panels that are not specifically identified on the drawings:

1. Converter, Current-to-Current, Isolator:
 - a. Units shall receive a 4 to 20 mA DC input signal and shall produce a repeated, isolated, proportional 4 to 20 mA DC output signal into loads in the range of 0 to 1200 ohms without load adjustments for a 24V DC supply. Input impedance shall be less than or equal to 50 ohms. Unit accuracy shall be plus or minus 0.25 percent of span. Unit shall be provided with multi-turn span and zero adjustment.
 - b. Units shall be housed in a NEMA 4X rated enclosure with integral supports suitable for wall mounting. Unit shall operate on a isolated 120 volt, 60 Hz power supply.
 - c. Units shall be Moore Industries SCT, AGM Electronics PTA 4000, Rochester Instrument Systems Model SC1326, or equal.
2. Converter, Current-to-Pulse Frequency:
 - a. Unit shall accept an analog input and utilize time integration to produce a pulse rate output proportional to the input. The computing relay shall be housed in a metallic dust cover with integral bracket for rear of panel mounting. Unit shall accept a 4 to 20 mA DC input with input impedance of 250 ohms or less.
 - b. Pulse frequency scaling shall be provided so that each output pulse represents the unit digit value required. Unit shall operate on 24-volt DC and be provided with power supply operation. Output shall be provided with adjustable dropout of 0 to 5 percent of input span.
 - c. Accuracy shall be plus or minus 0.25 percent of span with temperature stability of 0.01 percent per degree F. Unit shall have multi-turn zero and span adjustment. Units shall be Moore Industries, LIT; AGM Electronics, PTA 4011; Rochester Instrument Systems, Model SC-1356; or equal.
3. Current Switch, Isolator:
 - a. Units shall receive an isolated 4 to 20 mA DC input signal and shall provide an adjustable contact closure on the selected setpoint. The set point shall be continuously adjustable over the full input span and shall be repeatable within plus or minus 0.1 percent of span. Activation on rising or falling setpoint shall be internally adjustable. Dead band shall be continuously adjustable from 1 to 100 percent of full scale.
 - b. The contact output shall be an isolated DPDT contact rated for 5 amps at 120V AC. Units shall be housed in a NEMA 1 rated enclosure. Unit shall operate on an isolated 120-volt, 60 Hz power supply.
 - c. Units shall be Moore Industries DCA, AGM Electronics PTA 4034 or 4035, Rochester Instrument Systems Model 1218 or 1219, or equal.

4. Miscellaneous Mechanical Components:

- a. Manifold, Three valve Equalizing: Shall be of stainless steel construction for isolation and equalization of differential transducers. Units shall be Anderson, Greenwood and Co., Type M1, Evans Equalizing Valve Manifolds, or equal.
- b. Test Tap: Shall consist of Crawford Fitting Co., Swagelock quick connects Series QC4 and caps QC4-DE, or equal.
- c. Tubing, Stainless Steel: Shall be ASTM A312, TP 316, seamless soft annealed with 0.065 inch wall. Fittings shall be ASTM A276, TP 316 compression or socket weld type.
- d. Valve, Ball: Shall be stainless steel ball valves, Whitey Series 40, Hoke Flamite Series 7100, or equal.
- e. Valve, Check: Shall be stainless steel NUPRO 4CP Series, or equal.
- f. Valve, Needle: Shall be stainless steel, 0.020 inch orifice, Whitey Model 21RF2, or equal.

5. Radio Telemetry Unit

- a. The remote terminal unit shall be a microcomputer-based data collection and dissemination subsystem. The remote terminal unit shall communicate with the central site (or forwarding terminal unit) via a two-way radio link or Ethernet and shall be designed to accommodate plug-in function modules. Function module card connectors shall be gold-over-nickel plated to inhibit corrosion. The system shall be capable of being outfitted, at any time, with RTUs capable of being configured with up to fifteen (15) function modules per RTU, with no software or firmware changes to the system. All sheet metal utilized inside the enclosure shall be anodized. An interlock system shall be provided to prevent the removal of function modules with the power applied. The RTU shall be enclosed in a NEMA 4X-316 stainless steel enclosure, acid-dipped and painted white. The RTU shall be capable of operating in a temperature ranging from -10 to 60 Degrees Celsius (14 to 140 Degrees Fahrenheit). The RTUs shall meet or exceed the quality, reliability, performance and versatility of those manufactured by Data Flow Systems, Inc. of Melbourne, Florida.
- b. SERVICE PORT - The remote terminal unit shall support a local serial interface. The local serial interface shall provide local access to all the functions of the remote terminal unit. The local serial interface shall support the monitoring of the radio communications link. The system shall support an automatic antenna alignment function utilizing the local serial interface.

- c. **POWER SUPPLY** - All function modules in the remote terminal unit shall run off DC voltage from +7.5 volts to +13 volts. The power supply module shall supply +12 volts. A battery backup shall be provided to operate the system for a minimum of 120 minutes in event of power failure. The power supply shall be surge protected. The power supply shall be short circuit protected by current limiting. Normal operation shall automatically resume when the short circuit overload is removed. The power supply shall be sized to operate the system with the battery removed. The power supply module shall provide a battery backed, isolated bias voltage source. The isolated bias voltage source shall be utilized to monitor the high well alarm so as to make sure the alarm is detected and reported during power outages. The circuit breaker for the power supply module shall be part of the power supply module. Neither the use of tools nor the disconnection of any wires shall be required to replace the power supply module.
- d. **SURGE PROTECTION** - Multiple staged surge protection shall be provided for all power supply and power monitoring circuits. One stage of protection shall be equipped with both energy limiting and clamping circuits with slow blow fuses designed for overload conditions. This design shall provide a very high level of non-destructive transient immunity. With the exception of a direct lightning strike, the device shall protect the RTU power supply and power monitoring circuits from damage due to voltage transients. The unit shall provide circuit protection to withstand multiple transients in excess of 6,500 volts, 3,250 amps, without damage. Damage shall be limited to a blown fuse when exposed to larger transients. The device shall be transient-tested to ANSI standard C62.41. The unit shall meet or exceed the quality, reliability and performance of the Transient Filter Shield TFS001 as manufactured by Data Flow Systems. The AC power input protection shall meet or exceed the quality, reliability and performance of the Single Phase Suppressor, SPS001 (or, if three phase power is in use, the Three Phase Suppressor, TPS001) as manufactured by Data Flow Systems.
- e. **BATTERIES** - The HSS central site server, and all RTUs, shall have the uninterruptible power supply (UPS) function built in. The unit's internal power supply shall keep the batteries at a float charge. The batteries shall not be damaged by deep discharges.
- f. **COMMUNICATION INTERFACE MODULES** - A Radio Interface Module (RIM) when utilizing radio communications, or Fiber Network Interface Module (FIM) when utilizing Ethernet, is required in each remote terminal unit.
- g. **RADIO INTERFACE MODULE** - Each remote terminal unit utilizing radio communications shall require one radio interface module (RIM). The RIM shall control the terminal radio during the polling sequence. The radio interface module shall have a service port to provide communications link monitoring. The service port shall also

provide the capability to directly monitor and/or control each module in the remote terminal unit. The radio interface module utilized at the remote terminal units shall be interchangeable with the radio interface module at the central site. The system shall be capable of utilizing up to 505 radio interface modules per communications link and up to 15 function modules per radio interface module. All communications shall be in ASCII and utilize an error detecting and correction data transfer protocol. Each radio interface module shall have a radio transceiver mounted to it. The radio shall be an FM transceiver. The radio interface module shall measure and transmit to the central site computer system the received signal strength (RSS). Replacement of the radio interface module shall trigger an automatic configuration of the new module to accommodate the site address and function (plug & play).

- h. **NETWORK INTERFACE MODULE** - Each remote terminal unit utilizing Ethernet communications shall require one fiber network interface module (FIM). The FIM shall interface to the network during the polling sequence. The FIM shall use serial tunneling to pass data between the network and the function modules. The FIM shall have a service port to provide system debugging. The service port shall also provide the capability to directly monitor and/or control each module in the RTU. The FIM utilized at the RTU shall be interchangeable with any other FIM. The FIM shall be for used in the RTU as an interface to the Ethernet network. The system shall be capable of utilizing up to 250 FIMs per communications link and up to 15 function modules per FIM. Communications between the HSS and the RTU shall have a speed of 10 Mbps. The FIM shall have flash memory for field upgrades. The FIM shall feature a 10Mbps Ethernet Media Converter that supports either multi-mode or single mode fiber to protect the unit from transient voltage damage. The type of converter used shall depend on the length of fiber optic cable required. The FIM shall use serial tunneling to communicate over a network with RS232 devices.
- i. **FUNCTION MODULES** - The function modules shall be designed so they do not have configuration switches or straps and may be easily added in the future. The function modules shall be designed with surge suppression on all inputs and outputs. The function module card edge connector fingers shall be gold-over-nickel-over-copper plated to inhibit corrosion. Replacement of a function module shall not require the use of tools or the removal of any interface wires. There shall be no components associated with the function module mounted to the motherboard (passive backplane). All the function modules shall support central site computer access to the revision level of the module.

- j. DIGITAL MONITOR MODULE (DMM) - The digital monitor module shall accept 12 on/off or pulsed inputs of 12 to 30 volts AC or DC. Voltages from 100 to 300 volts AC or DC shall be accommodated with the use of an inline voltage converter device. Status reporting of the digital inputs shall have an accuracy of +/- 2 seconds, the accuracy being defined as time of an occurrence to actual time recorded by the central site computer. The digital monitor module shall not require interfacing relays to monitor 24 VDC, 115 VAC, 220 VAC or 480 VAC. The digital monitor module shall have LEDs to indicate: the status of each input point; receive communications; transmit communications; CPU fault; and power status. The configuration of the monitor points as alarm points, monitor points (pump run time monitors), or pulsed input points shall be operator changeable. The custom configuration of the digital monitor module shall not require any software or firmware changes in the remote terminal unit. Replacement of the digital monitor module shall trigger an automatic configuration of the new module by the central site computer (plug & play).

- k. DIGITAL CONTROL MODULE (DCM) - The digital control module shall provide for remote control of 8 independent 60 to 280 volt AC devices. The control relays shall be solid-state devices with zero crossover detection. Each control point shall be capable of driving a 0.5 amp load @ 280 volts AC (140 VA), with inrush current of 5 amps. The control module shall have the configurable capability to automatically shut down all outputs in the case of a power loss on any one of three phases. Operator intervention shall be required to restart a control point after a phase loss shutdown. Any discrete control point shall have the capability of being automatically controlled by any discrete monitor point, at the same RTU or at any other RTU. This shall be accomplished during configuration at the central site computer system and shall be available for an unlimited number of control points. The digital control module shall have LEDs to indicate: the status of each output point; receive communications; transmit communications; CPU fault; and power status. Replacement of the digital control module shall trigger an automatic configuration of the new module by the central site computer (plug & play)

- l. DIGITAL CONTROL/MONITOR MODULE (DCM) - The digital control/monitor module shall provide for remote control of four (4) independent 60 to 280 volt AC devices. The control relays shall be solid-state devices with zero crossover detection. Each control point shall be capable of driving a .5 amp load @ 280 volts AC (140 VA), with inrush current of 5 amps. Any discrete control point shall have the capability of being automatically controlled by any discrete monitor point, at the same RTU or at any other RTU. This shall be accomplished during configuration at the central site computer system and shall be available for an unlimited number of control points. The digital control/monitor module shall also accept eight (8) ON/OFF

inputs of 12 to 30 volts AC or DC. Voltages from 100 to 300 Volts AC or DC shall be accommodated with the use of an inline voltage converter device. Status reporting of these inputs shall have an accuracy of ± 2 seconds - accuracy being defined as time of an occurrence to actual time recorded by the central site computer. The module shall not require interfacing relays to monitor 24 VDC, 115 VAC, 220 VAC or 480 VAC. The configuration of the monitor points as alarm points or monitor points (pump run time monitors) shall be operator selectable. The configuration shall not require any software or firmware changes in the system. The digital control/monitor module shall have LEDs to indicate: the status of each output point; the status of each input point; receive communications; transmit communications; CPU fault; and power status. Replacement of the digital control/monitor module shall trigger an automatic configuration of the new module by the central site computer (plug & play).

- m. ANALOG MONITOR MODULE (AMM) - The analog monitor module shall monitor up to 4 analog inputs. The analog monitor module shall be capable of accepting 4-20 ma or 0-5 VDC on each of the inputs. The analog input shall have 12-bit accuracy. The analog monitor module shall have support-configurable reporting granularity and alarm thresholds. The configuration parameters shall be downloaded over the radio link from the central site computer. All the analog monitor module-configurable parameters shall be operator-controlled. The analog monitor module shall have 4 qualifier inputs to prevent alarms during conditions when alarms are not valid. The analog monitor module shall have LEDs to indicate: the status of each qualifier input point; receive communications; transmit communications; CPU fault; and power status. Software or firmware modifications to support the configuration shall not be accepted. The analog monitor module shall supply a 24 VDC power source for the 4-20 ma loops. Replacement of the analog monitor module shall trigger an automatic configuration of the new module by the central site computer (plug & play).
- n. ANALOG CONTROL MODULE (ACM) - The analog control module shall control up to 4 analog outputs. The analog control module shall be capable of producing 4-20 ma on each of the outputs, driving a 0 to 1000 ohm load. The analog output shall have 12-bit accuracy. Each analog control output shall have configurable engineering units. All the analog control module configurable parameters shall be operator controlled. The analog control module shall have LEDs to indicate: receive communications; transmit communications; CPU fault; and power status. Any analog control point shall have the capability of being automatically controlled by any analog monitor point, at the same RTU or at any other RTU. This shall be accomplished during configuration at the central site computer system and shall be available for an unlimited number of control points. Software or firmware modifications to support the configuration shall not be accepted. The analog control module shall supply a 24 VDC power source for the 4-20 ma loops. Replacement

of the analog control module shall trigger an automatic configuration of the new module by the central site computer (plug & play).

- o. ENCLOSURES - Each RTU shall be housed in a NEMA 4X-316 stainless steel enclosure, acid-dipped and painted white. The enclosure shall be sized to accommodate the plug-in modules needed to meet the requirements. All mounting hardware utilized shall be stainless steel. The enclosure shall be capable of being locked. The latches utilized to secure the door of each enclosure shall not require the use of a screwdriver to open or close.
- p. ANTENNA SUBSYSTEM - A high gain directional antenna shall be used to transmit and receive data at the Remote Terminal Units. The directional antennas shall have all welded aluminum elements, and a single radiator element connected to a type N female connector. Element connections utilizing nuts and bolts are not acceptable. The antennas shall meet or exceed the quality, reliability and performance of the RTA series as provided by Data Flow Systems, Inc. of Melbourne, Florida. When an antenna mast/pole is utilized, it shall be hot dipped galvanized for corrosion protection. All mounting hardware shall be made of stainless steel. The mast shall meet or exceed the quality and reliability of the AG20 manufactured by Rohn. The coax cable shall be the type that utilizes an inert semi-liquid compound to flood the copper braid. The coax cable shall be of the RG-8 construction type and have the RF-loss characteristic of foam flex. The coax cable shall meet or exceed the quality, reliability and performance of RTC 400 as supplied by Data Flow Systems, Inc. of Melbourne, Florida. Type N connectors shall be utilized at both ends of the coax. The Type N connectors shall be sealed with 3-inch sections of Alpha FIT321-1-0 sealant shrink tubing. The coax cable shall be secured to the mast/pole with EVA-coated 316 stainless steel cable ties. The cable ties shall meet or exceed the quality, reliability and performance of AE112 cable ties manufactured by Band-It. The RTU shall be protected from electrical surge or transients entering through the coaxial cable by use of a coaxial cable surge protector. The coaxial cable surge protector shall meet or exceed the quality, reliability and performance of the IS-B50LN-C2 manufactured by Polyphaser.
- q. WARRANTY - The system supplier shall warrant all hardware and SCADA software provided under this contract against all defects in material and workmanship for a period of one year. The system supplier shall warrant the SCADA software to be free of defects for as long as it is in operation by the owner. The system supplier shall also provide free SCADA Software updates for the life of the system. The function modules utilized in the remote terminal units shall carry an additional 2-year return-to-factory warranty. The 2-year return-to-factory warranty shall cover damage due to lightning and surge.
- r. SERVICE - The system supplier shall offer full factory support of the installed system through the use of factory-trained employees. The

Owner shall have 24 hour per day access to service personnel through a pager and/or cell phone.

- s. SPARES - One spare circuit board of each type utilized in master radio communications equipment and remote terminal units shall be supplied.

2.04 SPARE PARTS

- A. Obtain from the manufacturer(s) and provide the recommended critical spare parts as part of the work. The spare parts are the property of the Owner.
- B. All system spare parts and expendables, as required for a period of one (1) year, shall be included and maintained at the job site by the PICS supplier.

PART 3 - EXECUTION

3.01 INSTALLATION

- A. Install the PICS field instruments and control panels in strict accordance with the respective manufacturer's instructions and recommendations, in locations as shown on the Drawings, and as indicated on the installation details of the Drawings.
- B. Install all mechanical piping and fittings as well as in-line instruments supplied with and/or supplied for the PICS.

END OF SECTION

SECTION 13420

PICS SERVICES

Scope of Work:

- A. Supply and integration of Online chlorine analyzers for continuous monitoring of free or total residual chlorine in water in the Chlorine Contact Chamber.
- B. The Instrumentation and Control System shall be furnished by a single prequalified Process and Control System Integrator (PICS) 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. The PICS for this project is CEC/Wood.
- C. Services supplied by the PICS are:
 - 1. Provision of three chlorine analyzers – AIT-CL-1, AIT-CL-2 and AIT-BS-1 located at the Chlorine Contact Chamber including any necessary installation support, startup, and calibration.
 - 2. Provision of CL-PLC Panel including necessary PLC programming, installation support, and startup.
 - 3. Provision of NEMA 4X network communications panels at analyzers.
 - 3. Integration of chlorine analyzer signals into the existing SCADA control system including the addition of any necessary SCADA graphics, parameter adjustment, and trending.
 - 4. Provision of O&M Documentation for installed products.

CHLORINE MONITORING SYSTEM

- A. The Chlorine Monitoring system shall be a coordinated system of analyzers capable of monitoring chlorine levels at three (3) locations within the chlorine contact chamber.
 - 1. The AIT-CL-1 analyzer will collect samples from the head end of chamber 1 of the CCC via a sample pump to determine the necessary level of Sodium Hypochlorite needed. This information will be used to drive the proportional output of the Sodium Hypochlorite pumps.
 - 2. The AIT-CL-2 analyzer will collect samples from the mid-point of the CCC at the end of chamber number 3. This information will be used for reporting purposes.
 - 3. The AIT-BS-1 analyzer will collect samples from the head end of chamber number 6 of the CCC via a sample pump to determine the necessary level of Sodium Bisulfate needed. This information will be used to drive the proportional output of the Sodium bisulfate pumps.
- B. The chlorine analyzers will be handrail mounted on aluminum back plates with three-sided aluminum sunshields and necessary surge protection devices.

- C. The new CL-PLC panel will be located in the chemical building and will provide all necessary power, control and networking needed for the Chlorine Analyzers. The CL-PLC panel will also provide analog signals to drive the Sodium Hypochlorite and Sodium Bisulfate pumps. The CL-PLC panel will contain but not be limited to the following:
 - 1. Rockwell CompactLogix PLC with analog and discrete signals to control Sodium Hypochlorite and Sodium bisulfate pumps.
 - 2. Surge-protected circuits and all necessary devices to provide power to the three chlorine analyzers and communications modules.
 - 3. Ethernet switch and fiber optic patch panel
- D. Provide network communications via a new fiber optic link between CL-PLC and PLC-4. Power and Network communications for AIT-CL-1, AIT-CL-2, & AIT-BS-1 will be provided via new conduit runs from CL-PLC.
- E. Provide an enclosed NEMA 4X network communications panel to be mounted adjacent to each chlorine analyzer converting media from fiber optic to CAT6.

CHLORINE ANALYZER

PART 1 GENERAL

- 1.1 Section Includes:
 - A. Online chlorine analyzer for continuous monitoring of free or total residual chlorine in water.
- 1.2 Measurement Procedures
 - A. The method of measuring free or total chlorine will be colorimetric. Instrument chemistry will employ N, N-diethyl-p-phenylenediamine (DPD) method.
- 1.3 Alternates
 - A. Other methods of chlorine measurement such as amperometric, potentiometric, and iodometric that employ electrodes or other electrochemical techniques are not acceptable.
- 1.4 System Description
 - A. Performance Requirements
 - 1. Measurement range:
 - 0 to 10 mg/L (ppm) free or total residual chlorine
 - 2. Accuracy
 - $\pm 5\%$ of reading or ± 0.04 mg/L (ppm), whichever is greater from 0 to 5 mg/L as Cl_2 ; $\pm 10\%$ from 5 to 10 mg/L as Cl_2
 - 3. Precision
 - 5% of reading or 0.01 mg/L (ppm), whichever is greater
 - 4. Lower Limit of Detection (LOD)
 - 0.03 mg/L (ppm)
 - 5. Resolution
 - 0.01 mg/L (ppm)
 - 6. Repeatability
 - 5% of reading or 0.01 mg/L (ppm), whichever is greater
 - 7. Cycle Time

- 2.5 minutes

1.5 Certifications

- A. Complies with US EPA 40 CFR 141.74
- B. CE compliant for conducted and radiated emissions CISPR 11 (Class A limits), EMC Immunity EN 61326-1 (Industrial limits), and EN 50581
- C. North America: FCC Supplier's Declaration of Conformance, IEC/EN 60529, ICES-003
- D. ACMA RCM
- E. South Korea KC Certificate

1.6 Environmental Requirements

- A. Operational Criteria
 - 1. Sample flow rate
 - 60 to 200 mL/minute through the analyzer
 - 2. Sample Filtration
 - Y-strainer with 40-mesh screen or higher
 - 3. Inlet Pressure
 - 4.5 to 75 psig (0.3 to 5.2 bar) supplied to Y-strainer; 1.5 to 5 psig (0.1 to 0.3 bar) supplied to analyzer
 - 4. Sample temperature
 - 41 to 104 °F (5 to 40 °C)
 - 5. Operating temperature
 - 41 to 104 °F (5 to 40 °C)
 - 6. Operating humidity
 - 0 to 90% non-condensing relative humidity

1.7 Warranty

- A. The product includes a one-year warranty from the date of shipment (EU: 2 years)

1.8 Maintenance Service

- A. Scheduled Maintenance
 - 1. Monthly
 - Reagent replacement
 - Cell cleaning
 - 2. Semi-annually
 - Analyzer tubing replacement

PART 2 PRODUCTS

2.1 Manufacturer

- A. Hach Company, Loveland, CO
 - 1. Model CL17sc Online Chlorine Analyzer

2.2 Manufactured Unit

- A. The CL17sc Online Chlorine Analyzer consists of a sample and reagent pump, measurement cell, and if chosen can be shipped with buffer and indicator solutions.

2.3 Equipment

A. Online Chlorine Analyzer

1. Housed in an IP66-rated enclosure.
2. Capable of measuring free or total residual chlorine by changing the tubing and indicator and buffer solutions.
3. Measurements are taken every 2.5 minutes and results are displayed on a controller display or web-enabled display in the range of 0 to 10 mg/L.
4. Utilizes a built-in flow meter.
5. Real-time flow rate is measured when sample is flowing through the analyzer and results are displayed on a controller display or web-enabled display in mL / min.
6. Connects to a standard controller, which controls and provides power to the analyzer.
7. Performs a blank reference measurement check between analysis points to compensate for sample color, turbidity, and changes in light intensity due to voltage fluctuations or light source aging.
8. Operates with an LED light source at a peak wavelength of 510nm.
9. Capable of operating unattended for 30 days between chemical reagent changes and measurement cell cleaning.
10. Utilizes a three-color status light to indicate operating status.
11. Utilizes three measurement cycle indicator lights to display the phase of the measurement cycle being performed.
12. Has a colorimeter measurement cell window for viewing sample inside cell.
13. Provides step-by-step, on-screen instructions for all routine maintenance activities, including reagent changes, tubing changes, and cell cleanings.
14. When connected to a cloud-based standard controller is capable of providing remote monitoring of measurement and instrument data on a web-enabled device.

B. Standard Controller

1. Provide an SC controller for online chlorine analyzer operation as detailed in.
2. Options for communication outputs determined by controller selection.

2.4 Components

A. Standard Equipment

1. CL17sc Online Chlorine Analyzer
2. Installation kit
3. Tubing kit
4. User manual

B. Dimensions: 12.9 x 13.5 x 7.0 inches (329 x 342 x 177 mm)

C. Shipping weight: 9 lbs (4.1 kg)

2.5 Instrument Options

A. Required

1. Standpipe installation kit

2.6 Optional Accessories

A. Required

1. Cell cleaning kit
2. Calibration verification kit

PART 3 EXECUTION

3 Preparation

1. Mounting
 - The CL17sc Online Chlorine Analyzer can be wall mounted only.
2. Required Clearances
 - Horizontal: 15.28 in (388 mm), 25.96 inches (660 mm) ideal
 - Vertical: 13.5 inches (342 mm), if using standpipe installation kit leave additional 24 inches (610 mm) above top of analyzer
 - Depth: 17.75 inches (451 mm)
3. Sample inlet
 - 0.25 inch OD polyethylene tubing, quick-disconnect fitting
4. Sample outlet
 - 0.50 inch ID flexible tubing
5. Overflow drain
 - 0.50 inch ID flexible tubing
6. Air purge quick connect
 - Optional with 3/8-inch quick-connect fitting and tubing; 0.003 m³/minute at 20 psig maximum

3.2 Installation

- A. Contractor will install the analyzer in strict accordance with the manufacturer's instructions and recommendation.
- B. Manufacturer's representative will include a half-day of start-up service by a factory-trained technician, if requested.
 1. Contractor will schedule a date and time for start-up.
 2. Contractor will require the following people to be present during the start-up procedure.
 - General contractor
 - Electrical contractor
 - Hach Company factory trained representative
 - Owner's personnel
 - Engineer

3.3 Manufacturer's Service and Start-Up

- A. Contractor will include the manufacturer's services to perform start-up on instrument to include basic operational training and certification of performance of the instrument.
- B. Contractor will include a manufacturer's Service Agreement that covers all the manufacturer's recommended preventative maintenance, regularly scheduled calibration and any necessary repairs beginning from the time of equipment startup through to end

user acceptance / plant turnover and the first 12 months of end-user operation post turnover.

- C. Items A and B are to be performed by manufacturer's factory-trained service personnel. Field service and factory repair by personnel not employed by the manufacturer is not allowed.
- D. Use of manufacturer's service parts and reagents is required. Third-party parts and reagents are not approved for use.

SENSOR CONTROLLER

PART 4 GENERAL

4.1 Section includes:

- A. A multi-parameter controller that works with digital sensors.
- B. Optional in predictive diagnostics capability which increases available operation time for enabled sensors. The predictive diagnostics produces alerts for upcoming maintenance tasks by monitoring the instrument's internal components and tracking service requirements. When paired with an enabled sensor, the controller will display status indicators for each sensor with predictive diagnostics capability.

4.2 Measurement Procedures

- A. Microprocessor-based sensor controller.
- B. Change digital sensors connected to the controller by unplugging and plugging in sensors as necessary.
- C. The controller accepts up to eight sensor inputs from the following digital sensors in any combination
 1. Hach 1200-S sc Digital pH sensor
 2. Hach 1720E sc Turbidimeter
 3. Hach 3400 sc Contacting Conductivity Sensor
 4. Hach 3700 sc Electrodeless Conductivity Sensor
 5. Hach 5740 sc Membrane Dissolved Oxygen Sensor
 6. Hach 9184 sc Free Chlorine Amperometric Sensor
 7. Hach 9185 sc Ozone Amperometric Sensor
 8. Hach 9187 sc Chlorine Dioxide Amperometric Sensor
 9. Hach Amtax sc Ammonia Analyzer
 10. Hach A-ISE Ammonium Sensor
 11. Hach AN-ISE combination Ammonium and Nitrate Sensor
 12. Hach ClF10 Free Chlorine Amperometric Sensor
 13. Hach ClT10 Total Chlorine Amperometric Sensor
 14. Hach Digital PC sc and RC sc Combination pH and ORP Sensors
 15. Hach Evita Insitu 4100 sc Ammonium and Orthophosphate Sensors
 16. Hach FilterTrak 660 sc Laser Nephelometer
 17. Hach FP360 Oil in Water Sensor
 18. Hach LDO Luminescent Dissolved Oxygen Sensor
 19. Hach LDO Model 2 Luminescent Dissolved Oxygen Sensor
 20. Hach NH₄D sc Ammonium Sensor
 21. Hach N-ISE Nitrate Sensor

- 22. Hach NO₃D Nitrate Sensor
 - 23. Hach Nitratax sc Nitrate Sensor
 - 24. Hach pHd sc Differential pH and ORP Sensors
 - 25. Hach Phosphax sc Low and High Range Phosphate Analyzer
 - 26. Hach Solitax sc Turbidity and Suspended Solids Sensor
 - 27. Hach Sonatax sc Sludge Level Probe
 - 28. Hach Surface Scatter 7 sc High Range Turbidimeter
 - 29. Hach TSS sc Suspended Solids/Turbidity Sensor
 - 30. Hach Ultraturb sc Turbidimeter (Including *plus* and *seawater* versions)
 - 31. Hach UVAS sc SAC sensor
 - D. Probe modules of the controller can be networked together to accommodate more than eight sensors on one network
 - 1. Only one display module is required/accepted for the entire network of probe modules.
- 4.3 Alternates
- A. Parameter specific controllers that do not allow changing parameter configurations in the field are unacceptable.
 - B. Multi-parameter controllers that require field change-out of boards and/or EPROM are unacceptable.
 - C. Other controllers that do not have the option for predictive diagnostic capabilities on connected instruments are unacceptable.
- 4.4 System Description
- A. Performance Requirements:
 - 1. When paired with an enabled sensor, the overall status of the sensor performance is displayed as a percentage value via a measurement indicator
 - 2. When paired with an enabled sensor, the overall time remaining until maintenance tasks are due for the sensor is displayed in days
- 4.5 Certifications
- A. EMC: CE compliant for conducted and radiated emissions CISPR 11 (Class A limits), EMC Immunity EN 61326-1 (Industrial limits)
 - B. Safety: General Purpose UL/CSA 61010-1 with cTUVus safety mark
 - C. Australian C-TICK and Korean KC Markings
 - D. FCC ID QIPMC56/IC ID 267W-MC56
 - E. IP65 dust and water ingress ratings
- 4.6 Environmental Requirements
- A. Operational Criteria
 - 1. Operating temperature: -4 to 131 °F (-20 to 55°C)
 - 2. Storage Temperature: -4 to 158 °F (-20 to 70°C)
 - 3. Humidity Requirements: 0 to 95% relative humidity, non-condensing
- 4.7 Warranty
- A. Warranted for 12 months from the date of shipment from manufacturer's defects

- 4.8 Maintenance Service
- A. Unscheduled Maintenance
 - 1. Clean controller keypad
 - 2. Calibrate mA output signals

PART 5 PRODUCTS

- 5.1 Manufacturer
- A. Hach Company, Loveland, CO
 - 1. Hach Model sc1000 Multi-parameter Universal Controller
- 5.2 Manufactured Unit
- A. The sc1000 controller is microprocessor-based and is housed in an IP65 rated enclosure.
 - B. The sc1000 controller is a modular system consisting of:
 - 1. Display Module
 - 2. Probe Module (separate CSI specifications are available for this part of the unit)
 - C. The sc1000 controller has up to eight connections for Hach digital sensors.
- 5.3 Equipment
- A. The controller is available with the following power requirements:
 - 1. AC powered: 100 to 240 Vac $\pm 10\%$, 50/60 Hz; maximum 1000 VA, Category II
 - 2. 24 VDC powered: 18 to 30 VDC, maximum 75 W
 - B. The controller uses a menu-driven operation system.
 - C. The controller display is a $\frac{1}{4}$ VGA graphical backlit TFT Color Glass/Glass-Touch Screen
 - 1. Screen size is 4.5 x 3.4 in (11.4 x 8.6 cm)
 - 2. Screen resolution is 320 x 240 pixels
 - D. The controller is equipped with a real-time clock.
 - E. The controller is equipped with two security levels.
 - F. The controller is equipped with a data logger that can output to a storage card or directly to a computer hard drive.
 - G. The controller can be equipped with an SD card reader for data download and controller software upload.
 - H. The controller can have software updated through a direct network connection
 - I. Four electromechanical, UL rated, SPDT relays (Form C) can be installed for user-configurable contacts rated 100 to 250 Vac, 5 Amp at 30 VDC resistive maximum.
 - 1. The following can be programmed:
 - Alarm
 - Feeder Control
 - Two Point Control
 - Pulse Width Modulation Control
 - Frequency Control
 - Timer
 - System Error
 - 2. The following can be assigned:
 - Primary value measurement I
 - Secondary value measurement I

- Tertiary value measurement I
 - Quaternary value measurement I
 - Primary value Measurement II
 - Secondary value measurement II
 - Tertiary value measurement II
 - Quaternary value measurement II
 - Real time clock
 - Calculated values
- J. The controller can be equipped with up to twelve 0/4-20mA outputs with a maximum impedance of 500 ohms per probe module.
1. The following can be programmed:
- Alarms:
 - 1) Low alarm point
 - 2) Low alarm point deadband
 - 3) High alarm point
 - 4) High alarm point deadband
 - 5) Off delay
 - 6) On delay
 - Controls:
 - 1) Linear
 - 1) PID
 - 2) High/Low Phasing
 - 3) Set-Point
 - 4) Deadband
 - 5) Overfeed timer
 - 6) Off Delay
 - 7) On Delay
- K. The probe module MUST be equipped with the following form of communication:
Modbus TCP/IP with the use of a GSM/GPRS modem
NOTE: SURGE SUPPRESSION MUST BE PROVIDED BY PICS SUPPLIER
- L. All user settings of the controller are retained for 10 years in non-volatile EEPROM memory.
- M. The controller is equipped with a system check for:
1. Power up test (monitoring and shutdown)
 2. Total power draw
 3. Memory devices
 4. Temperature mother board
- N. The controller has the option of graphical measurement that tracks measurement values over time.

5.4 Components

- A. Standard Equipment
1. sc1000 Display Module
 2. User Manual
- B. Dimensions: 9.5 x 2 x 7.8 in (242 x 50 x 200 mm)
- C. Weight: 5.1 lbs (2.3 kg)

5.5 Accessories

A. Required

1. sc1000 Probe Module
2. Mounting hardware
3. Sun shield
4. Internal network connector and cables
5. UDG1000™ Universal Data Gateway software

PART 6 EXECUTION

6.1 Preparation

A. Mounting

1. Display module is mounted directly to the sc1000 probe module and connected via a plug-and-play connection. The display module can be removed and transported to be used with multiple probe modules.

6.2 Installation

- A. Contractor will install the analyzer in PICS specified locations and per guidance provided by the PICS. Devices shall be installed in strict accordance with the manufacturer's instructions and recommendation.
- B. Manufacturer's representative will include requisite start-up services by a factory-trained technician.
 1. Contractor will schedule a date and time for start-up.
 2. Contractor will require the following people to be present during the start-up procedure.
 - General contractor
 - Electrical contractor
 - Hach Company factory trained representative
 - Owner's personnel
 - Engineer
- C. The following Services are **excluded** from the PICS scope of supply:
 - Wire, conduit and electrical connections
 - Mounting and associated fasteners for mounting and installing equipment and devices.

6.3 Manufacturer's Service and Start-Up

- A. Contractor will include the manufacturer's services to perform start-up on instrument to include basic operational training and certification of performance of the instrument.
- B. Contractor will include a manufacturer's Service Agreement that covers all the manufacturer's recommended preventative maintenance, regularly scheduled calibration and any necessary repairs beginning from the time of equipment startup through to end user acceptance / plant turnover and the first 12 months of end-user operation post turnover.

- C. Items A and B are to be performed by manufacturer's factory-trained service personnel. Field service and factory repair by personnel not employed by the manufacturer is not allowed.
- D. Use of manufacturer's service parts and reagents is required. Third-party parts and reagents are not approved for use.

END OF SECTION

SECTION 16015 ELECTRICAL REFERENCE SYMBOLS

PART 1 - GENERAL

1.01 SYMBOLS

- A. The foregoing "General Requirements" form a part of this contract and all the requirements set forth shall be binding upon this subcontractor.
- B. In general, the symbols used on the drawings conform to the Standard Symbols of the Institute of Electrical and Electronic Engineers with the exception of special systems or agencies as hereinafter noted.
1. Special Symbols as shown in schedules or legends.

1.02 ABBREVIATIONS

- A. The following abbreviations or initials are used:

A/C	Air Conditioning
AC	Alternating Current
AFF	Above Finished Floor
AFG	Above Finished Grade
AHU	Air Handling Unit
AIC	Amps Interrupting Capacity
AMP	Ampere
ANSI	American National Standards Institute
ATS	Automatic Transfer Switch
AUX	Auxiliary
AWG	American Wire Gauge
C	Conduit
CB	Circuit Breaker
CBM	Certified Ballast Manufacturers
Clg	Ceiling
COND	Conductor
Conn	Connection
CT	Current Transformer
CU	Copper
DO	Draw Out
DN	Down
DPST	Double Pole Single Throw
EC	Electrical Contractor
EMT	Electric Metallic Tubing
EO	Electrically Operated

FLA	Full Load Amperes
FM	Factory Mutual
FT	Feet
GFI	Ground Fault Interrupting
Gnd	Ground
Horiz	Horizontal
Hp	Horsepower
Hr	Hour
IEEE	Institute of Electrical and Electronic Engineers
IES	Illuminating Engineering Society
In	Inches
IPCEA	
JB	Junction Box
KV	Kilovolt
KVA	Kilo-Volt-Amps
KW	Kilowatts
LBS	Pounds
Max	Maximum
MCB	Main Circuit Breaker
MCP	Motor Circuit Protector
Min	Minimum
MLO	Main Lugs Only
MTD	Mounted
N	Neutral
NEC	National Electric Code
NECA	National Electrical Contractors
NEMA	
NFPA	National Fire Protection Association
NIC	Not in Contract
NF	Non-Fused
No	Number
/O	Phase
OL	Overload
OLS	Overloads
OSHA	Occupational Safety and Health Act
P	Pole
PB	Pullbox
PNL	Panel
PR	Pair
Pri	Primary
PT	Potential Transformer
PVC	Polyvinyl Chloride

RMS	Root-Means-Square
Recept.	
SCA	Short Circuit Amps
SH	Shielded
S/N	Solid Neutral
SPST	Single Pole Single Throw
SW	Switch
SWBD	Switchboard
TEL	Telephone
TYP	Typical
T/P	Twisted Pair
Temp	Temperature
UL	Underwriters Laboratories
V	Volt
W	Wire
WP	Weatherproof

END OF SECTION

SECTION 16025
CODES, FEES, AND STANDARDS

PART 1 - GENERAL

1.01 CODES AND FEES

- A. The foregoing "General Requirements" form a part of this contract and all the requirements set forth shall be binding upon this subcontractor.
- B. Install in accordance with latest edition of the National Electric Code and the regulations of governing local, State, County and other applicable codes. Pay for all required licenses, fees and inspections.

1.02 STANDARDS

- A. All materials shall be new and free of defects, and shall be U.L. listed, bear the U.L. label or be labeled or listed with an approved, nationally recognized Electrical Testing Agency. Where no labeling or listing service is available for certain types of equipment, test data shall be submitted to prove to the Engineer that equipment meets or exceeds available standards.

END OF SECTION

SECTION 16060
ELECTRICAL CONNECTION FOR EQUIPMENT

PART 1 - GENERAL

- A. Type of electrical power connections specified in this section includes the following:
 - 1. To motors.
 - 2. To motor starters.
 - 3. From motor starters to motors.
 - 4. To lighting fixtures.
 - 5. To transformers, rheostats, and similar current adjustment features of equipment.
 - 6. To ground.
 - 7. To master units of communication, signal, alarm, clock, public address, sound, and video systems.
- B. Motor starters and controls not furnished integrally with equipment are specified in applicable Section XVI.
- C. Refer to Section XIII - Mechanical Equipment for motor starters and controls furnished integrally with equipment; not work of this section.
- D. Junction boxes and disconnect switches required for motors and other electrical units of equipment are specified in applicable Section XVI.

PART 2 - QUALITY ASSURANCE

2.01 NEC COMPLIANCE.

- A. Comply with applicable portions of NEC as to type products used and installation of electrical power connections (terminals and splices), for junction boxes, motor starters, and disconnect switches.
- B. NEMA Compliance. Comply with applicable portions of NEMA standards pertaining to electrical connections for equipment.
- C. ANSI Compliance. Comply with applicable ANSI standards pertaining to products and installation of electrical connections.
- D. Splices and terminations of types indicated.

2.02 METAL CONDUIT, TUBING AND FITTINGS

- A. General. Provide metal conduit, tubing and fittings of types, grades, sizes and weights (wall thicknesses) indicated for each type service. Where types and grades are not indicated, provide proper selection as determined for installer to fulfill wiring requirements; comply with NEC requirements for raceways. Provide products complying with Section XVI basic materials and methods section "Raceways", and in accordance with the following listing of metal conduit, tubing and fittings:
 - 1. Rigid Steel Conduit Flexible Metal Conduit Fittings.
 - 2. Rigid Metal Conduit Fittings Liquid-Tight Flexible Metal Conduit.
 - 3. Electrical Metallic Tubing Liquid-Tight Flexible Metal Conduit Fittings.
 - 4. Flexible Metal Conduit.

2.03 WIRE, CABLE AND CONNECTORS

- A. General. Provide wires, cables and connectors complying with Section XVI basic materials and methods section "Wire and Cables."
- B. Wire. Unless otherwise indicated, provide wires/conductors for electrical connections which match wires/conductors of wiring of wiring supplying power.
- C. Connectors and Terminals. Provide electrical connectors and terminals as recommended by connector and terminal manufacturer for intended applications.

2.04 ELECTRICAL CONNECTION ACCESSORIES

- A. Provide electrical insulating tape, heat-shrinkable insulating tubing and boots, solder, electrical soldering flux, wire nuts and cable ties as recommended for use by accessories manufacturers for type services indicated.

PART 3 - EXECUTION

3.01 INSTALLATION OF ELECTRICAL CONNECTIONS

- A. Install electrical connections as indicated; in accordance with connector manufacturer's written instructions and with recognized industry practices, and complying with requirements of NEC and NECA's "Standard of Installation" to ensure that products fulfill requirements.
- B. Connect electrical power supply conductors to equipment conductors in accordance with equipment manufacturer's written instructions and wiring diagrams. Wherever possible, mate and match conductors of electrical connections for proper interface between electrical power supplies and installed equipment.
- C. Coordinate installation of electrical connections for equipment with equipment installation work.
- D. Cover splices with electrical insulation equivalent to, or of higher rating, than insulation on conductors being spliced.

- E. Prepare cables and wires by cutting and stripping covering armor, jacket, and insulation properly to ensure uniform and neat appearance where cables and wires are terminated.
- F. Trim cables and wires as short as practical and arrange routing to facilitate inspection, testing and maintenance.
- G. Tighten wire-binding connector screws firmly.
- H. Provide flexible conduit for motor connections and for other electrical equipment connections where subject to movement and vibration.
- I. Provide liquid-tight flexible conduit for connection of motors and for other electrical equipment where subject to movement and vibration, and also were subjected to one or more of the following conditions:
 - 1. Exterior location.
 - 2. Moist or humid atmosphere where condensate can be expected to accumulate.
 - 3. Corrosive atmosphere.
 - 4. Subjected to water spray.
 - 5. Subjected to dripping oil, grease, or water.
- J. Refer to basic materials and methods section for identification of electrical power supply conductor terminations with markers approved as to types, colors, letter and marker sizes, by Architect/Engineer. Affix markers at each point of termination, as close as possible to each point of connection.

END OF SECTION

SECTION 16110 RACEWAYS AND CONDUITS

PART 1 - GENERAL

1.01 DESCRIPTION OF WORK

- A. Extent of raceways is indicated by drawings and schedules. Types of raceways in this section include the following:
 - 1. Electrical Metallic Tubing
 - 2. Flexible Metal Conduit
 - 3. Intermediate Metal Conduit
 - 4. Liquid-Tight Flexible Metal Conduit
 - 5. Rigid Metal Conduit
 - 6. Rigid Nonmetallic Conduit
 - 7. Surface Metal Raceways
- B. NEMA Compliance. Comply with applicable requirements to NEMA standards pertaining to raceways.
- C. UL Compliance and Labeling. Comply with provisions of UL safety standards pertaining to electrical raceway systems; and provide products and components which have been UL listed and labeled.
- D. NEC Compliance. Comply with requirements as applicable to construction and installation of raceway systems.

1.02 METAL CONDUIT AND TUBING

- A. General. Provide metal conduit, tubing and fittings of types, grades, sizes and weights (wall thicknesses) for each service indicated. Where types and grades are not indicated, provide proper selection determined by installer to fulfill wiring requirements, and comply with applicable portions of NEC for raceways.
 - 1. Rigid Steel Conduit. FS WW-C-0581 and ANSI C80.1.
 - 2. Rigid Metal Conduit Fittings. FS W-F-408.
 - 3. Use Type 1 Fittings for rain-tight connections.
 - 4. Use Type 1 Fittings for concrete tight connections.
 - 5. Use Type 3 Fittings for other miscellaneous connections.
 - 6. Electrical Metallic Tubing (EMT). FS WW-C-563 and ANSI C80.3.

NOTE: IN GENERAL EMT RACEWAYS SHALL NOT BE USED ON THIS PROJECT

- B. EMT Fittings. FS W-F-408.
 - 1. Use Type 1 Fittings for rain-tight connections.
 - 2. Use Type 2 Fittings for concrete tight connections.
 - 3. Use Type 3 Fittings for other miscellaneous connections.

- C. Flexible Metal Conduits. FW WW-C-566, of the following type:
 - 1. Type 2. Zinc-coated steel.
 - 2. Flexible Metal Conduit Fittings. FS W-F-406, Type 1, Class 1, and Style A.
 - 3. Liquid-Tight Flexible Metal Conduit. Provide liquid-tight flexible metal conduit; construct of single strip, flexible, continuous, interlocked, and double-wrapped steel; galvanized inside and outside; coat with liquid-tight jacket of flexible polyvinyl chloride (PVC).

1.03 WIREWAYS

- A. General. Provide electrical raceways of types, grades, sizes, weights (wall thicknesses), number of channels, for each type service indicated. Provide complete assembly of raceway including, but not necessarily limited to, couplings, offsets, elbows, expansion joints, adapters, hold-down straps, end caps and other components and accessories as needed for complete system. Where types and grades are not indicated, provide proper selection as determined by installer to fulfill wiring requirements, and comply with applicable provisions of NEC for electrical raceways.

PART 2 - PRODUCTS

2.01 INSTALLATION OF ELECTRICAL RACEWAYS

- A. Install electrical raceways where indicated; in accordance with manufacturer's written instructions, applicable requirements of NEC and NECA "Standard of Installation", and comply with recognized industry practices.
- B. Coordinate with other work, including metal can concrete deck work, as necessary to interface installation of electrical raceways and components with other work.
- C. Coat under floor metal raceways with bitumastic type protective coating prior to placing concrete.
- D. Level and square raceway runs, and install at proper elevations/heights.
- E. Complete installation of electrical raceways before starting installation of cables/wires within raceways.
- F. Install PVC-coated conduit and fittings in highly corrosive atmospheres, and elsewhere as indicated.
- G. Install flexible conduit for motor connections and for other electrical equipment connections where subject to movement and vibration.
- H. Install liquid-tight flexible conduit for connection of motors and for other electrical equipment where subject to movement and vibration and also where subject to one or more of the following conditions:

1. Exterior location, moist or humid atmosphere where condensate can be expected to accumulate, corrosive atmosphere, subjected to water spray, subjected to dripping oil, grease, or water.
- I. Wherever possible, install horizontal raceway runs above water and steam piping.

END OF SECTION

SECTION 16120
WIRES AND CABLES

PART 1 - GENERAL

1.01 DESCRIPTION OF WORK

- A. Extent of electrical wire and electrical cable work is indicated by drawings and schedules.
- B. Types of wire, cable and connectors in this section include the following:
 - 1. Copper Conductors
 - 2. Tab Type Connectors
 - 3. Split-Bolt Connectors
- C. Applications for wire, cable and connectors required for project as follows:
 - 1. Power Distribution circuitry
 - 2. Lighting Circuitry
 - 3. Appliance and Equipment circuitry
 - 4. Motor-Branch Circuitry

PART 2 - QUALITY ASSURANCE

2.01 NEC COMPLIANCE

- A. Comply with NEC as applicable to construction and installation of electrical wire, cable and connectors.
- B. UL Compliance. Comply with UL standards pertaining to wire, cable and connectors.
- C. UL Labels. Provide electrical wires, cables and connectors which have been UL listed and labeled.
- D. NEMA/ICEA Compliance. Comply with applicable portions of NEMA/Insulated Cable Engineers Association standards pertaining to material, construction and testing of wire and cable.
- E. ANSI/ASTM. Comply with applicable portions of ANSI/ASTM standards pertaining to construction of wire and cable.

PART 3 - EXECUTION

3.01 ACCEPTABLE MANUFACTURERS

- A. Available Manufacturers. Subject to compliance with requirements, manufacturers offering products which may be incorporated in the work include, but are not limited to, the following:
- B. Manufacturers. Subject to compliance with requirements, provide products of one of the following (for each type of wire, cable and connector):
- C. Wire and Cable
 - 1. General Cable Corporation
 - 2. Southwire Company
 - 3. Triangle PWC, Inc.
- D. Connectors
 - 1. AMP, Inc.
 - 2. Burndy Corporation
 - 3. Ideal Industries, Inc.
 - 4. Thomas and Betts Company

3.02 WIRE, CABLE AND CONNECTORS

- A. General. Except as otherwise indicated, provide wire, cable and connectors of manufacturer's standard materials, as indicated by published product information; designed and constructed as recommended by manufacturer, and as required for installation.
- B. Wire. Provide factory-fabricated wire of sizes, ratings, materials and types indicated for each service. Where not indicated, provide proper selection as determined by installer to comply with project's installation requirements and NEC standards. Select from the following types, materials, conductors, configurations, insulation and coverings:
 - 1. UL Type: MTW
 - 2. UL Type: THHN
 - 3. UL Type: THWN
- C. Material: Copper
 - 1. Conductors: Solid (AWG 20 to AWG 8 only).
 - 2. Conductors: Concentric-lay-stranded (standard flexibility).
 - 3. Outer Covering: Thermoplastic.
- D. Cable. Provide factory-fabricated, metal connectors of sizes, ratings, materials, types and classes as indicated for each service. Where not indicated, provide proper selection as determined by installer to comply with installation requirements and NEC standards.

3.03 CONNECTORS

- A. Provide factory-fabricated, metal connectors of sizes, ratings, material, types and classes as indicated for each service. Where not indicated, provide proper selection as determined by installer to comply with installation requirements and NEC standards. Select from the following types, classes, kinds and styles.
 - 1. Type: Pressure.
 - 2. Class: Non-insulated.
 - 3. Kind: Copper (for Cu to Cu connection).
 - 4. Style: Butt connection.
 - 5. Style: Split-bolt parallel connection.
 - 6. Style: Tap connection.
 - 7. Style: Pigtail connection.

PART 4 - INSTALLATION

4.01 GENERAL

- A. Install electrical cables, wires and connectors as indicated, in compliance with manufacturer's written instruction, applicable requirements of NEC and NECA's "Standard of Installation", and in accordance with recognized industry practices.
- B. Coordinate cable and wire installation work with electrical raceway and equipment installation work, as necessary for proper interface.
- C. Use pulling compound or lubricant, where necessary; compound must not deteriorate conductor or installation.
- D. Keep conductor splices to minimum.
- E. Install splices and tapes which have mechanical strength and insulation rating equivalent-or-better than conductor.
- F. Field Quality Control. Prior to delivery, test cable and wire for continuity of circuitry, and also for short circuits. Correct malfunctions when detected.
- G. Subsequent to wire and cable hook-ups, energize circuitry and demonstrate functioning in accordance with requirements.

END OF SECTION

SECTION 16165
PANEL BOARDS

PART 1 - GENERAL

1.01 DESCRIPTION OF WORK

- A. Extent of panel board, load-center, and enclosure work, including cabinets and cut out boxes as indicated by drawings and schedules.
- B. Types of panel boards and enclosures in this section include the following:
 - 1. Lighting and appliance panel boards.
- C. Refer to other Section XIII sections for cable/wire, connectors and electrical raceway work required in conjunction with panel board and enclosures provide units which have been UL-listed and labeled.
- D. NEC Compliance. Comply with NEC as applicable to installation of panel boards, cabinets, and cutout boxes.

1.02 SUBMITTALS

- A. Products Data.
 - 1. Submit manufacturer's data including specifications, installation instruction and general recommendations, for each type of panel board required. Include data substantiating that units comply with requirements. All panel boards to have ninety-eight percent (98%) conductivity copper bussing, tin plated.
- B. Shop Drawings.
 - 2. Submit dimensioned drawings of panel boards and enclosures showing accurately scaled layouts of enclosures and required individual panel board devices, including but not necessarily limited to, circuit breakers, fusible switches, fuses, ground fault circuit interrupters and accessories.

PART 2 - PRODUCTS

2.01 Acceptable Manufacturer

- A. Submit to compliance with requirements; provide products of one of the following (for each type of panel board and enclosure):
 - 1. General Electric Company
 - 2. Square D Company

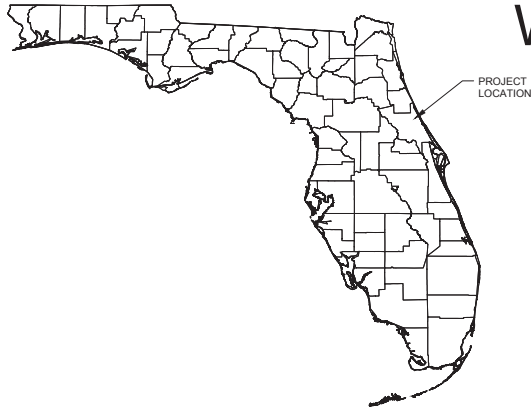
PART 3 - EXECUTION

1.01 INSTALLATION OF PANEL BOARDS

A. General.

1. Install panel boards and enclosures where indicated, in accordance with manufacturer's written instruction, applicable requirements of NEC and NEMA's "Standard of Installation", and in compliance with recognized industry practices to ensure that products fulfill requirements.
2. Coordinate installation of panel boards and enclosures with cable and raceway installation work.
3. Anchor enclosures firmly to walls and structural surfaces, ensuring that they are permanently and mechanically secure.
4. Provide electrical connections within enclosures.
5. Fill out panel board's circuit directory card upon completion of installation work.

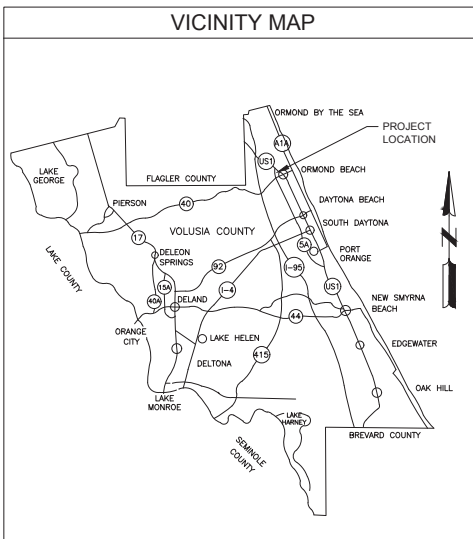
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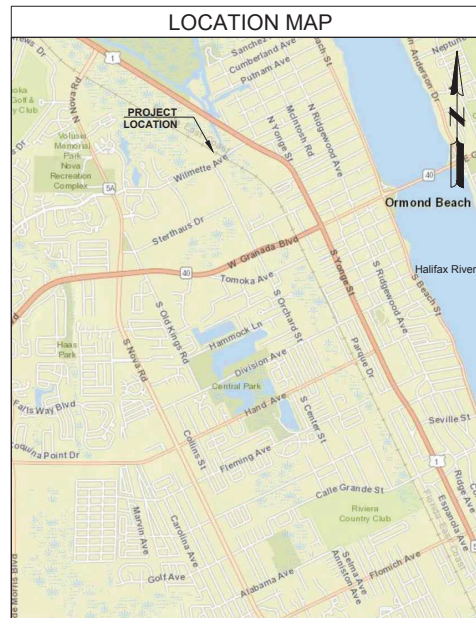
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CITY OF ORMOND BEACH WRF CHLORINE CONTACT IMPROVEMENTS

BID #
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JANUARY 2021



VICINITY MAP



LOCATION MAP

SHEET INDEX

SHEET NUMBER	SHEET TITLE
G-001	COVER SHEET
G-101	SITE PLAN
G-102	CHLORINE CONTACT CHAMBER PLAN VIEW
G-301	SECTION VIEWS
G-501	DETAILS
G-502	MIXER DETAILS

CITY OFFICIALS

BILL PARTINGTON
JOYCE SHANAHAN

MAYOR
CITY MANAGER

COMMISSIONERS:
DWIGHT SELBY
TROY KENT
SUSAN PERSIS
ROB LITTLETON

ZONE 1
ZONE 2
ZONE 3
ZONE 4

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SHEET CONTENTS
COVER SHEET

SHEET NO.

G-001



PROJECT OVERVIEW

- (A) INSTALL ADDITIONAL BAFFLE WALLS WITHIN THE EXISTING CHLORINE CONTACT TANK, FILL IN THE EXISTING WALL OPENINGS AND CUT NEW OPENINGS FOR NEW FLOW PATH.

INSTALL TEMPORARY COFFER DAM TO ISOLATE SOUTH HALF OF TANK FOR CONSTRUCTION. NORTH HALF OF TANK MUST REMAIN IN SERVICE. CHLORINE CONTACT OPERATION MAY NOT BE OFF LINE MORE THAN FOUR HOURS. DRAIN SOUTH HALF OF TANK ONLY.

- (B) INSTALL SUBMERSIBLE MIXER IN FILTER INFLUENT CHANNEL

CHLORINE
CONTACT
TANK

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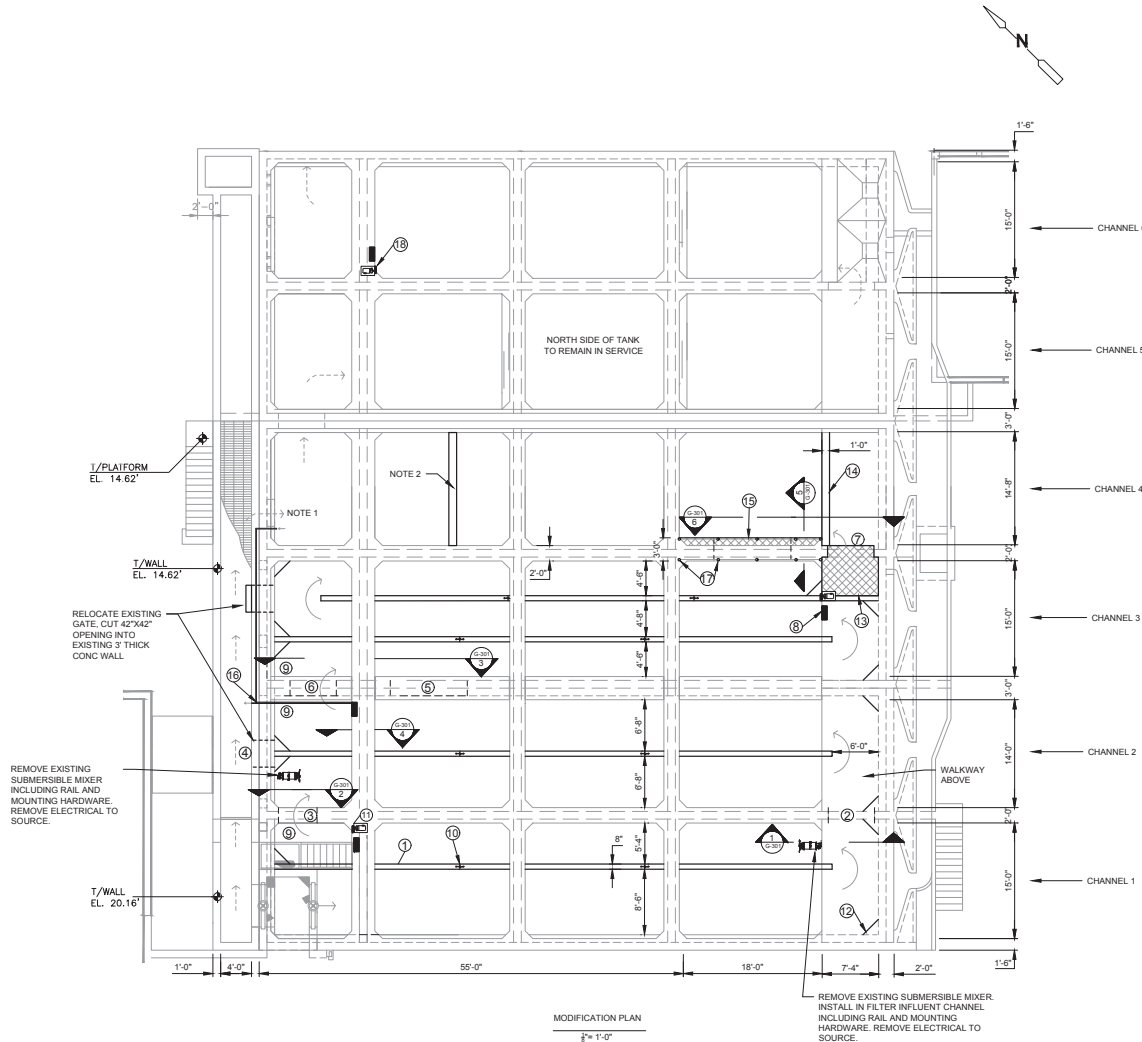
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SHEET CONTENTS
SITE PLAN

SHEET NO.

G-101



- ① CONSTRUCT FOUR (4) 8" CONCRETE BAFFLE WALLS. DESIGN BASED ON FORMED AND POURED CONCRETE WALLS. CONTRACTOR MAY CONSTRUCT VIA PRECAST PANELS. CONTRACTOR TO PROVIDE PRECAST DESIGN SIGNED AND SEALED BY A FLORIDA REGISTERED PE. (SEE DETAIL 3 & 4 ON SHEET G-501 FOR REBAR INFORMATION)
- ② FILL IN EXISTING OPENING IN WALL PER SECTION 1 ON SHEET G-301.
- ③ CUT OPENING IN EXISTING WALL PER SECTION 2 ON SHEET G-301.
- ④ FILL EXISTING 42"x42" OPENING IN WALL PER DETAIL 2 ON SHEET G-501.
- ⑤ RAISE EXISTING WEIR GATE TO BLOCK OFF WATER FLOW. COORDINATE GATE CLOSURE WITH THE CITY.
- ⑥ REMOVE EXISTING WEIR GATE AND CUT OPENING IN EXISTING WALL PER SECTION 3 SHEET G-301.
- ⑦ FILL OPENING IN EXISTING WALL.
- ⑧ INSTALL NEW EFFLUENT HACH CHLORINE ANALYZER IN CHANNEL 3 PER DETAIL 6 & 7 ON SHEET G-501.
- ⑨ CUT 12"x12"x4" DEEP SUMPS INTO EXISTING CONCRETE TANK SLAB (TYP 3)
- ⑩ INSTALL CONCRETE WALL CONSTRUCTION JOINTS ON NEW CONCRETE WALLS (3 PER WALL) SPACING NOT TO EXCEED 20 FEET, PER DETAIL 5 SHEET G-501.
- ⑪ INSTALL NEW HACH CHLORINE ANALYZER IN CHANNEL 1 PER DETAIL 6 & 7 ON SHEET G-501.
- ⑫ CONSTRUCT 2'x2' FILLET IN CORNERS FROM FLOOR SLAB TO TOP OF WALL (TYP 13)
- ⑬ FILL AREA WITH CONCRETE UP TO THE BOTTOM OF THE WALKWAY
- ⑭ PROPOSED 12" CONCRETE WALL. FILL VOID AREA WITH CLEAN FILL AND/OR SANDFILL
- ⑮ POUR 18" THICK WALL NORTH OF EXISTING WALL TO WIDEN WALKWAY TO 3'-0". SURFACE MOUNT 10" WIDE WEIR GATE.
- ⑯ RUN 1" PVC FOR TEMPORARY USE OF EXISTING CHLORINE SAMPLE PUMP DURING CONSTRUCTION. SUCTION LINE IN CHANNEL 4, AND RETURN LINE IN INFLUENT CHANNEL AS SHOWN.
- ⑰ NEW ALUMINUM HANDRAIL
- ⑱ INSTALL NEW HACH CL110SC TOTAL CHLORINE ANALYZER WITH SC200 CONTROLLER AND COMBINATION PH SENSOR.

GENERAL NOTES:

1. EXISTING GATE IN EFFLUENT EQ TANK#2 TO BE USED FOR CHLORINE CONTACT BYPASS. COORDINATE WITH CITY OPERATIONS. CHLORINE CONTACT BYPASS CAN LAST UP TO 45 DAYS TO ALLOW FOR CONSTRUCTION. TEMPORARY PIPE EXISTING CHLORINE ANALYZER SAMPLE PUMP TO EXISTING GATE FOR DOSE CONTROL DURING CONSTRUCTION.
2. INSTALL TEMPORARY COFFER DAM TO ISOLATE SOUTH SIDE OF TANK. NORTH SIDE OF TANK (CHANNELS 4, 5 AND 6 MUST REMAIN IN SERVICE. COFFER DAM IS TO BE INSTALLED DURING CHLORINE CONTACT AND EFFLUENT EQ SHUTDOWN AT NIGHT DURING THE "LOW FLOW" PERIOD. MAX SHUTDOWN DURATION IS 4 HOURS. COORDINATE SHUTDOWN WITH CITY OPERATIONS STAFF 72HRS IN ADVANCE. COFFER DAM REMOVAL SUBJECT TO SAME SHUTDOWN PROCEDURE.
3. ALL CUT CONCRETE SURFACES SHALL BE COATED WITH EPOXY COATING, SUCH AS SHERWIN-WILLIAMS MACROPOXY 646 OR EQUIVALENT.

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ORMOND BEACH, FLORIDA

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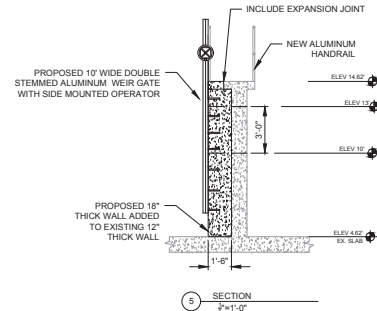
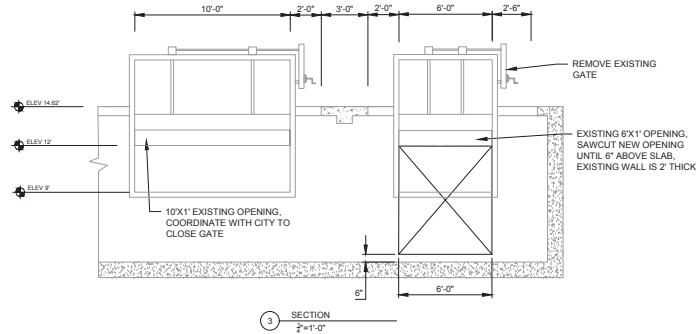
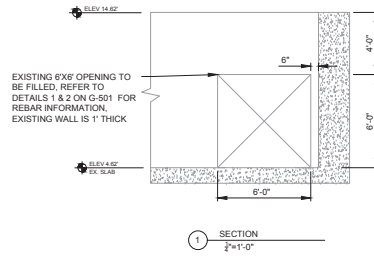
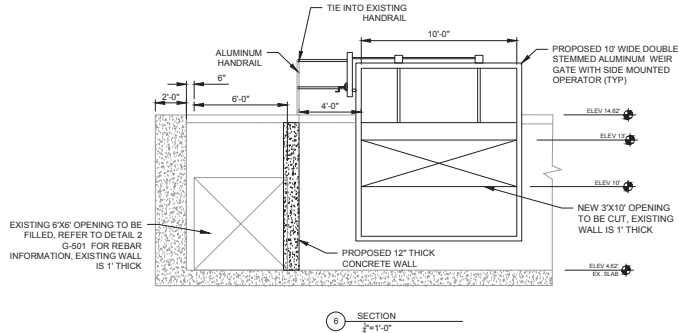
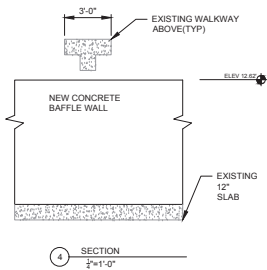
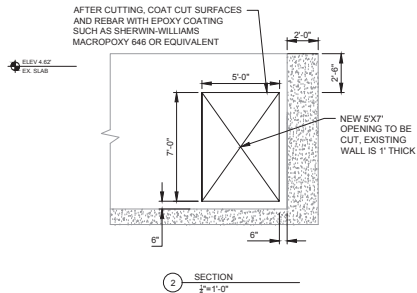
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SHEET CONTENTS
CHLORINE CONTACT
CHAMBER PLAN VIEW

SHEET NO.

G-102



STRUCTURAL NOTES

GENERAL

1. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS IN THE FIELD AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO PROCEEDING WITH FABRICATION AND CONSTRUCTION.
2. GOVERNING BUILDING CODE: 2017 FLORIDA BUILDING CODE AND ALL OTHER APPLICABLE LOCAL CODES.

CONCRETE

1. DESIGN, MATERIAL, WORKMANSHIP, TOLERANCES, AND PREPARATION OF DETAILED FABRICATION AND PLACING DRAWINGS SHALL BE IN ACCORDANCE WITH CURRENT EDITIONS OF ACI 318, ACI 315, ACI 350, ACI SP-66, ACI SP-4, AND THE CRSI HANDBOOK.
2. ALL CONCRETE SHALL DEVELOP THE FOLLOWING MINIMUM COMPRESSIVE STRENGTHS AT 28 DAYS, UNLESS OTHERWISE NOTED:
 - a. TANKS = 4000 PSI
 - b. W/C SHALL NOT EXCEED 0.44
3. SLUMP JUST PRIOR TO PLACING SHALL BE THE FOLLOWING (PLUS OR MINUS ONE INCH)
 - a. SLABS AND WALLS = 4 INCHES
 - b. SLUMPS MAY VARY FROM ABOVE IF ADMIXTURES ARE USED TO PERMIT WORKABILITY, FLOWABILITY, AND/OR ADJUST SET TIME.
4. ADMIXTURES SHALL CONFORM TO THE REQUIREMENTS OF ASTM C494 OR C1017 WHERE APPLICABLE. AIR-ENTRAINING ADMIXTURES SHALL CONFORM TO ASTM C260. ADMIXTURES SHALL NOT ADVERSELY AFFECT CONCRETE STRENGTH, PERFORMANCE, INTEGRITY, AND SHALL BE SHOWN CAPABLE OF MAINTAINING ESSENTIALLY THE SAME COMPOSITION AND PERFORMANCE THROUGHOUT AS THE PRODUCT PROPORTIONED WITHOUT THE USE OF ADMIXTURES AS SPECIFIED BY ACI.
5. ALL CONCRETE SHALL BE PLACED IN THE DRY. NO CONCRETE SHALL BE PLACED LATER THAN 90 MINUTES AFTER MIXING HAS BEGUN. DEPOSIT CONCRETE IN ITS FINAL POSITION WITHOUT SEGREGATION AND REHANDLING.
6. REINFORCING STEEL SHALL MEET ASTM A615 GRADE 60.
7. REINFORCING BARS ARE CONTINUOUS UNLESS OTHERWISE NOTED. WHERE NECESSARY, MINIMUM LAP SPLICES FOR REINFORCING BARS SHALL BE 40 BAR DIAMETERS.
8. ALL REINFORCING STEEL SHALL HAVE THE FOLLOWING MINIMUM CLEAR CONCRETE COVER:
 - a. WALLS AND ROOF SLABS = 2 INCHES, U.O.N.
 - b. CAST AGAINST EARTH = 3 INCHES
 - c. ALL OTHER CONDITIONS = 2 INCHES, U.O.N.
10. CHAMFER ALL EXPOSED CONCRETE EDGES 3/4 INCHES x 45 DEGREES.
11. CALCIUM CHLORIDE OR ADMIXTURES CONTAINING CHLORIDES SHALL NOT BE USED IN ANY FORM.
12. ALL REINFORCEMENT SHALL BE BENT COLD. REINFORCEMENT THAT IS PARTIALLY EMBEDDED IN CONCRETE SHALL NOT BE FIELD BENT UNLESS APPROVED BY THE STRUCTURAL ENGINEER OF RECORD.
13. AT THE TIME OF CONCRETE PLACEMENT, REINFORCEMENT SHALL BE FREE OF FOREIGN MATERIALS SUCH AS MUD, OIL, OR OTHER NONMETALLIC COATINGS THAT DECREASES THE CONCRETE TO REINFORCING STEEL BOND STRENGTH.

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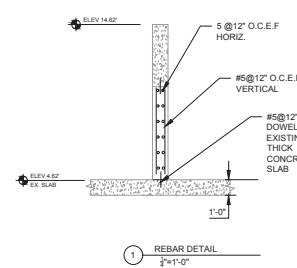
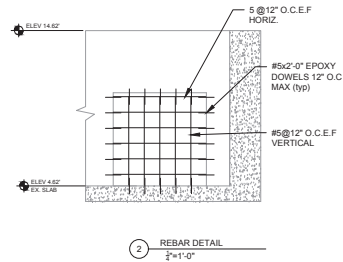
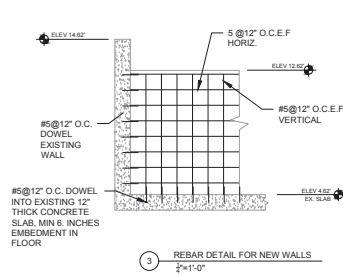
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 SHEET CONTENTS
 SECTION VIEWS

SHEET NO.

G-301



GENERAL STRUCTURAL NOTES:

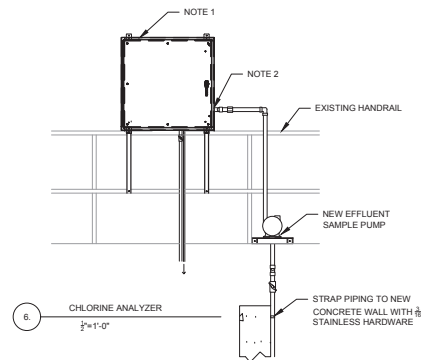
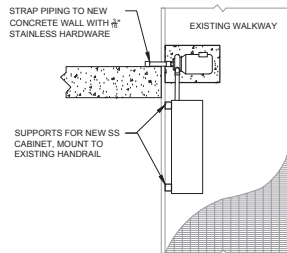
1. WALLS WITH THICKNESS OF 8 INCHES OR LESS SHALL HAVE ONE LAYER OF REINFORCEMENT CENTERED IN WALL.
2. WALLS THICKER THAN 8 INCHES SHALL HAVE TWO LAYERS OF REINFORCEMENT (ONE NEAR EACH FACE).
3. MINIMUM DOWEL EMBEDMENT 6 INCHES INTO EXISTING SLAB.
4. ALL DOWELS SHALL BE 24 INCHES LONG U.N.O.
5. MINIMUM DOWEL EMBEDMENT 8 INCHES U.N.O INTO SURROUNDING WALLS

Mead & Hunt

Mead and Hunt, Inc.
4401 Eastport Parkway
Port Orange, FL 32127
phone: 386-761-6810
meadhunt.com
FL Cert. #26730

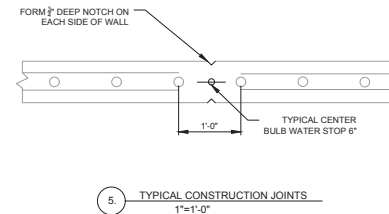
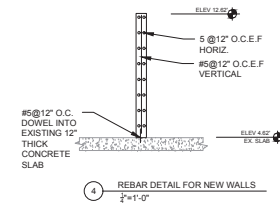


These documents shall not be used for any purpose or project for which it was not prepared. Mead & Hunt shall not be responsible for any errors, omissions, or inaccuracies in these documents. The user assumes all liability for any use of these documents. Mead & Hunt shall not be responsible for any errors, omissions, or inaccuracies in these documents. The user assumes all liability for any use of these documents.



CHLORINE ANALYZER NOTES:

1. INSTALL 36"x36"x12" HOFFMAN STAINLESS STEEL WHITE POWDER COATED BOX (A36H3612SSLP3PTW) ABOVE EXISTING HANDRAIL
2. INSIDE THE HOFFMAN BOX, INSTALL HACH CLF105SC CHLORINE ANALYZER WITH SC200 CONTROLLER PER MFR SPECS
3. HACH CLF105SC CHLORINE ANALYZER WITH SC200 CONTROLLER (TYP2)
4. HACH CLF105SC TOTAL CHLORINE ANALYZER WITH SC200 CONTROLLER AND COMBINATION PH SENSOR (TYP1)



CITY OF ORMOND BEACH
WRF CHLORINE CONTACT
IMPROVEMENTS
ORMOND BEACH, FLORIDA

ISSUED
01/2021 BID SET

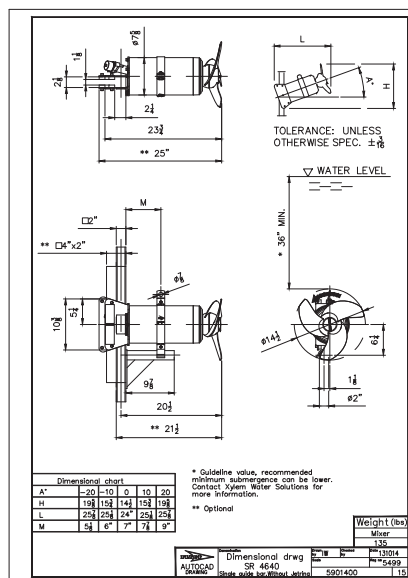
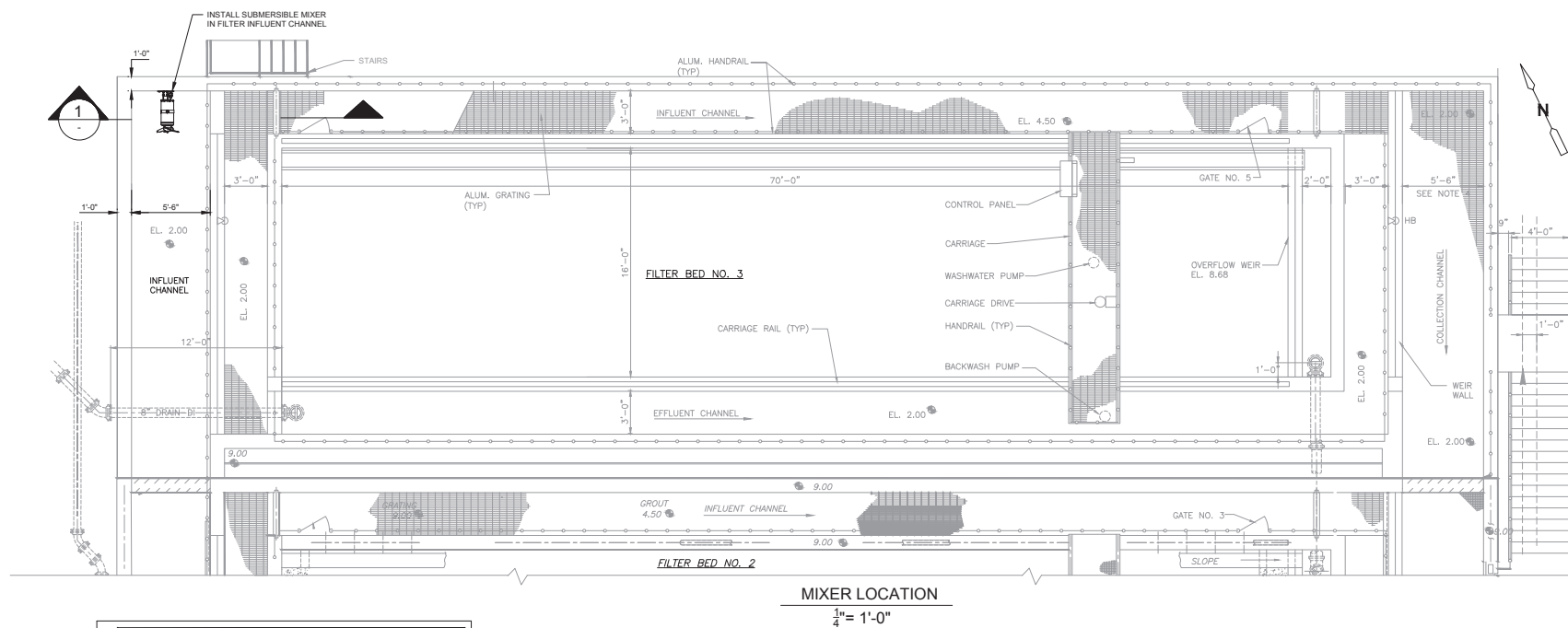
NOT FOR CONSTRUCTION

AMN NO: 1000714-200233.01
DATE: JANUARY 2021
DESIGNED BY: KAL
DRAWN BY: MIG
CHECKED BY: CMC
DO NOT SCALE DRAWINGS

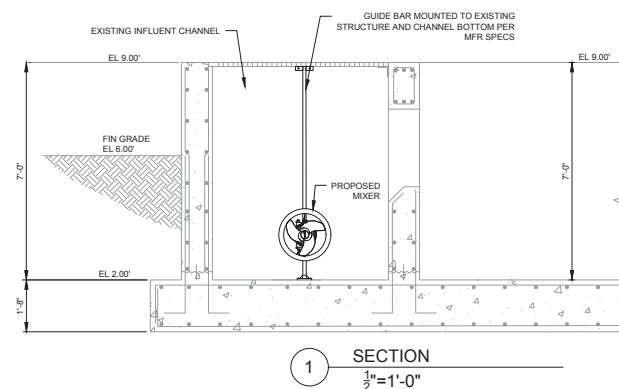
SHEET CONTENTS
DETAILS

SHEET NO.

G-501



MIXER DETAILS
NOT TO SCALE



1 SECTION
 $\frac{1}{2}" = 1'-0"$



CITY OF ORMOND BEACH

City Manager • 22 S. Beach Street • Ormond Beach • Florida • 32174 • (386) 676-3200 • Fax (386) 676-3384

CITY MANAGER MEMORANDUM

To: The Honorable Mayor Partington and City Commissioners

Through: Joyce A. Shanahan, City Manager

From: Steven Spraker, Planning Director

Date: March 2, 2021

Subject: 2341 West Granada Boulevard (portion), Zoning Map amendment

Commission Goal: Community Development - Other

Introduction

This is an administrative request to amend the City's Official Zoning Map for a 0.32± acre land area from the existing zoning classification of Volusia County A-2 (Rural Agriculture) to Ormond Beach B-2 (Neighborhood Commercial) for a portion of the property at 2341 West Granada Boulevard.

Background

City staff met with the property owner of the property at 2341 West Granada Boulevard recently who has inherited the property and is reviewing the zoning options for the property. The subject property is partially located in unincorporated Volusia County and partially within the City of Ormond Beach. The eastern 125 feet of the property located at 2341 West Granada Boulevard was annexed into the City of Ormond Beach in 1962 for a utility service corridor among other properties. The subject area was never given a city land use or zoning designation. The remaining western portion of the property was developed in unincorporated Volusia County as a 1996 BPUD (Volusia County Resolution 96-165) for a telecommunications facility, including a 250-foot antenna structure and a 419 square foot building.

Discussion

The portion of the subject parcel within Ormond Beach is currently vacant. The property currently has a land use of Volusia County Rural (R) and is zoned Volusia County A-2 (Rural Agriculture). Since the subject property has been annexed into the City of Ormond Beach, it is required to have a land use and compatible zoning assigned. Until a city land use designation and zoning classification are adopted, the property maintains its County land use and zoning classifications. Due to the small parcel size, greenbelt buffer, stormwater, landscaping and parking, staff believes that there are limited development options.

In choosing a consistent zoning district for the proposed land use of “General Commercial”, Table 2-2 under Chapter 2, Article I - Establishment of Zoning Districts and Official Zoning Map, Section 2.02 of the City’s Land Development Code was referenced. The B-2 (Neighborhood Commercial) zoning designation was selected based on the abutting city zoning and limited commercial uses. Other zoning districts reviewed include the B-4 (Central Business) and B-8 (Commercial). The B-4 (Central Business) zoning designation is located in and around the Downtown and would not be an appropriate zoning designation. The B-8 (Commercial) zoning designation is located along major commercial corridors and allows both intensive residential and commercial uses and would not be appropriate for this land area. The B-2 (Neighborhood Commercial) zoning district does not allow residential uses and allows only neighborhood commercial uses, such as daily needs and a convenience store (with no gas).

Planning Board review

The Planning Board reviewed the zoning map amendment at the December 10, 2020 meeting and recommended approval with a 7-0 vote. There were no speakers on this item for or against the amendment. The Planning Board minutes are attached to this packet item.

Citizen Impact

There is no citizen impact as the result of this zoning map amendment.

Budget Impact

There is no budget impact as the result of this zoning map amendment.

Recommendation

It is recommended the City Commission **APPROVE** the administrative request to amend the Official Zoning Map to change the zoning classification of a portion of 2341 West Granada Boulevard from Volusia County A-2 (Rural Agriculture) to Ormond Beach B-2 (Neighborhood Commercial).

Attachments:

- 21-07 2341 W Granada Boulevard - Zoning Map Amendment (P21-0005G) (PDF)
- Exhibit A, Sketch and Legal (PDF)
- Exhibit B, 2341WestGranada_ProposedZoning (PDF)
- 12.10.2020-2341 West Granada Boulevard, zoning map amendment PB Staff Report (PDF)
- Planning Board minutes, 2341 West Granada Boulevard Zoning Map Amendment (PDF)

REVIEWED BY:
Kelly McGuire, Finance Director 2/8/2021
Claire Whitley, Assistant City Manager 2/9/2021**APPROVED BY:**
Joyce A. Shanahan, City Manager 2/11/2021

ORDINANCE NO. 2021-07

AN ORDINANCE AMENDING PARAGRAPH C, OFFICIAL ZONING MAP, OF SECTION 2-01, ESTABLISHED, OF ARTICLE I, ESTABLISHMENT OF ZONING DISTRICTS AND OFFICIAL ZONING MAP, OF CHAPTER 2, DISTRICT AND GENERAL REGULATIONS, OF THE CITY OF ORMOND BEACH *LAND DEVELOPMENT CODE*, BY AMENDING THE OFFICIAL ZONING MAP TO REZONE A PORTION OF CERTAIN REAL PROPERTY TOTALING 0.32± ACRES LOCATED AT 2341 WEST GRANADA BOULEVARD FROM VOLUSIA COUNTY A-2 (RURAL AGRICULTURE) TO ORMOND BEACH B-2 (NEIGHBORHOOD COMMERCIAL), AUTHORIZING REVISION OF OFFICIAL ZONING MAP; REPEALING ALL INCONSISTENT ORDINANCES OR PARTS THEREOF; AND SETTING FORTH AN EFFECTIVE DATE.

WHEREAS, the City of Ormond Beach has initiated this Ordinance which rezones that specific parcel of privately-owned real property located at 2341 West Granada Boulevard, and

WHEREAS, the property to be rezoned consists of 0.32± acres of a portion of real property located at 2341 West Granada Boulevard and is zoned Volusia County A-2 (Rural Agricultural), and

WHEREAS, the said parcel or real property involves less than ten (10) contiguous acres, and

WHEREAS, the Planning Board held a public hearing regarding this matter as required by Chapter 1, Article II, Section 1-15(d)(3), of the *Land Development Code*, and

WHEREAS, the City Commission held a public hearing regarding this matter as required by Section 166.041(3)(c)(1), *Florida Statutes*, and

WHEREAS, all applicable legal notice requirements have been complied with, and

WHEREAS, the City Commission finds the proposed rezoning to be consistent with the Future Land Use Element, and the Future Land Use Map, of the City's adopted *Comprehensive Plan*, now therefore,

BE IT ENACTED BY THE PEOPLE OF THE CITY OF ORMOND BEACH, FLORIDA, THAT:

SECTION ONE. Paragraph C, Official Zoning Map, of Section 2-01, Established, of Article I, Establishment of Zoning Districts and Official Zoning Map, of Chapter 2, District and General Regulations, of the *Land Development Code* of the City of Ormond Beach, Florida is hereby amended by amending the Official Zoning Map, which is part of the said *Land Development Code*, to change the real property, described and depicted on Exhibit "A" attached hereto and incorporated herein by reference, from the present zoning classification of Volusia County A-2 (Rural Agriculture) to Ormond Beach B-2 (Neighborhood Commercial).

SECTION TWO. The property hereby rezoned consists of 0.32± acres at a portion of 2341 West Granada Boulevard.

SECTION THREE. The City Commission does hereby approve, authorize and direct the revision of the City's Official Zoning Map to show the classification for the area as hereby zoned as depicted in Exhibit "B" attached hereto and incorporated herein by reference.

SECTION FOUR. All Ordinances or parts of Ordinances in conflict herewith are hereby repealed to the extent of such conflict.

SECTION FIVE. This Ordinance shall take effect immediately upon its adoption.

PASSED UPON at the first reading of the City Commission, this 16th day of February, 2021.

PASSED UPON at the second and final reading of the City Commission, this 2nd day of March, 2021.

BILL PARTINGTON
Mayor

ATTEST:

COLBY CILENTO
City Clerk

EXHIBIT "A"**Page 1 of 2**

A PORTION OF LAND LYING IN SECTION 27, TOWNSHIP 14 SOUTH, RANGE 31 EAST, VOLUSIA COUNTY, FLORIDA BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

FROM THE SOUTHEAST CORNER OF SECTION 27, RUN N01°30'21"W ALONG THE EAST LINE OF SAID SECTION 27 A DISTANCE OF 1200.53 FEET TO A POINT OF INTERSECTION WITH THE NORTH RIGHT-OF-WAY LINE OF FLORIDA STATE ROAD 40, (A 200 FOOT RIGHT-OF-WAY AS SHOWN ON THE STATE OF FLORIDA, STATE ROAD DEPARTMENT RIGHT-OF-WAY MAP, SECTION 79100-2503, PAGE 13 of 18, DATED OCTOBER 19,1960 SAID POINT ALSO KNOW AS THE POINT OF BEGINNING; THENCE N82°36'49"W ALONG SAID RIGHT-OF-WAY LINE A DISTANCE OF 126.52 FEET; THENCE DEPARTING SAID NORTH LINE RUN N01°30'21"W A DISTANCE OF 101.77 FEET; THENCE N88°06'42"E A DISTANCE OF 125.00 FEET; THENCE S01°30'21"E A DISTANCE OF 122.16 FEET TO THE POINT OF BEGINNING.

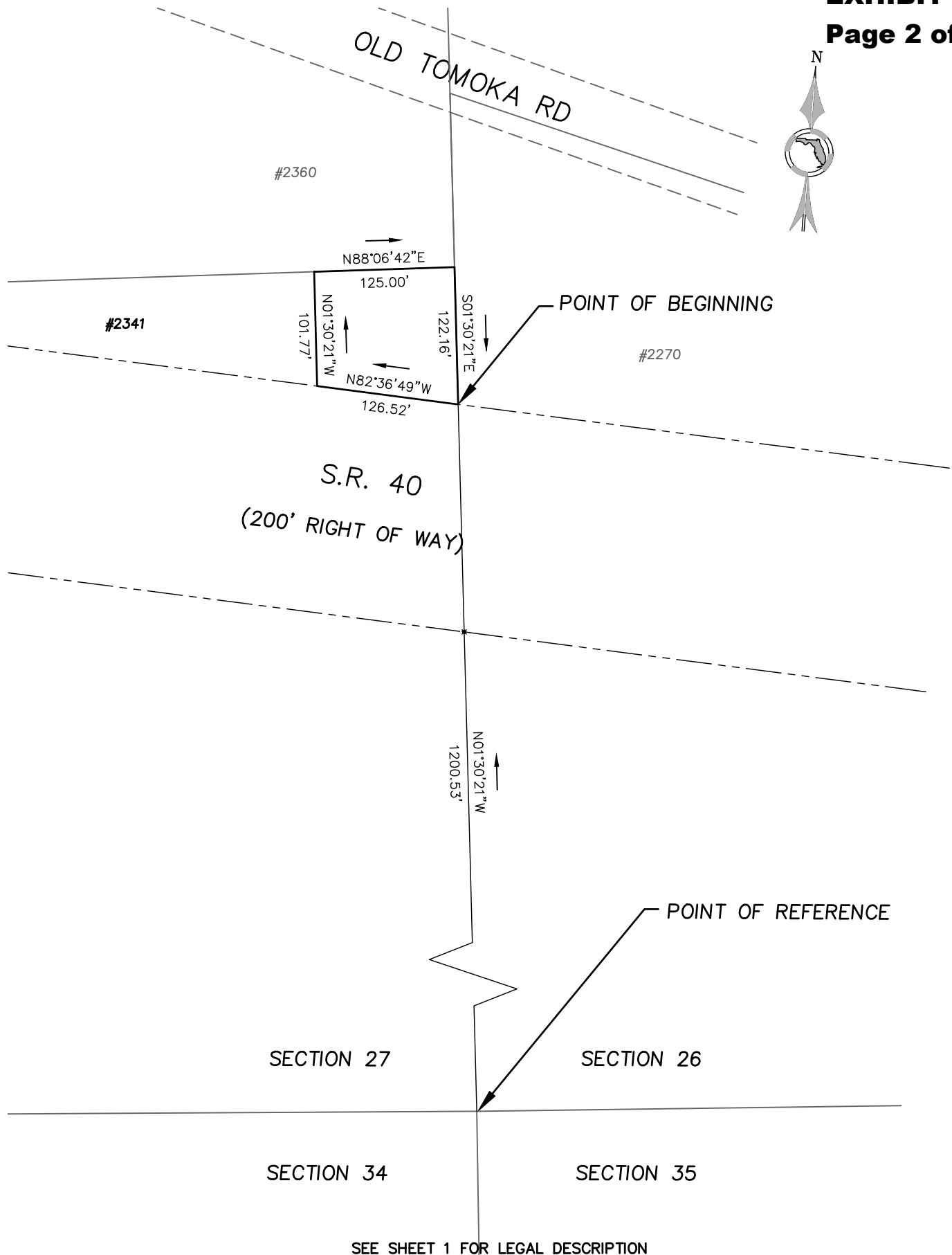
CONTAINING 13,995 SQUARE FEET OR 0.32 ACRES MORE OR LESS.

SEE SHEET 2 FOR SKETCH OF DESCRIPTION

City of Ormond Beach
Engineering Division

DATE: 11/12/20	PROJECT NO.:
SCALE: N.T.S.'	FILE NAME: 2341WGRAN
SHEET: 1 OF 2	DRAWN BY: CO

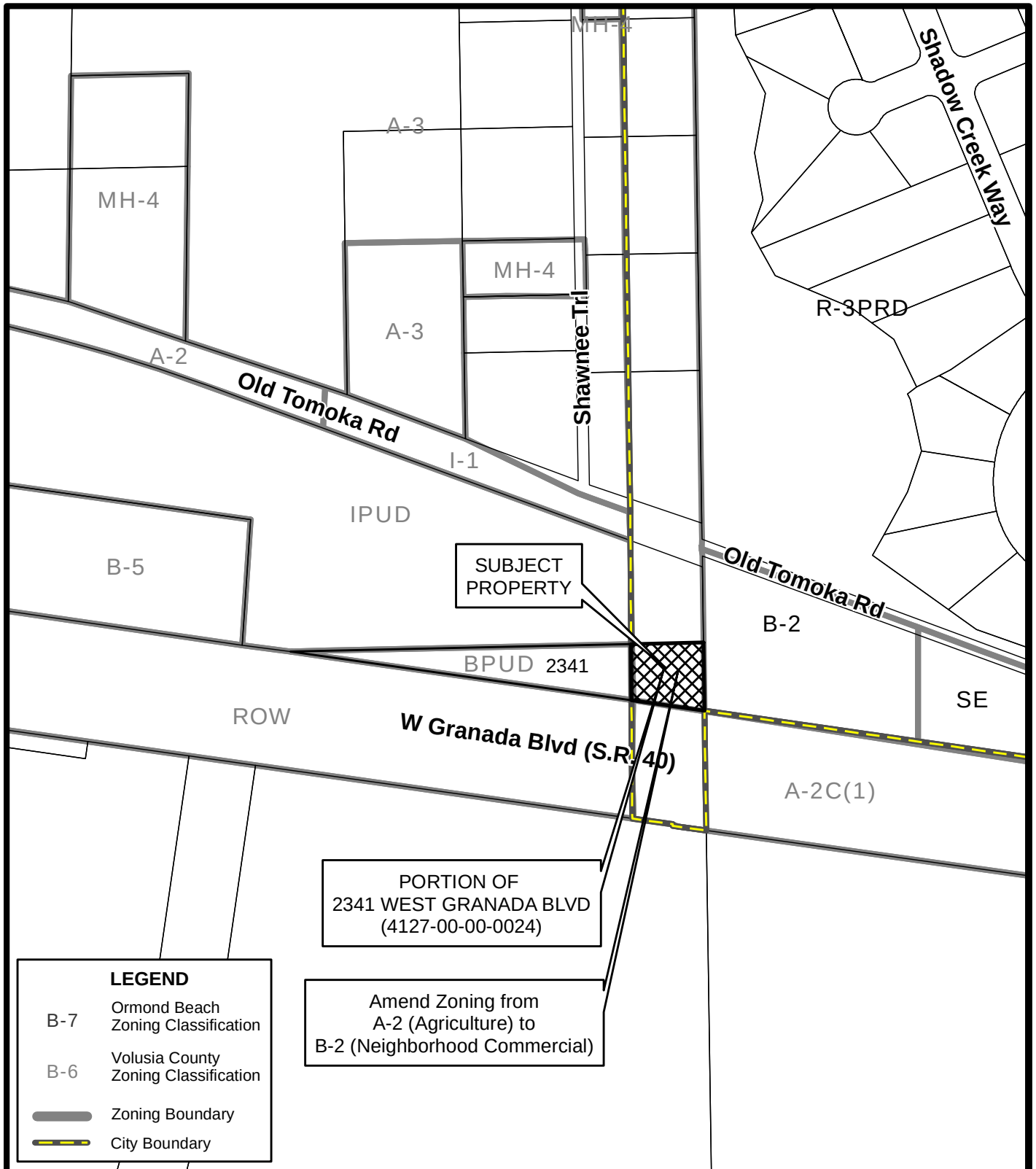
Packet Pg. 487

EXHIBIT "A"**Page 2 of 2**

City of Ormond Beach
Engineering Division

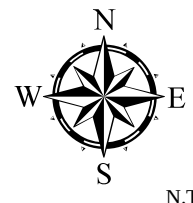
DATE: 11/12/20	PROJECT NO.:
SCALE: N.T.S.'	FILE NAME: 2341WGRAN
SHEET: 2 OF 2	DRAWN:

Packet Pg. 488



**PROPOSED ZONING MAP
PORTION OF 2341 WEST GRANADA BLVD
(4127-00-00-0024)**

Prepared By: The City of Ormond Beach
G.I.S. Department - November 9, 2020



N.T.S.

STAFF REPORT

City of Ormond Beach Department of Planning

DATE: November 30, 2020

SUBJECT: Portion of 2341 West Granada Boulevard, Amendment to the Official Zoning Map

APPLICANT: Administrative

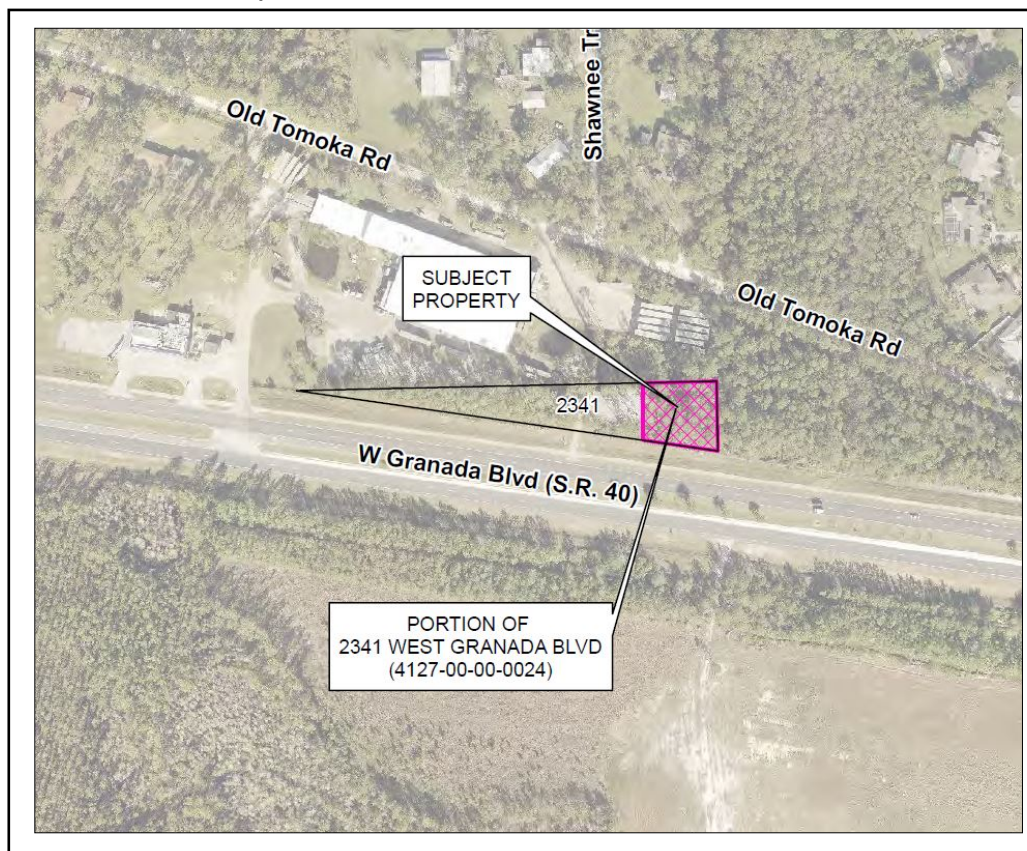
NUMBER: RZ 2021-010

PROJECT PLANNER: Noel Eaton, Senior Planner
Steven Spraker, AICP, Planning Director

INTRODUCTION:

This is an administrative request to amend the City's Official Zoning Map for a 0.32± acre land area from the existing zoning classification of Volusia County A-2 (Rural Agriculture) to Ormond Beach B-2 (Neighborhood Commercial) for a portion of the property at 2341 West Granada Boulevard. The subject property is shown below in Exhibit 1:

EXHIBIT 1: Location of a portion of 2341 West Granada Boulevard:



BACKGROUND:

City staff met with the property owner of the property at 2341 West Granada Boulevard recently who has inherited the property and is reviewing the zoning options for the property. The subject property is partially located in unincorporated Volusia County and partially within the City of Ormond Beach. The eastern 125 feet of the property located at 2341 West Granada Boulevard was annexed into the City of Ormond Beach in 1962 for a utility service corridor among other properties. The subject area was never given a city land use or zoning designation. The remaining western portion of the property was developed in unincorporated Volusia County as a 1996 BPUD (Volusia County Resolution 96-165) for a telecommunications facility, including a 250-foot antenna structure and a 419 square foot building.

The portion of the subject parcel within Ormond Beach is currently vacant. The property currently has a land use of Volusia County Rural (R) and is zoned Volusia County A-2 (Rural Agriculture). Since the subject property has been annexed into the City of Ormond Beach, it is required to have a land use and compatible zoning assigned. Until a city land use designation and zoning classification are adopted, the property maintains its County land use and zoning classifications. Due to the small parcel size, greenbelt buffer, stormwater, landscaping and parking, staff believes that there are limited development options.

The proposed zoning map amendment schedule of the subject property is as follows:

EXHIBIT 2: Zoning map amendment schedule:

Action/Board	Date
Planning Board	December 10, 2020
City Commission 1 st Reading	February 16, 2021
City Commission 2 nd Reading	March 2, 2021

ANALYSIS:

The existing Volusia County zoning classification for the subject property is Volusia County A-2 (Rural Agriculture). The Volusia County Land Development Code states the purpose and intent for the A-2 (Rural Agriculture) zoning classification as follows:

This classification is to preserve and protect rural areas of the county that have some agricultural value but which are also suitable for rural estate living.

The subject property is undergoing a land use amendment to assign a City Future Land Use designation of "General Commercial". The goal of the zoning classification is to provide the most compatible zoning with surrounding properties and the most consistent designation with the adopted Future Land Use map designation.

The adjacent land use designations and zoning classifications are as follows:

EXHIBIT 3: Land use and zoning designations:

Land Use and Zoning Designations of Adjacent Property			
	Current Land Uses	Future Land Use Designation	Zoning Classifications
North	Industrial	Volusia County "Industrial"	Volusia County "Industrial Planned Unit Development" (IPUD)
South	Vacant Avalon Park	Daytona Beach "Low Intensity Urban"	Daytona Beach "Planned Development General" (PD-G)
East	Vacant	Ormond Beach "General Commercial"	Ormond Beach "Neighborhood Commercial" (B-2)
West	Communication Tower	Volusia County "Rural"	Volusia County "BPUD"

In choosing a consistent zoning district for the proposed land use of General Commercial, Table 2-2 under Chapter 2, Article I – Establishment of Zoning Districts and Official Zoning Map, Section 2.02 of the City's Land Development Code was referenced.

EXHIBIT 4: Table 2-2 of the Land Development Code:

Table 2.2 Establishment of Zoning Districts and Official Zoning Map Chapter 2, Article I Zoning Districts, Section 2.02 Future Land Use Map Designations and Zoning Districts	
Comprehensive Plan Future Land Use Map Designation	Corresponding Compatible Zoning District
General Commercial	B-2, Neighborhood Commercial B-3, Reserved B-4, Central Business B-8, Commercial PBD, Planned Business Development

The B-2 (Neighborhood Commercial) zoning designation was selected based on the abutting city zoning and limited commercial uses. The B-4 (Central Business) zoning designation is located in and around the Downtown and would not be an appropriate zoning designation. The B-8 (Commercial) zoning designation is located along major commercial corridors and allows both intensive residential and commercial uses and would not be appropriate for this land area.

The B-2 (Neighborhood Commercial) zoning district does not allow residential uses and neighborhood commercial uses, such as daily needs and a convenience store (with no gas).

CONCLUSION/CRITERIA FOR APPROVAL:

Section 1-15(d)(3) of the Land Development Code states that the Planning Board shall review rezonings based on the Development Order criteria in Section 1-15(e) of the Land Development Code which are analyzed below:

- 1. The proposed development conforms to the standards and requirements of this Code and will not create undue crowding beyond the conditions normally permitted in the zoning district, or adversely affect the public health, safety, welfare, or quality of life.**

Due to the small nature of the property and constraints within the Land Development Code, such as a greenbelt buffer, landscape buffers, parking requirements, and stormwater, staff does not believe this site is conducive to a high intensity use or development potential. Any future site redevelopment shall be reviewed based upon the standards of the Land Development Code by the Site Plan Review Committee.

- 2. The proposed development is consistent with the Comprehensive Plan.**

There is a separate future land use map amendment that proposes to assign a City "General Commercial" designation to the property. The proposed B-2 (Neighborhood Commercial) zoning district is consistent with the "General Commercial" land use designation.

- 3. The proposed development will not adversely impact environmentally sensitive lands or natural resources, including but not limited to waterbodies, wetlands, xeric communities, wildlife habitats, endangered or threatened plants and animal species or species of special concern, wellfields, and individual wells.**

The property is vacant and any new construction would require review by the Site Plan Review Committee. This criterion is not applicable.

- 4. The proposed use will not substantially or permanently depreciate the value of surrounding property; create a nuisance; or deprive adjoining properties of adequate light and air; create excessive noise, odor, glare, or visual impacts on the neighborhood and adjoining properties.**

The remainder of the property has a 250-foot communications tower and 419 Sq./ft. facility building. This proposed zoning map amendment is not anticipated to have an impact on adjacent properties. Any site development would require separate approvals in compliance with the Land Development Code.

- 5. There are adequate public facilities to serve the development, including but not limited to roads, sidewalks, bike paths, potable water, wastewater treatment, drainage, fire and police safety, parks and recreation facilities, schools, and playgrounds.**

The zoning action is the result of annexation into the city in 1962. The property is vacant and any new construction would require review by the Site Plan Review Committee. The Land use amendment staff report has analyzed the theoretical maximum potential impacts.

- 6. Ingress and egress to the property and traffic patterns are designed to protect and promote motorized vehicle and pedestrian/bicycle safety and convenience, allow for desirable traffic flow and control, and provide adequate access in case of fire or catastrophe. This finding shall be based on a traffic report where available, prepared by a qualified traffic consultant, engineer or planner which details the anticipated or projected effect of the project on adjacent roads and the impact on public safety.**

The property is vacant and any new construction would require review by the Site Plan Review Committee. This criterion is not applicable.

- 7. The proposed development is functional in the use of space and aesthetically acceptable.**

The property is vacant and any new construction would require review by the Site Plan Review Committee. This criterion is not applicable. The Land use amendment staff report has analyzed the maximum potential impacts.

- 8. The proposed development provides for the safety of occupants and visitors.**

The property is vacant and any new construction would require review by the Site Plan Review Committee. This criterion is not applicable.

- 9. The proposed use of materials and architectural features will not adversely impact the neighborhood and aesthetics of the area.**

The property is vacant and any new construction would require review by the Site Plan Review Committee. This criterion is not applicable.

- 10. The testimony provided at public hearings.**

There has not been a public hearing at this time. The comments from the Planning Board meeting will be incorporated into the City Commission packet.

Section 1-18.E.3 of the Land Development Code states that the City Commission shall consider rezonings based on the consistency with the Comprehensive Plan. The rezoning is consistent based upon the following points:

- The impacts on facilities and services are minor with the requested zoning amendment from Volusia County A-2 (Rural Agriculture) to Ormond Beach B-2 (Neighborhood Commercial);
- The proposed City zoning classification of B-2 (Neighborhood Commercial) is the most consistent zoning classification with the Volusia County zoning classification of A-2 (Urban Single-Family Residential) and with the surrounding properties currently zoned in the City; and
- The administrative request is consistent with the compatibility matrix outlined in the Land Development Code for the Future Land Use Plan Map designation of "General Commercial".

RECOMMENDATION: Staff recommends that the Planning Board recommend **APPROVAL** to the City Commission of the administrative request to amend the Official Zoning Map to change the zoning classification of a portion of 2341 West Granada

Boulevard from Volusia County A-2 (Rural Agriculture) to Ormond Beach B-2 (Neighborhood Commercial).

Attachments:

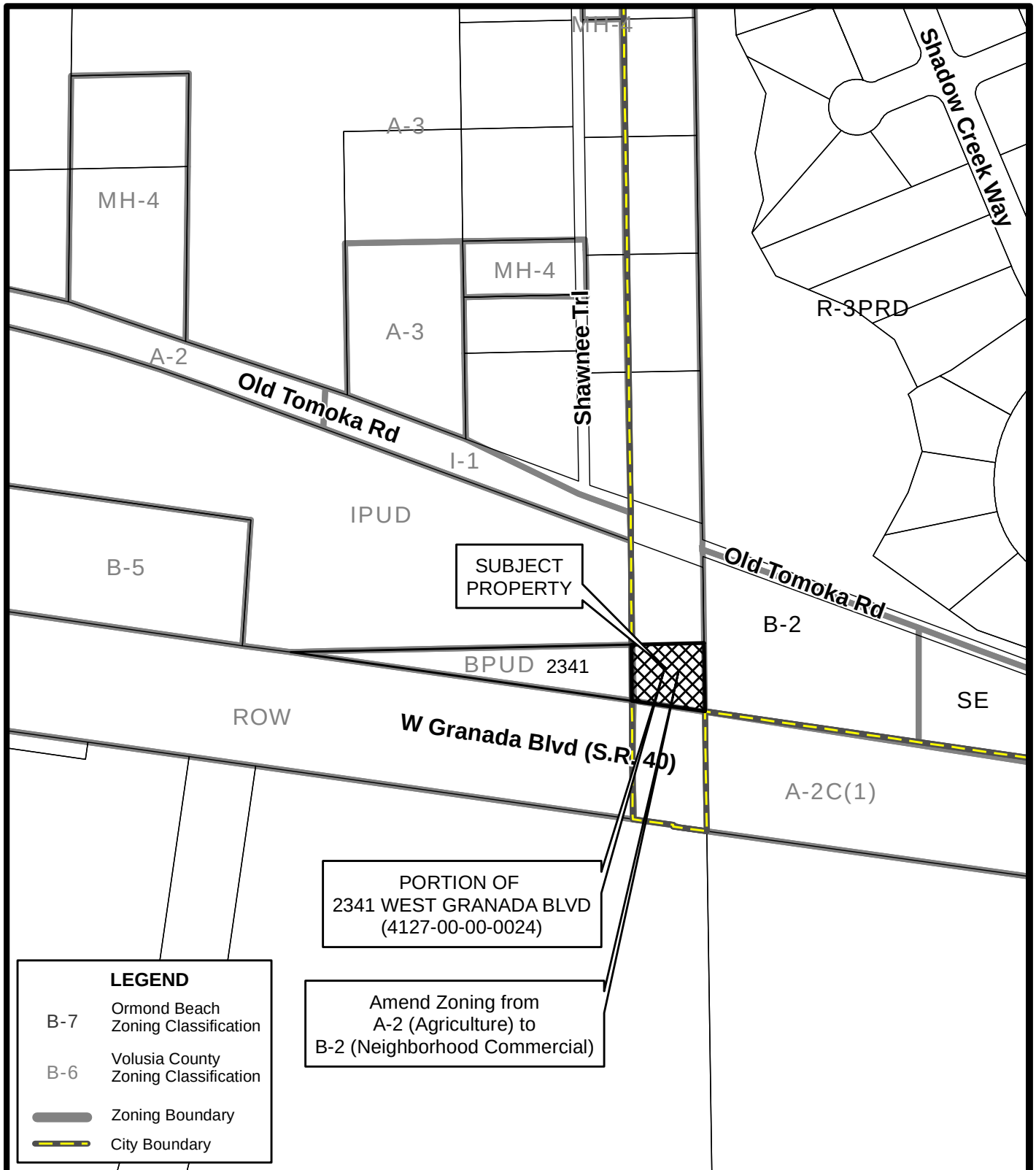
Attachment 1: Zoning Map

Attachment 2: Sketch and legal description/location and aerial maps

Attachment 3: Section 2-23 of the Land Development Code, B-2 (Neighborhood Commercial) Zoning District

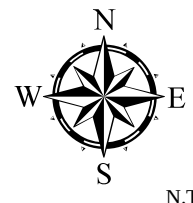
Attachment 1:

Proposed zoning map



PROPOSED ZONING MAP
PORTION OF 2341 WEST GRANADA BLVD
(4127-00-00-0024)

Prepared By: The City of Ormond Beach
 G.I.S. Department - November 9, 2020



N.T.S.

Attachment 2:

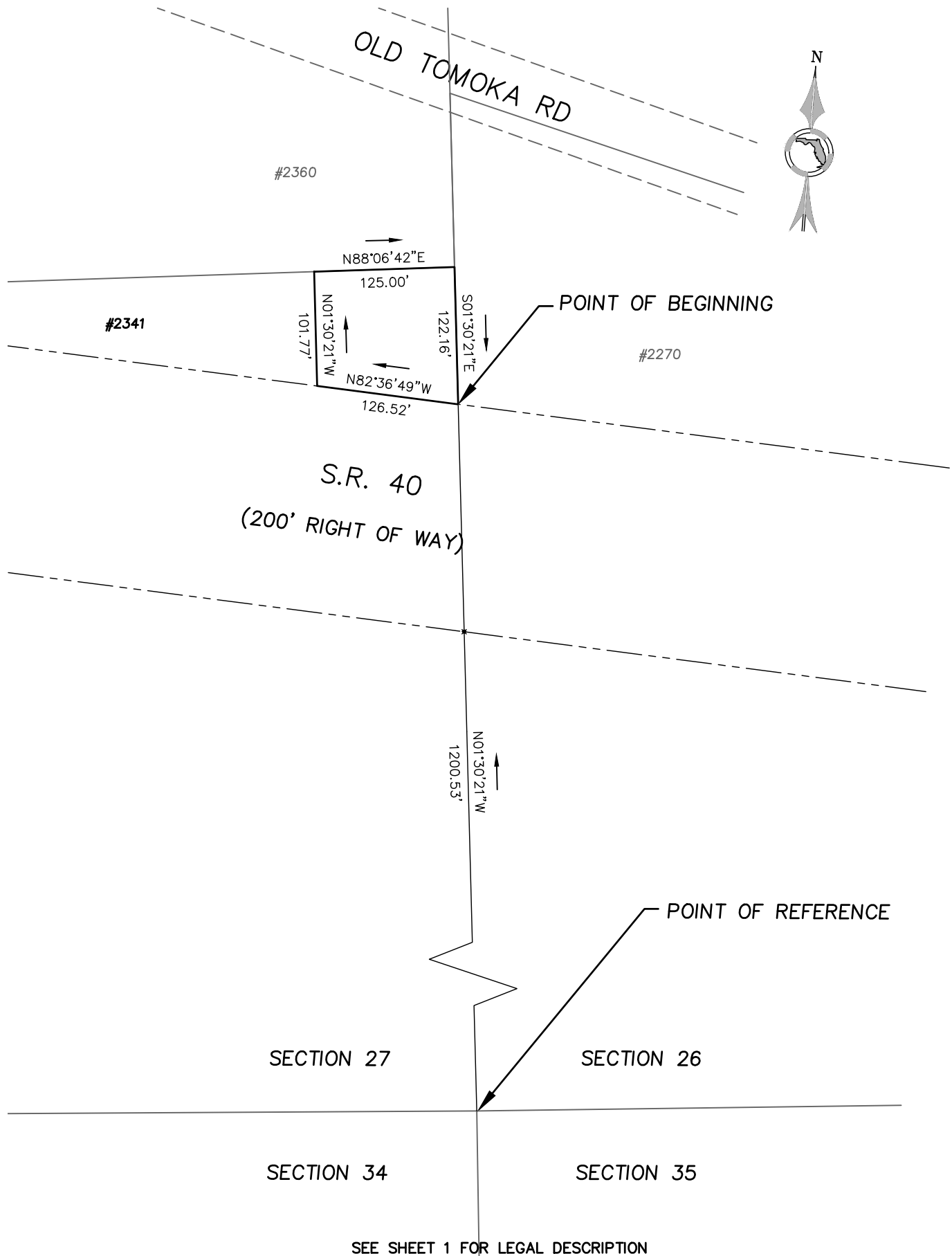
Sketch and legal
description/location and
aerial maps

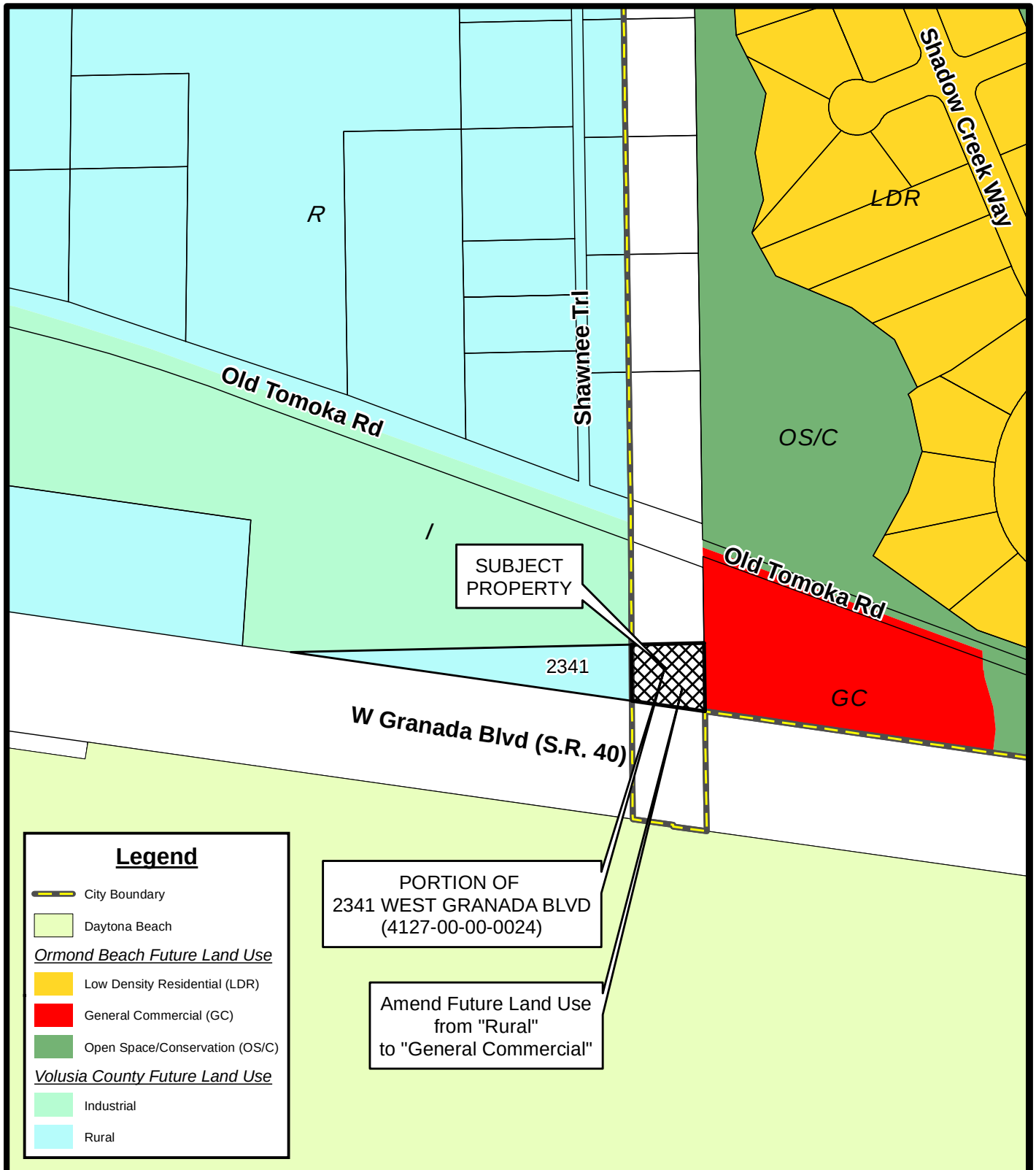
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CONTAINING 13,995 SQUARE FEET OR 0.32 ACRES MORE OR LESS.

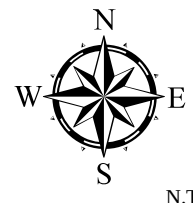
SEE SHEET 2 FOR SKETCH OF DESCRIPTION

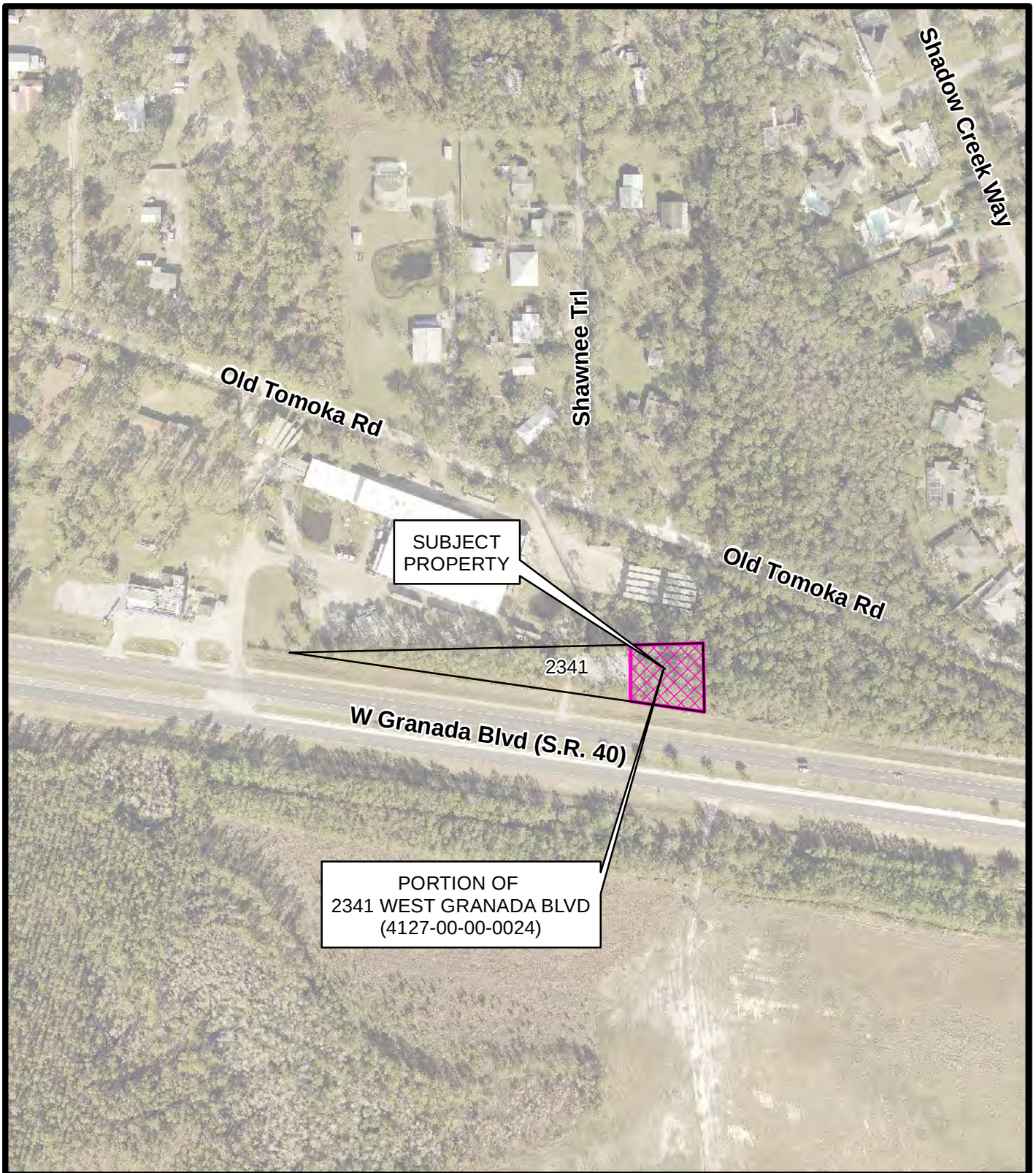




**FUTURE LAND USE MAP
PORTION OF 2341 WEST GRANADA BLVD
(4127-00-00-0024)**

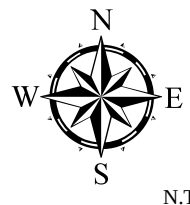
Prepared By: The City of Ormond Beach
G.I.S. Department - November 19, 2020



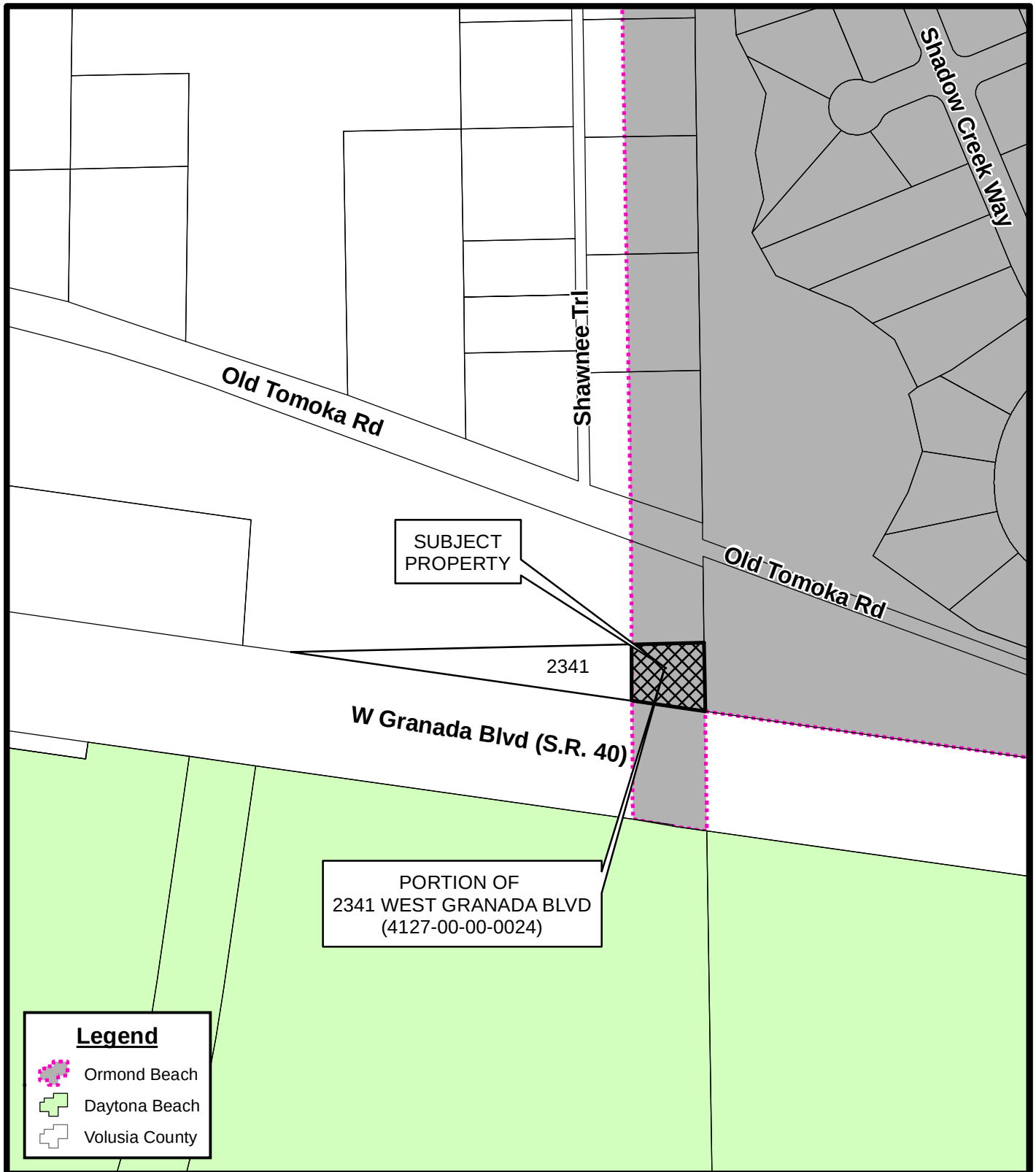


**AERIAL MAP
PORTION OF 2341 WEST GRANADA BLVD
(4127-00-00-0024)**

Prepared By: The City of Ormond Beach
G.I.S. Department - November 9, 2020

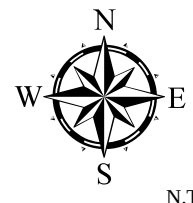


N.T.S.



LOCATION MAP
PORTION OF 2341 WEST GRANADA BLVD
(4127-00-00-0024)

Prepared By: The City of Ormond Beach
 G.I.S. Department - November 9, 2020



Attachment 3:

Section 2-15 of the Land
Development Code, R-3
(Single-Family Medium
Density) Zoning District

Sec. 2-23. B-2, Neighborhood Commercial Zoning District.

A. PURPOSE:		The purpose of the Neighborhood Commercial (B-2) Zoning District is to provide small attractive areas to meet the daily shopping needs of residents of the immediate neighborhood. These commercial areas should be designed and constructed so as to be architecturally compatible with the residential development in the area and to cause the least possible nuisance to nearby residential uses.										
B. DIMENSIONAL STANDARDS												
1. Type	2. Density	3. Maximum Building Height	4. Maximum Building Coverage	5. Maximum Impervious Lot Coverage	6. Minimum Lot Size	7. Minimum Lot Width	8. Minimum Lot Depth	9. Setbacks				
								a. Front	b. Rear	c. Side	d. Street Side/Corner	e. Waterfront
Nonresidential Uses	—	30'	30%	75%	1 acre	150'	—	50'	20'; 30' if abutting residential district; 5' additional combined side yard required for each story over 2.	30'	50'	30'
C. PERMITTED USES			D. CONDITIONAL USES			E. SPECIAL EXCEPTION USES			F. OTHER STANDARDS			
1. Retail Sales and Service, Daily Needs 2. School, Public			1. Convenience Store, Type "B" 2. Parks and Recreation Facilities, Private 3. Parks and Recreation Facilities, Public 4. Public Facilities 5. Public Utilities 6. Telecommunication Tower or Antenna, Camouflaged 7. Wind Energy System			1. Outdoor Activity 2. Outdoor Storage			All development must comply with setback requirements: 1. Wetlands (chapter 3, article II). 2. Special corridors and buffer requirements (chapter 3, article I). 3. See conditional and special exception regulations (chapter 2, article IV).			
G. PERMITTED ACCESSORY USES: Accessory uses customarily associated with, dependent on and incidental to their permitted principal uses, provided that such uses conform to the regulations set forth in chapter 2, article III.												

Sec. 2-24. B-3, Reserved.

Planning Board minutes
2341 West Granada Boulevard
Zoning Map Amendment

property was developed in unincorporated Volusia County as a 1996 BPUD for a telecommunications facility including a 250-foot antenna structure and a 419 square foot building. Ms. Eaton continued that the proposed land use amendment seeks to change the land use designation of the subject property from unincorporated Volusia County “Rural” (R) to the City of Ormond Beach “General Commercial” (GC). The goal of the assignment of the land use and zoning was to provide the B-2 (Neighborhood Commercial) zoning designation. The B-2 zoning district does not allow residential uses or intensive commercial uses and allows neighborhood commercial uses. Ms. Eaton explained that in order to assign the B-2 (Neighborhood Commercial) zoning designation, the property must be assigned the “General Commercial” land use designation.

Ms. Eaton stated that due to the small nature of the property and constraints within the Land Development Code (LDC), such as a greenbelt buffer, landscape buffers, parking requirements, and stormwater, staff believes the development potential is low. It is important to note that the land use amendment does not approve a specific development, but instead, the framework for future site development applications. Ms. Eaton continued that staff recommends that the Planning Board recommend approval to the City Commission for a Future Land Use map amendment for 0.32± acres from the existing land use designation of Volusia County “Rural” (R) to Ormond Beach “General Commercial” (GC) for a portion of the property located at 2341 West Granada Boulevard. Ms. Eaton concluded that the City Commission dates are January 19, 2021 for first reading and February 2, 2021 for second reading.

Board discussion ensued on the industrial use property to the north of the subject site.

Mr. Jorczak made a motion to LUPA 2021-009: Portion of 2341 West Granada Boulevard, Land Use Amendment. Ms. Tolland seconded the motion. Vote was called, and the motion was approved (7-0).

D. RZ 2021-010: Portion of 2341 West Granada Boulevard, Zoning Map Amendments

Ms. Noel Eaton, Senior Planner, explained that RZ 2021-10 is an administrative request to amend the City’s official land use map of the 0.32 ± acres at 2341 West Granada Boulevard from Volusia County A-2 (Rural Agriculture) to Ormond Beach B-2 (Neighborhood Commercial) for a portion of the property. Ms. Eaton continued reiterating that the eastern 125 feet of the property was annexed into the City of Ormond Beach in 1962 for a utility service corridor among other properties. The subject area was never given a city land use or zoning designation. The remaining western portion of the property was developed in unincorporated Volusia County as a 1996 BPUD for a telecommunications facility.

Ms. Eaton stated that the portion of the subject parcel within Ormond Beach is currently vacant. The property currently has a land use of Volusia County Rural (R) and is zoned Volusia County A-2 (Rural Agriculture). She continued that the B-2 (Neighborhood Commercial) zoning designation was selected based on the abutting city zoning and limited commercial uses. Due to the small nature and the constraints within the Land Development Code (LDC) staff does not believe that the site is conducive to high, intensive use or development potential.

Ms. Eaton concluded that staff recommends approval to the City Commission for the administrative request to amend the official zoning map to change the zoning classification from Volusia County A-2 (Rural Agriculture) to Ormond Beach B-2 (Neighborhood Commercial) for a portion of property at 2341 West Granada Boulevard.

Ms. Tolland made a motion to approve RZ 2021-010: Portion of 2341-010: Portion of 2341 West Granada Boulevard, Zoning Map Amendments. Mr. Scudiero seconded the motion. Vote was called, and the motion was approved (7-0).

E. MM 2019-020: 2020 Capital Improvements Element (CIE) Annual Update

Mr. Steven Spraker, Planning Director, delivered information on the administrative update to the Capital Improvements Element (CIE) Comprehensive Plan. The State Statutes require that the CIE be updated annually and it implements the capital improvement plans and annual budget that the City Commission approves. Mr. Spraker explained that they are large items, typically over twenty-five thousand dollar-projects, which includes the Volusia County School Board, as the City entered into an interlocal agreement with them. Mr. Spraker added that transportation projects, concurrency, residential trends, population and permit information are also included. The update does not include any text changes to the goals, objectives and policies of the CIE. Mr. Spraker concluded that the City Commission dates for this will take place January 19, 2021 for the first reading and February 2, 2021 for the second reading.

Chairman Thomas commented that the City is not planning to spend money in 2021-2024 on parks and recreation. Mr. Spraker explained that the current year plan is only adopted and that in future years the Capital Improvement Plan can be amended to include other projects. He elaborated that new projects come in and go out or are expanded. Chairman Thomas commented on what he has learned from the Leisure Service Board regarding future projects listed that have been cancelled.

Ms. Shull noted that population growth has not changed too much from 1990-2020.

Mr. Jorczak asked about the status of Ormond Crossings. Mr. Spraker replied that it is a private development therefore comes from private funds and is not recorded in the Capital Improvement Plan regarding building infrastructure. He added that he has not seen any development applications for it although he is aware that there are always people looking for residential, commercial and industrial opportunities.

Ms. Shull asked how the Margaritaville, and Avalon developments and traffic affect the City of Ormond Beach and improvements in the budget. Mr. Spraker replied that Avalon will have its own process and review with opportunities to discuss the projects. The City's concurrency deals with projects within the city's level service standards.

Mr. Briley commented that Avalon will have the most affects due to the City supplying them water and sewer. Mr. Spraker answered that there are agreements already in place for water and sewer and part of the contracts state that Daytona Beach has to pay the infrastructure costs of the water and sewer improvements. Avalon will



CITY OF ORMOND BEACH

City Manager • 22 S. Beach Street • Ormond Beach • Florida • 32174 • (386) 676-3200 • Fax (386) 676-3384

CITY MANAGER MEMORANDUM

To: The Honorable Mayor Partington and City Commissioners

Through: Joyce A. Shanahan, City Manager

From: Steven Spraker, Planning Director

Date: March 2, 2021

Subject: Pineland, Phases 4 & 5, Final Plat

Commission Goal: Community Development - Other

Introduction

This is a request from Chris Tyree, Division President, of Forestar, the property owner, Forestar (USA) Real Estate Group Inc., for final plat approval of 78 lots within the Pineland P.R.D. Subdivision - Phases 4 & 5. The project is under construction and the applicant shall post a performance guarantee to allow the subdivision plat to be recorded prior to the Site Plan Review Committee accepting the subdivision improvements.

Background

The subject property is north of Airport Road, east of Pineland Trail and Interstate 95, south of the City's business park, and west of the Ormond Green and Pine Trails subdivisions. The site is designated "Suburban Low Density Residential" (SLDR) on the City's Future Land Use Map and is zoned PRD (Planned Residential Development).

Subdivisions within the "Suburban Low Density Residential" land use are required to undergo a three-step process for subdivision development that includes (1) rezoning to Planned Residential Development, (2) preliminary plat, and (3) final plat. The property has had a long development review and approval history, and was originally known as Phase III of the Ormond Green Planned Unit Development (PUD) approved in 1989. Phase III of Ormond Green proposed 208 single-family homes but was never developed and the Development Order expired. Key approvals for the property include:

- On October 21, 2008, the City Commission approved Ordinance No. 2008-44 that allowed 192 single-family lots and a parcel to be developed for an institutional use on 164.5 acres under certain conditions. The expiration date for the subdivision was extended based on Land Development Code regulations and state extensions.
- On September 20, 2016, the City Commission approved Ordinance No. 2016-

29 that amended Ordinance No. 2008-44 for certain items such as subdivision completion dates, transportation and deletion of an attainable housing requirement.

- On December 4, 2017, the City's Site Plan Review Committee approved the subdivision construction plans for the entire Pineland subdivision.
- On June 26, 2018, the City Commission approved Resolution No. 2018-82 authorizing a preliminary plat for the two phases totaling 78 single family lots.
- On August 9, 2018, a site engineering permit was issued for the subdivision improvements for phases 1-3. The Phase 1 improvements were completed on January 6, 2020 and Phases 2 & 3 improvements on April 16, 2020.
- On June 1, 2020, an administrative one (1) year extension was granted to the preliminary plat based upon Section 1-14 of the Land Development Code.
- On October 19, 2020, a site engineering permit was issued for the subdivision improvements for Phases 4 & 5.

The project seeks to record the plat while completing the subdivision infrastructure improvements. The applicant shall be required to post a performance guarantee to ensure that the remaining subdivision improvements are completed.

Final plats are subject to review and approval by the Site Plan Review Committee, a Florida licensed surveyor acting on behalf of the City, and the City Attorney's office. The subject plat has been reviewed and determined acceptable. The proposed plat is consistent with the preliminary plat previously approved and the overall Planned Residential Development.

Budget Impact

There is no budget impact as the result of the final plat application.

Citizen Impact

The final plat is the last action of the subdivision approval process. The Pineland subdivision has been through a number of public review and hearings. The subdivision is specifically allowed within the property's land use and zoning and is consistent with the City's Comprehensive Plan and Land Development Code.

Recommendation

It is recommended that the City Commission **APPROVE** the final plat for 78 lots for the lot Pineland P.R.D. Subdivision - Phases 4 & 5. The final plat is consistent with the approved Planned Residential Development zoning and preliminary plat.

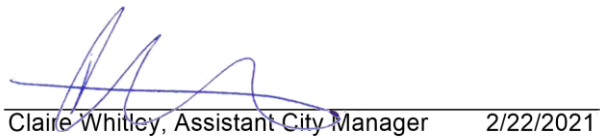
Attachments:

- 21-09 Pineland Final Plat (P21-0012G) (PDF)

- Exhibit A, Final plat (PDF)
- Overall Pineland subdivision development map (PDF)

REVIEWED BY:


Kelly McGuire, Finance Director 2/22/2021


Claire Whitley, Assistant City Manager 2/22/2021

APPROVED BY:


Joyce A. Shanahan, City Manager 2/24/2021

ORDINANCE NO. 2021-09

AN ORDINANCE APPROVING THE FINAL PLAT FOR THE “PINELAND P.R.D. SUBDIVISION – PHASES 4 & 5”, A PLANNED RESIDENTIAL DEVELOPMENT; ESTABLISHING CONDITIONS AND EXPIRATION DATE OF APPROVAL; AND SETTING FORTH AN EFFECTIVE DATE.

WHEREAS, on October 21, 2008, the City Commission approved Ordinance 2008-44 authorizing a Planned Residential Development Order for a five-phase subdivision of 192 single family lots known as “Pineland” Planned Residential Development and authorized the execution of a Development Order, which Ordinance and Development Order are recorded in the public records of Volusia County, Florida in Official Records Book 6291, at Pages 1070 through 1094, inclusive, and

WHEREAS, on September 20, 2016, the City Commission approved Ordinance 2016-29 authorizing the first amended and restated Development Order for a five-phase subdivision of 192 single family lots known as “Pineland” Planned Residential Development and authorized the execution of a Development Order, which Ordinance and Development Order are recorded in the public records of Volusia County, Florida in Official Records Book 7306, at Pages 2772 through 2789, inclusive, and

WHEREAS, on December 4, 2017, the City’s Site Plan Review Committee approved the subdivision construction plans. These plans detail the clearing/tree removal, protected areas, stormwater retention areas, the street grading plans, lot elevations, recreation areas, and utilities, and

WHEREAS, on June 26, 2018, the City Commission approved Resolution 2018-82 authorizing a preliminary plat for a 78 single family lot subdivision known as “Pineland P.R.D. Subdivision – Phases 4 & 5”, and

WHEREAS, on August 9, 2018, a site engineering permit was issued for the subdivision improvements for phases 1-3. The Phase 1 improvements were completed on January 6, 2020 and Phases 2 & 3 improvements on April 16, 2020, and

WHEREAS, on June 1, 2020, an administrative one (1) year extension was granted to the preliminary plat based upon Section 1-14 of the Land Development Code, and

WHEREAS, On October 19, 2020, a site engineering permit was issued for the subdivision improvements for phases 4 & 5, and

WHEREAS, the applicant desires to record the “Pineland P.R.D. Subdivision – Phases 4 & 5” plat while the project construction has not yet been completed and shall provide a subdivision performance guarantee prior to recordation, and

WHEREAS, the final plat for the “Pineland P.R.D. Subdivision – Phases 4 & 5” has been reviewed by the City staff, City Surveyor, and by the Site Plan Review Committee and is recommended for approval subject to certain conditions, and

WHEREAS, the City Commission concurs with the recommendation of City staff, City Surveyor, and by the Site Plan Review Committee, now therefore,

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

SECTION ONE. The City Commission hereby approves final plat for the “Pineland P.R.D. Subdivision – Phases 4 & 5” subdivision, as depicted on Exhibit “A” attached hereto, subject to compliance with the following conditions prior to recordation of the final plat:

- (a) Performance bond for remaining construction improvements shall be in place; and
- (b) All applicable requirements of Chapter 177, *Florida Statutes*, shall be met.

SECTION TWO. In accordance with the requirements for development orders and building permits in Chapter 1, Article II, Section 1-14 of the *Land Development Code*; and where applicable, consistent with the concurrency requirements of Chapter 1, Article V, Section 1-37(4) of the *Land Development Code*, the approval granted shall automatically expire and become void unless the following condition is met:

- (a) The plat is recorded within eighteen (18) months of the date of approval by this Resolution, said date being September 16, 2022; and

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

PASSED UPON at the first reading of the City Commission, this 2nd day of March, 2021.

PASSED UPON at the second reading of the City Commission, this 16th day of
March, 2021.

BILL PARTINGTON
Mayor

ATTEST:

COLBY CILENTO
City Clerk

DEDICATION:

THIS IS TO CERTIFY THAT FORESTAR (USA) REAL ESTATE GROUP INC. A DBA AMERLAC CORPORATION, BEING THE OWNER IN FEE SIMPLE OF THE LANDS DESCRIBED IN THE ATTACHED PLAT ENTITLED PINELAND P.R.D. SUBDIVISION - PHASES 4 & 5, LOCATED IN THE CITY OF ORMOND BEACH, VOLUSIA COUNTY, FLORIDA, ALL ROADS, STREETS, AND RIGHT OF WAY AS SHOWN HEREON ARE DEDICATED TO THE PERPETUAL USE OF THE PUBLIC AND THE CITY OF ORMOND BEACH, FLORIDA.

EASEMENTS:

- (1) THE UTILITY EASEMENTS SHOWN HEREON ARE HEREBY DEDICATED TO THE PUBLIC FOR PROPER PURPOSES AND MAINTENANCE OF THE UTILITY FACILITIES AND SHALL BE THE PERPETUAL MAINTENANCE OBLIGATION OF THE ASSOCIATION.
- (2) UNLESS OTHERWISE NOTED, EASEMENTS OF 5.00 FEET IN WIDTH ALONG EACH SIDE LOT LINE ARE HEREBY CREATED AND PROVIDED FOR THE PURPOSE OF ACCOMMODATING SIDE YARD DRAINAGE SWALES.
- (3) A (10) FOOT WIDE MAINTENANCE ACCESS EASEMENT AS SHOWN HEREON IS DEDICATED TO THE PINELAND HOMEOWNERS ASSOCIATION OF ORMOND BEACH (ASSOCIATION) FOR STORMWATER MANAGEMENT, POND MAINTENANCE AND POND ACCESS PURPOSES DESCRIBED IN THE DECLARATION OF COVENANTS AND RESTRICTIONS AND SHALL BE THE PERPETUAL MAINTENANCE OBLIGATION OF THE ASSOCIATION.

NOTES:

- (1) THE PROPERTY DESCRIBED IN THIS PLAT IS SUBJECT TO THE DECLARATION OF COVENANTS, CONDITIONS, RESTRICTIONS AND EASEMENTS FOR PINELAND P.R.D. SUBDIVISION - PHASES 4 & 5, TO BE RECORDED SIMULTANEOUSLY WITH THIS PLAT IN THE PUBLIC RECORDS OF VOLUSIA COUNTY, FLORIDA.
- (2) TRACTS A-1 AND A-2 AS SHOWN HEREON ARE GRANTED AND CONVEYED TO THE PINELAND HOMEOWNERS ASSOCIATION OF ORMOND BEACH (ASSOCIATION) FOR THE PERPETUAL MAINTENANCE OBLIGATION OF THE ASSOCIATION.
- (3) TRACTS C-1, C-2 AND C-3 AS SHOWN HEREON ARE GRANTED AND CONVEYED TO THE ASSOCIATION FOR CONSERVATION AREA PURPOSES AND SHALL BE THE PERPETUAL MAINTENANCE OBLIGATION OF THE ASSOCIATION.
- (4) TRACTS D-1, D-2, D-3, D-4, D-5, D-6, D-7, D-8, D-9, D-10, D-11 AND D-12 PONDS, DRAINAGE EASEMENTS AND DRAINAGE AREAS AS SHOWN HEREON ARE DEDICATED TO THE ASSOCIATION FOR STORMWATER MANAGEMENT, POND MAINTENANCE AND POND ACCESS PURPOSES DESCRIBED IN THE DECLARATION OF COVENANTS AND RESTRICTIONS AND SHALL BE THE PERPETUAL MAINTENANCE OBLIGATION OF THE ASSOCIATION.
- (5) THE OWNER DOES FURTHER GRANT, CONVEY AND DEDICATE TO THE CITY OF ORMOND BEACH, FLORIDA, TRACT Z-1, (LIFT STATION) AS SHOWN HEREON AND THE FACILITIES LOCATED THEREON FOR PURPOSES INCIDENTAL THERETO.
- (6) JOHN'S WATER MANAGEMENT DISTRICT IS SUBJECT TO A CONSERVATION EASEMENT IN FAVOR OF THE ST. JOHN'S RECORDS OF VOLUSIA COUNTY, FLORIDA.
- (7) THE VEGETATIVE NATURAL BUFFERS AND LANDSCAPE BUFFERS SHALL REMAIN IN AN UNDEVELOPED AND UNDISTURBED NATURAL STATE, ANY DEFICIENT AREAS WITHIN THE VEGETATIVE NATURAL BUFFERS AND LANDSCAPE BUFFERS SHALL BE PLANTED WITH NATIVE VEGETATION IN ACCORDANCE TO THE REQUIREMENTS OF CITY'S LAND DEVELOPMENT CODE, THE PINELAND SUBDIVISION PLANS ENVIRONMENTAL RESOURCE PERMIT AND DEED OF CONSERVATION EASEMENT, AND ANY DOCUMENTS PERTAINING THERETO.
- (8) THE CONSERVATION EASEMENTS SHOWN HEREON SHALL BE DEDICATED TO THE ST. JOHN'S RIVER WATER MANAGEMENT DISTRICT PURSUANT TO SECTION 704.06, FLORIDA STATUTES. CONSERVATION EASEMENTS WILL NOT BE GRANTED TO ANY OTHER PARTY, AND ANY OTHER PARTY WHO MAY BE GRANTED SUCH EASEMENTS SHALL HAVE ANY AND ALL EXCEPT THOSE FACILITIES WHICH HAVE BEEN APPROVED AND PERMITTED BY THE APPROPRIATE GOVERNMENTAL AGENCIES. CONSERVATION EASEMENTS SHALL PERMIT ACCESS BY THE ST. JOHN'S RIVER WATER MANAGEMENT DISTRICT TO INSPECT, AND IF NECESSARY, TAKE CORRECTIVE ACTION AT THE PINELAND HOMEOWNERS ASSOCIATION EXPENSE. IF THE PINELAND HOMEOWNERS ASSOCIATION FAILS TO MAINTAIN THE SYSTEM.
- (9) THE DECLARATION OF COVENANTS, CONDITIONS & RESTRICTIONS THAT PERTAIN TO PINELAND PROPERTY, ARE RECORDED IN BOOK _____, PAGES _____ OF THE OFFICIAL RECORDS OF VOLUSIA COUNTY, FLORIDA.

FORESTAR (USA) REAL ESTATE GROUP INC., A DELAWARE CORPORATION - OWNER

CHRIS TREEE

WITNESS,

WITNESS,

ACKNOWLEDGEMENT: STATE OF FLORIDA, COUNTY OF _____, SHOWN TO AND SUBSCRIBED BEFORE ME BY MEANS OF PHYSICAL PRESENCE THIS DAY OF _____, 2021, PERSONALLY APPEARED CHRIS TREEE, WHO IS PERSONALLY KNOWN TO ME OR HAS PRODUCED _____ AS IDENTIFICATION.

Notary Public, State of Florida at Large

Printed Name of Notary _____

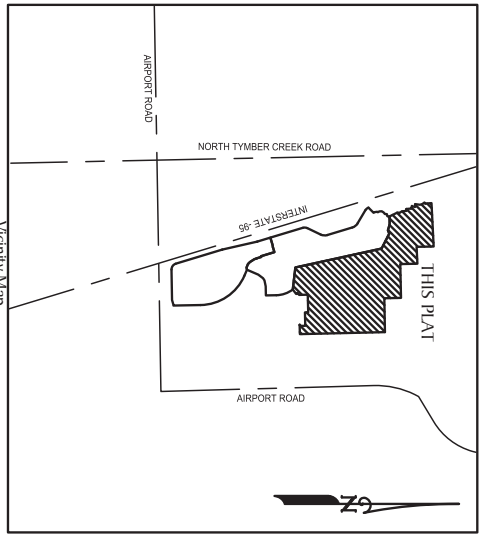
My Commission expires: _____

Commission Number: _____

SURETORS CERTIFICATION

I HEREBY CERTIFY THAT THIS IS A TRUE AND CORRECT REPRESENTATION OF THE LANDS SURVEYED, AND THAT THE SURVEY DATA CONTAINED HEREIN COMPLETES WITH ALL OF THE REQUIREMENTS OF THE FLORIDA STATUTES AND THE CITY OF ORMOND BEACH, FLORIDA, AND THAT I HAVE REVIEWED THE SURVEY AND PLAT FOR CONFORMITY TO CHAPTER 177 OF THE FLORIDA STATUTES AND I HEREBY CERTIFY THAT SAID SURVEY IS IN FULL COMPLIANCE WITH THE REQUIREMENTS OF CHAPTER 177, PART 1 OF THE FLORIDA STATUTES.

BY: JAMES D. LEVNER, (LICENSE NO. 156915)
FLORIDA PROFESSIONAL SURVEYOR AND MAPPER
GEOPoint SURVEYING, INC.
555 WINDERMERE LANE, SUITE 120
WINDERMERE, FLORIDA 32791
LICENSED BUSINESS NUMBER LB 7768



Vicinity Map (NOT TO SCALE)

DESCRIPTION A PARCEL OF LAND LYING IN SECTIONS 13 AND 24, TOWNSHIP 14 SOUTH, RANGE 31 EAST, VOLUSIA COUNTY, FLORIDA, AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGIN AT THE SOUTHWEST CORNER OF PINE TRAILS PHASE II ACCORDING TO THE PLAT THEREOF AS RECORDED IN BOOK 188, PAGE 100 OF THE OFFICIAL RECORDS OF VOLUSIA COUNTY, FLORIDA, AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: LINE OF THE ACRES SAID SECTION 13, THENCE ALONG SAID EAST LINE, 8.01'20\"/>

NOTICE: THIS PLAT, AS RECORDED IN ITS GRAPHIC FORM, IS THE OFFICIAL DEPICTION OF THE SUBDIVIDED LANDS DESCRIBED HEREIN AND WILL IN NO CIRCUMSTANCES BE SUPPLEMENTED OR AUTHORIZED BY ANY OTHER GRAPHIC OR DOCUMENT. ANY CHANGES TO THIS PLAT THAT MAY BE FOUND IN THE PUBLIC RECORDS OF VOLUSIA COUNTY.

CERTIFICATE OF APPROVAL BY THE CITY COMMISSION

THIS IS TO CERTIFY THAT ON THE _____ DAY OF _____, 2021, THE ORMOND BEACH CITY COMMISSION APPROVED THE FOREGOING PLAT.

MAYOR BILL PARTINGTON, MAYOR

ATTEND:

CITY CLERK

CERTIFICATE OF CLERK

I HEREBY CERTIFY THAT I HAVE EXAMINED THE FOREGOING PLAT AND FIND IT CONFORMS TO THE REQUIREMENTS OF CHAPTER 177, FLORIDA STATUTES AND WAS FILED FOR RECORD ON _____ AT _____

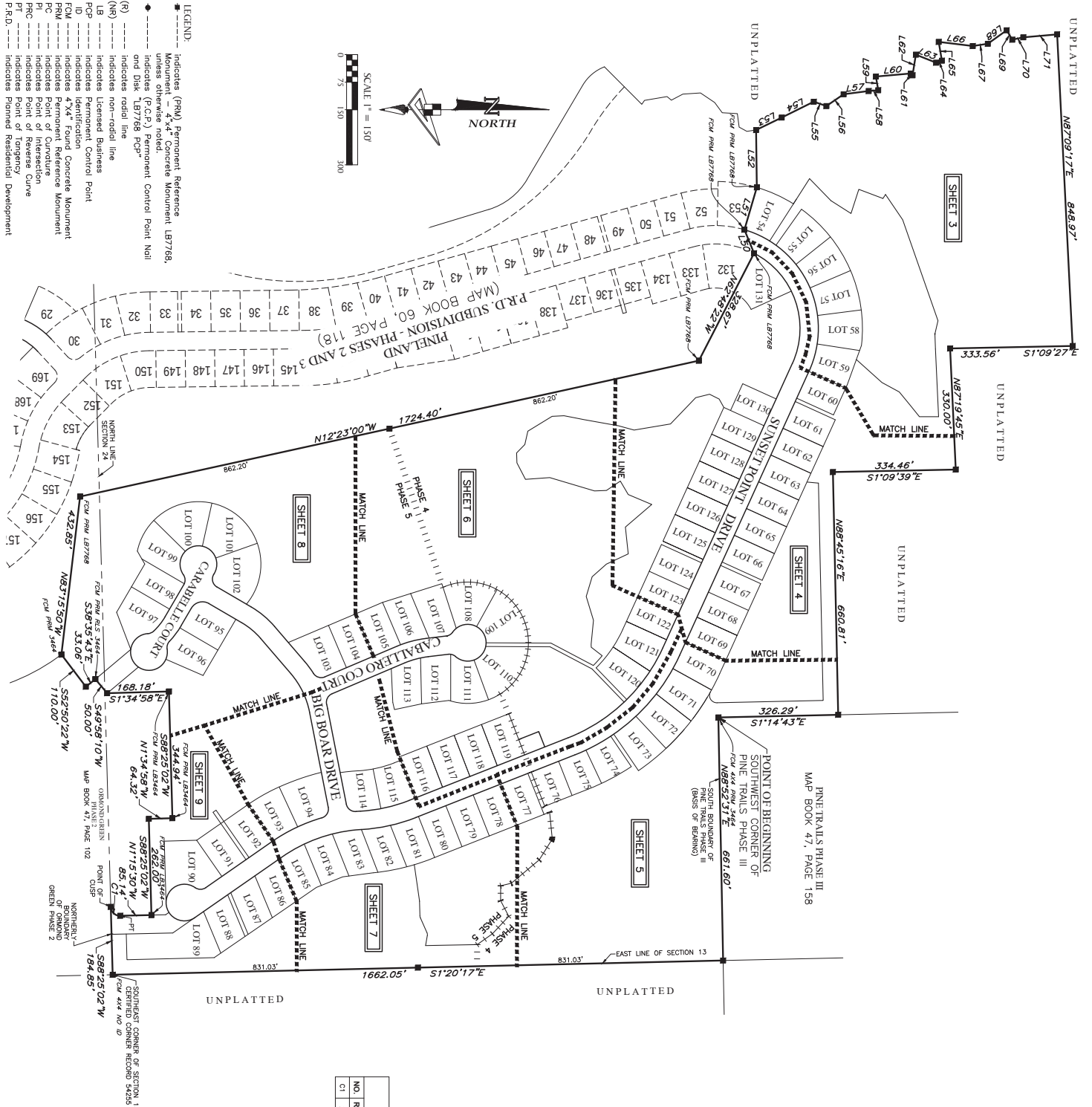
CLERK OF THE CIRCUIT COURT, FILE NUMBER _____ IN AND FOR VOLUSIA COUNTY, FLORIDA

ADDITIONAL NOTES:

1. BEGINS SHOWN HEREON ARE BASED ON THE THE WEST BOUNDARY OF ORMOND GREEN P.R.D. SUBDIVISION - PHASES 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 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PINELAND P.R.D. SUBDIVISION - PHASES 4 & 5

LYING IN SECTIONS 13 & 24, TOWNSHIP 14 SOUTH, RANGE 31 EAST, CITY OF ORMOND BEACH, VOLUSIA COUNTY, FLORIDA



- LEGEND:**
- Indicates (R/R) Permanent Reference Monument 4"x4" Concrete Monument LB7768, unless otherwise noted.
 - Indicates (P.C.P.) Permanent Control Point Nail and Disk LB7768 PCP
 - (R) Indicates radial line
 - Indicates non-radial line
 - Indicates Licensed Business
 - Indicates Permanent Control Point
 - Indicates Identification
 - Indicates 4"x4" Found Concrete Monument
 - Indicates Permanent Reference Monument
 - Indicates Point of Intersection
 - Indicates Point of Tangency
 - Indicates Planned Residential Development



CURVE DATA TABLE

NO.	RADIUS	DELTA	ARC	CHORD	BEARING
C1	25.00'	89°40'32"	39.13'	35.28'	N 83°44'46" E

LINE DATA TABLE

NO.	BEARING	LENGTH
L50	S 67°44'32" W	69.24'
L51	N 73°38'12" W	120.00'
L52	S 89°15'34" W	156.46'
L53	N 25°56'40" W	77.59'
L54	N 26°19'28" W	97.31'
L55	N 18°59'05" E	36.31'
L56	N 34°21'02" W	68.84'
L57	N 07°17'46" W	68.84'
L58	N 04°50'24" W	26.11'
L59	S 80°44'47" W	37.77'
L60	N 05°01'46" W	95.10'
L61	N 44°39'15" E	6.89'
L62	N 80°51'14" W	56.88'
L63	N 21°37'12" E	59.22'
L64	N 19°12'05" W	16.80'
L65	S 80°20'37" W	51.81'
L66	N 08°54'56" E	93.34'
L67	N 08°28'28" W	41.45'
L68	N 35°18'07" W	63.15'
L69	N 59°13'14" E	29.81'
L70	N 11°59'32" W	30.65'
L71	N 04°55'34" W	92.52'

KEY SHEET

NOTE: REFER TO THE FOLLOWING SHEETS AND SUBDIVISIONS:

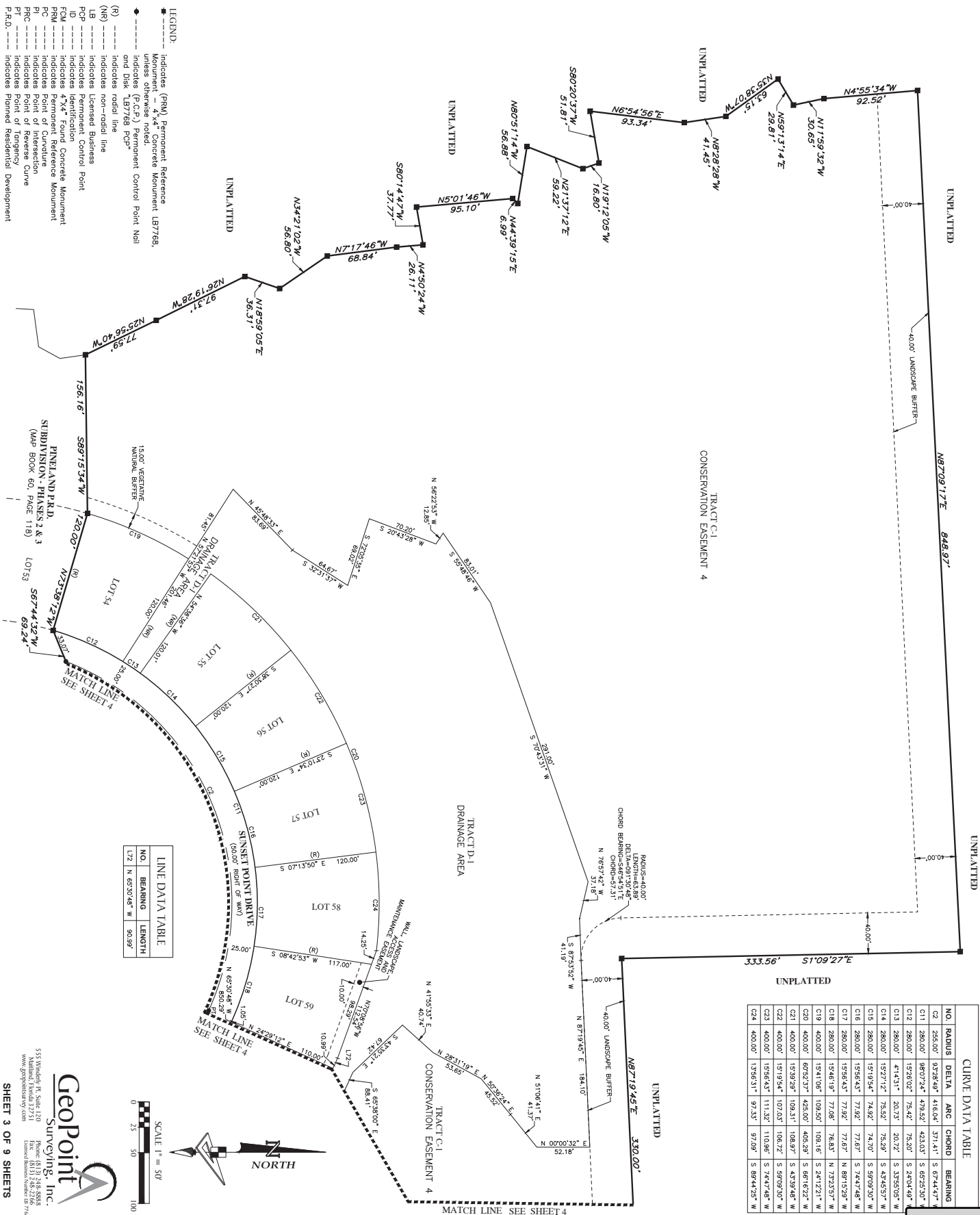
555 W. Highway 17, Suite 120
Ormond Beach, Florida 32131
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PINELAND P.R.D. SUBDIVISION - PHASES 4 & 5

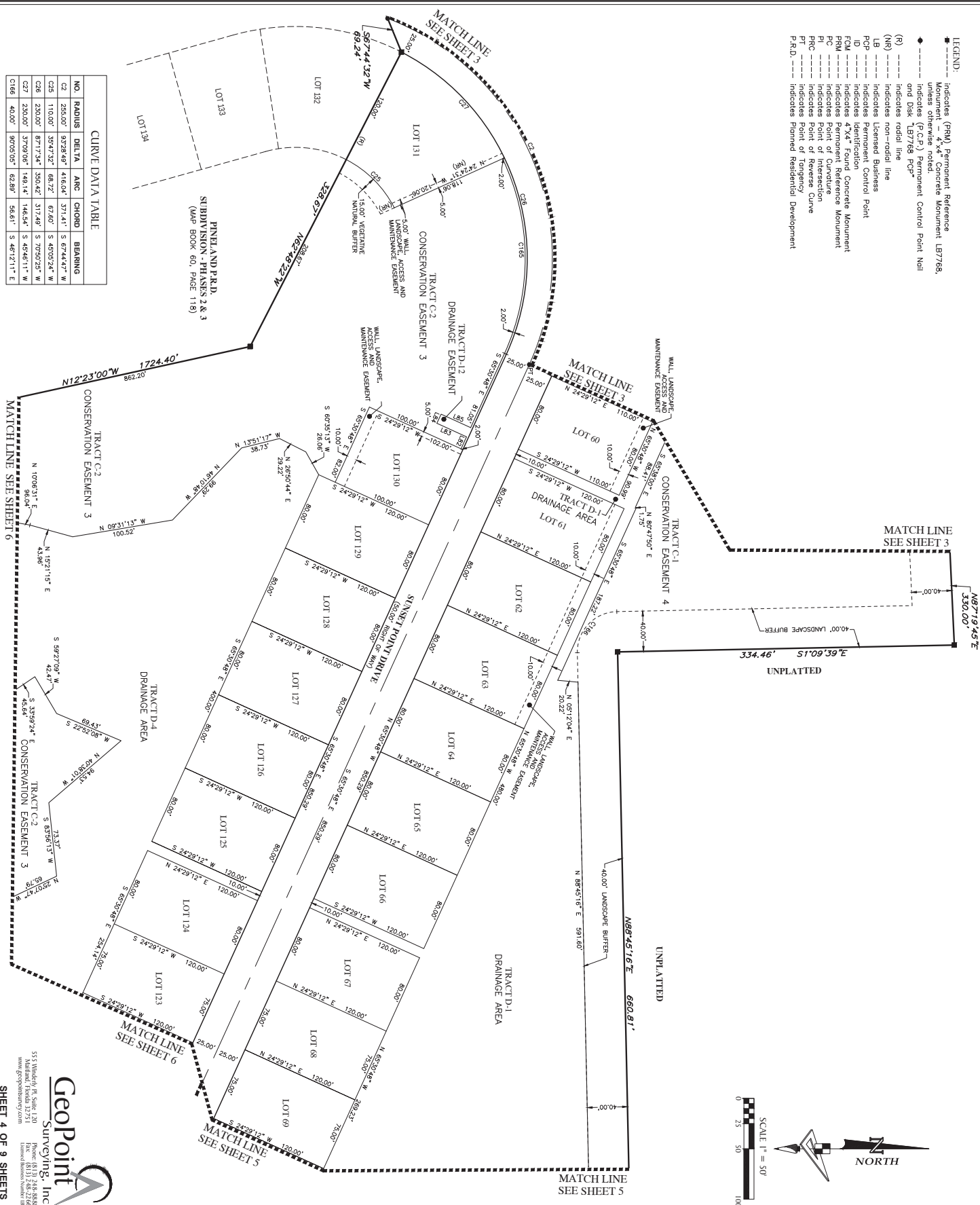
LYING IN SECTIONS 13 & 24, TOWNSHIP 14 SOUTH, RANGE 31 EAST, CITY OF ORMOND BEACH, VOLUSIA COUNTY, FLORIDA

CURVE DATA TABLE				
NO.	RADIUS	DELTA	CHORD	BEARING
C1	925.000	93.278-49.4	416.04	571.41
C2	1280.00	96.807-72.4	719.82	423.03
C12	2800.00	158.072-70.2	1452.30	65.292-50.9
C13	2800.00	158.072-70.2	1452.30	75.307
C14	2800.00	141.311	20.32	20.32
C15	2800.00	152.721	75.53	75.53
C16	2800.00	159.184	74.62	74.67
C16	2800.00	159.643	77.92	77.67
C17	2800.00	159.643	77.92	77.67
C18	2800.00	159.643	77.92	77.67
C19	400.00	154.106	109.60	76.63
C20	400.00	154.106	109.60	76.63
C21	400.00	154.106	109.60	76.63
C22	400.00	154.106	109.60	76.63
C23	400.00	154.106	109.60	76.63
C24	400.00	154.106	109.60	76.63



	MAP BOOK	PAGE NO.
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■ **LEND** — indicates (R/N) Permanent Reference
 More than 10^4 X_{10}^4 Concrete Monument, LB7768
 unless otherwise noted
 ◆ **P.C.P.** — Permanent Control Point Nail
 and Disk, LB7768 P.C.P.
 (r) — indicates radial line
 (NR) — indicates non-radial line
 LB — indicates Licensed Business
 RD — indicates Permanent Control Point
 ID — indicates Identification Concrete Monument
 FC — indicates Permanent Reference Monument
 PM — indicates Point of Curvature
 PC — indicates Point of Intersection
 PI — indicates Point of Reverse Curve
 PRC — indicates Planned Residential Development
 P.R.D. — indicates



PINELAND P.R.D. SUBDIVISION - PHASES 4 & 5
LYING IN SECTIONS 13 & 24, TOWNSHIP 14 SOUTH, RANGE 31 EAST, CITY OF ORMOND BEACH, VOLUSIA COUNTY, FLORIDA

CURVE DATA TABLE				
NO.	RADIUS	DELTA	ARC	CHORD
C3	500.00'	44°00'53"	384.10'	374.73'
C29	505.00'	44°00'53"	403.31'	393.46'
C30	505.00'	47°42'02"	40.32'	40.31'
C31	505.00'	90°00'00"	82.47'	82.38'
C32	505.00'	90°00'00"	82.47'	82.38'
C33	505.00'	82°16'16"	77.47'	77.40'
C34	505.00'	105°29'31"	10.00'	10.00'
C35	505.00'	82°16'16"	77.47'	77.40'
C36	505.00'	33°14'31"	33.25'	33.24'
C38	15.00'	37°48'41"	9.80'	9.72'
C39	20.00'	120°38'44"	42.11'	34.75'
C40	645.00'	47°42'02"	55.32'	55.30'

CURVE DATA TABLE				
NO.	RADIUS	DELTA	ARC	CHORD
C41	645.00'	47°42'02"	49.54'	49.53'
C42	645.00'	90°00'00"	101.32'	101.21'
C43	645.00'	90°00'00"	101.32'	101.21'
C44	645.00'	83°33'21"	96.32'	96.23'
C45	645.00'	26°02'34"	293.17'	290.06'
C46	627.00'	12°09'28"	133.04'	132.79'
C47	627.00'	83°14'31"	93.33'	93.24'
C48	627.00'	30°21'31"	39.20'	38.20'
C49	660.00'	07°52'42"	10.12'	10.12'
C168	40.00'	89°52'46"	62.75'	56.51'
C169	40.00'	89°52'46"	62.75'	56.51'

LINE DATA TABLE		
NO.	BEARING	LENGTH
L1	N 21°29'55" W	6.41'
L68	N 30°35'00" E	15.00'

- LEGEND:
- Indicates (PRM) Permanent Reference Monument - 4"x4" Concrete Monument LB7768, unless otherwise noted.
 - Indicates (P.C.P.) Permanent Control Point Nail and Disk LB7768 PCP
 - (R) --- Indicates radial line
 - (NR) --- Indicates non-radial line
 - LB --- Indicates Licensed Business
 - PCP --- Indicates Permanent Control Point
 - ID --- Indicates Identification
 - PRM --- Indicates Permanent Reference Monument
 - PC --- Indicates Point of Curvature
 - PI --- Indicates Point of Intersection
 - PRC --- Indicates Point of Reverse Curve
 - PT --- Indicates Point of Tangency
 - P.R.D. --- Indicates Planned Residential Development

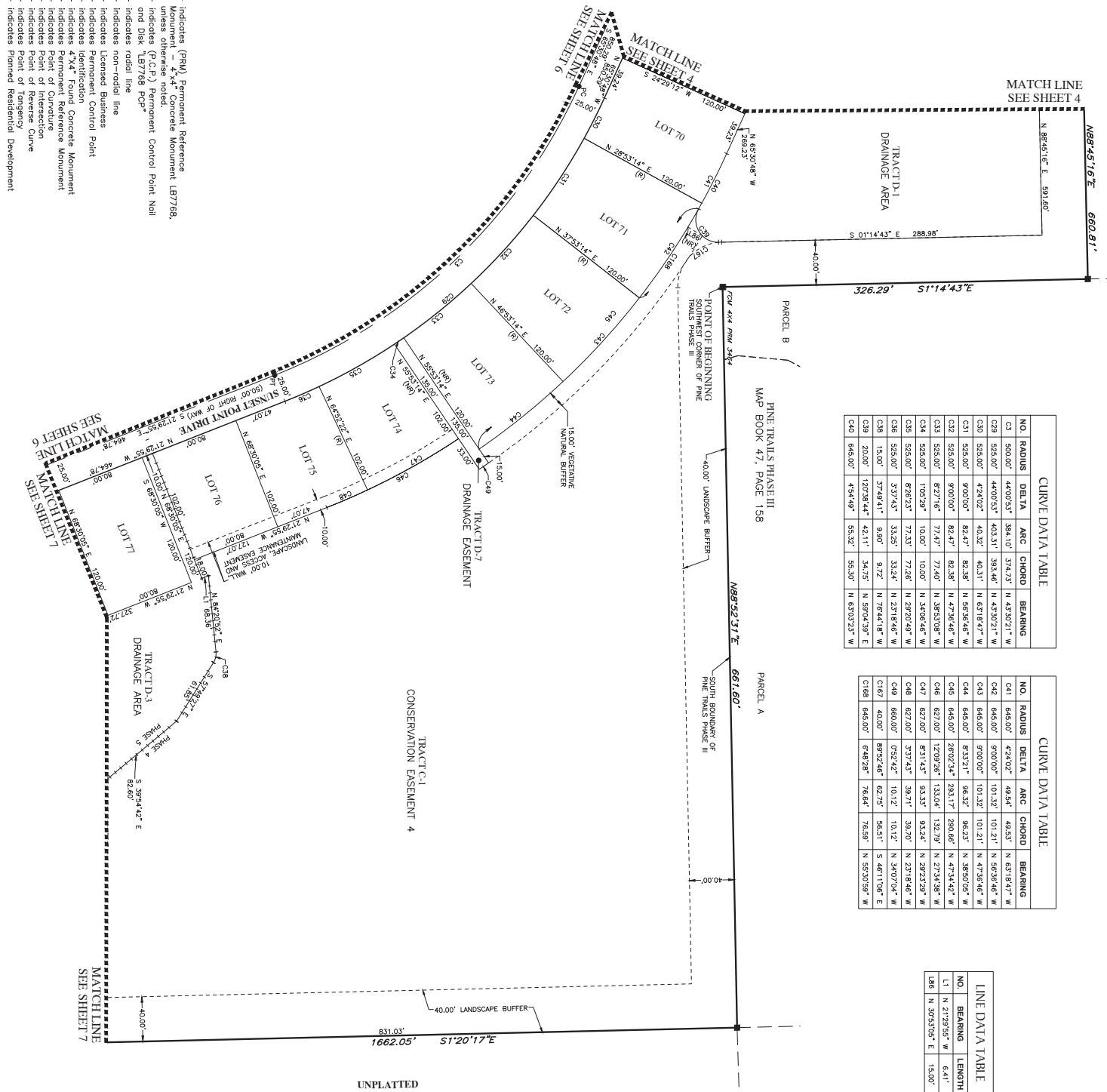
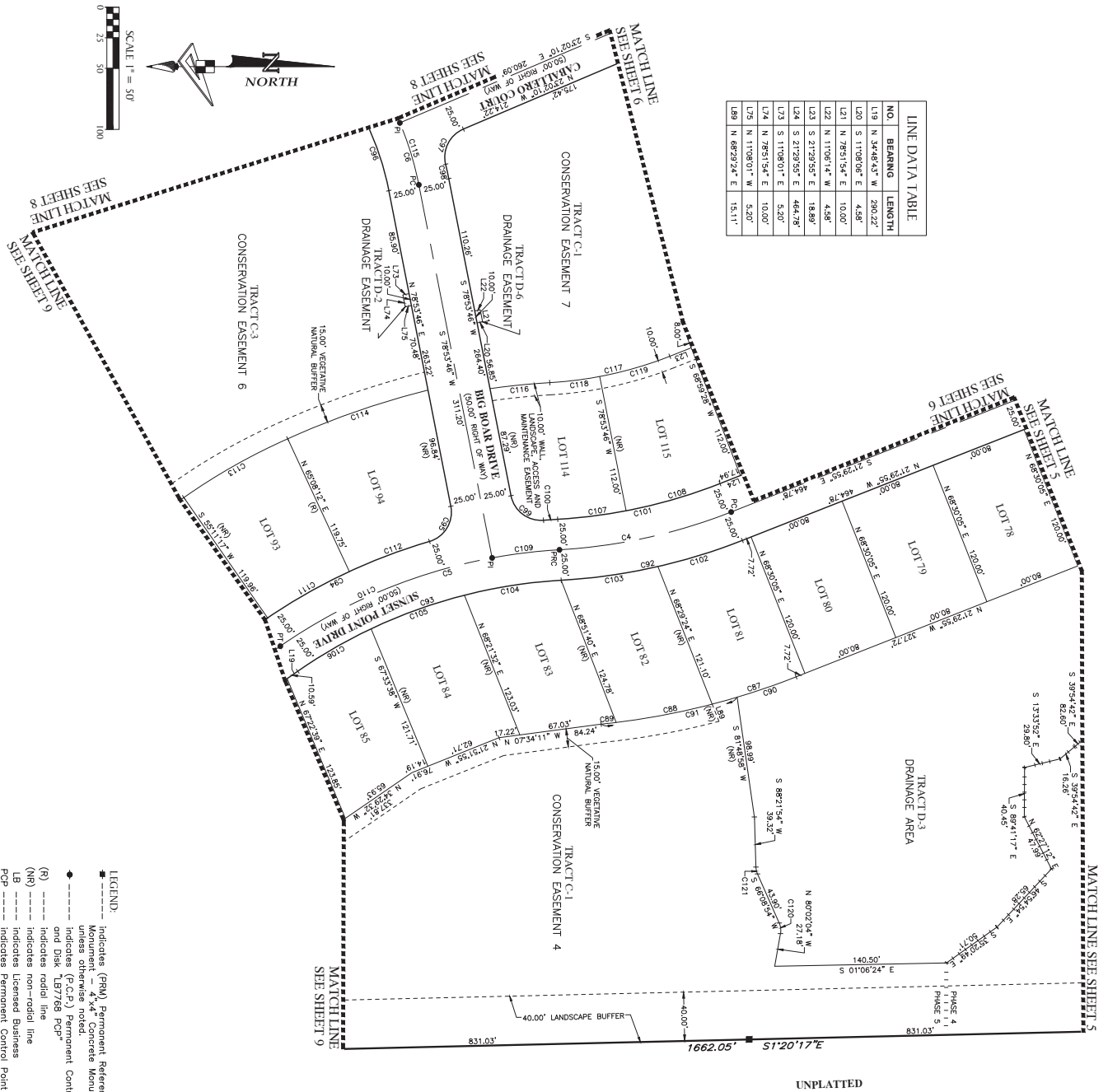


EXHIBIT "A"
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PINELAND P.R.D. SUBDIVISION - PHASES 4 & 5
LYING IN SECTIONS 13 & 24, TOWNSHIP 14 SOUTH, RANGE 31 EAST, CITY OF ORMOND BEACH, VOLUSIA COUNTY, FLORIDA



LINE DATA TABLE	
NO.	BEARING
L19	N 34°48'43" W 280.22'
L20	S 11°08'06" E 4.58'
L21	N 78°51'54" E 10.00'
L22	N 11°06'14" W 4.58'
L23	S 21°29'55" E 18.88'
L24	S 21°29'55" E 44.78'
L25	S 11°08'01" E 5.20'
L26	N 78°51'54" E 10.00'
L27	N 11°08'01" W 5.20'
L28	N 88°29'24" E 15.11'

CURVE DATA TABLE			
NO.	RADIUS	DELTA	ARC CHORD
C1	445.00'	18°11'30"	144.65'
C2	445.00'	18°11'30"	144.65'
C3	445.00'	18°11'30"	144.65'
C4	254.71'	29°34'48"	131.50'
C5	600.00'	6°54'04"	72.22'
C6	600.00'	7°38'33"	80.03'
C7	600.00'	11°10'55"	124.1'
C8	600.00'	4°52'31"	51.05'
C9	600.00'	10°51'11"	113.65'
C10	480.00'	18°11'28"	152.39'
C11	480.00'	31°20'31"	230.93'
C12	470.00'	151.60'	191.03'
C13	28.00'	86°47'03"	36.89'
C14	229.72'	28°34'51"	118.60'
C15	28.00'	86°47'03"	36.89'
C16	278.60'	72°28'02"	12.04'
C17	28.00'	86°47'03"	36.89'
C18	28.00'	86°47'03"	36.89'
C19	470.00'	17°34'56"	115.62'
C20	480.00'	18°11'28"	152.39'
C21	480.00'	31°20'31"	230.93'
C22	470.00'	151.60'	191.03'
C23	28.00'	86°47'03"	36.89'
C24	229.72'	28°34'51"	118.60'
C25	28.00'	86°47'03"	36.89'
C26	278.60'	72°28'02"	12.04'
C27	28.00'	86°47'03"	36.89'
C28	28.00'	86°47'03"	36.89'
C29	470.00'	17°34'56"	115.62'
C30	480.00'	18°11'28"	152.39'
C31	480.00'	31°20'31"	230.93'
C32	470.00'	151.60'	191.03'
C33	28.00'	86°47'03"	36.89'
C34	229.72'	28°34'51"	118.60'
C35	28.00'	86°47'03"	36.89'
C36	278.60'	72°28'02"	12.04'
C37	28.00'	86°47'03"	36.89'
C38	28.00'	86°47'03"	36.89'
C39	470.00'	17°34'56"	115.62'
C40	480.00'	18°11'28"	152.39'
C41	480.00'	31°20'31"	230.93'
C42	470.00'	151.60'	191.03'
C43	28.00'	86°47'03"	36.89'
C44	229.72'	28°34'51"	118.60'
C45	28.00'	86°47'03"	36.89'
C46	278.60'	72°28'02"	12.04'
C47	28.00'	86°47'03"	36.89'
C48	28.00'	86°47'03"	36.89'
C49	470.00'	17°34'56"	115.62'
C50	480.00'	18°11'28"	152.39'
C51	480.00'	31°20'31"	230.93'
C52	470.00'	151.60'	191.03'
C53	28.00'	86°47'03"	36.89'
C54	229.72'	28°34'51"	118.60'
C55	28.00'	86°47'03"	36.89'
C56	278.60'	72°28'02"	12.04'
C57	28.00'	86°47'03"	36.89'
C58	28.00'	86°47'03"	36.89'
C59	470.00'	17°34'56"	115.62'
C60	480.00'	18°11'28"	152.39'
C61	480.00'	31°20'31"	230.93'
C62	470.00'	151.60'	191.03'
C63	28.00'	86°47'03"	36.89'
C64	229.72'	28°34'51"	118.60'
C65	28.00'	86°47'03"	36.89'
C66	278.60'	72°28'02"	12.04'
C67	28.00'	86°47'03"	36.89'
C68	28.00'	86°47'03"	36.89'
C69	470.00'	17°34'56"	115.62'
C70	480.00'	18°11'28"	152.39'
C71	480.00'	31°20'31"	230.93'
C72	470.00'	151.60'	191.03'
C73	28.00'	86°47'03"	36.89'
C74	229.72'	28°34'51"	118.60'
C75	28.00'	86°47'03"	36.89'
C76	278.60'	72°28'02"	12.04'
C77	28.00'	86°47'03"	36.89'
C78	28.00'	86°47'03"	36.89'
C79	470.00'	17°34'56"	115.62'
C80	480.00'	18°11'28"	152.39'
C81	480.00'	31°20'31"	230.93'
C82	470.00'	151.60'	191.03'
C83	28.00'	86°47'03"	36.89'
C84	229.72'	28°34'51"	118.60'
C85	28.00'	86°47'03"	36.89'
C86	278.60'	72°28'02"	12.04'
C87	28.00'	86°47'03"	36.89'
C88	28.00'	86°47'03"	36.89'
C89	470.00'	17°34'56"	115.62'
C90	480.00'	18°11'28"	152.39'
C91	480.00'	31°20'31"	230.93'
C92	470.00'	151.60'	191.03'
C93	28.00'	86°47'03"	36.89'
C94	229.72'	28°34'51"	118.60'
C95	28.00'	86°47'03"	36.89'
C96	278.60'	72°28'02"	12.04'
C97	28.00'	86°47'03"	36.89'
C98	28.00'	86°47'03"	36.89'
C99	470.00'	17°34'56"	115.62'
C100	480.00'	18°11'28"	152.39'
C101	480.00'	31°20'31"	230.93'
C102	470.00'	151.60'	191.03'
C103	28.00'	86°47'03"	36.89'
C104	229.72'	28°34'51"	118.60'
C105	28.00'	86°47'03"	36.89'
C106	278.60'	72°28'02"	12.04'
C107	28.00'	86°47'03"	36.89'
C108	28.00'	86°47'03"	36.89'
C109	470.00'	17°34'56"	115.62'
C110	480.00'	18°11'28"	152.39'
C111	480.00'	31°20'31"	230.93'
C112	470.00'	151.60'	191.03'
C113	28.00'	86°47'03"	36.89'
C114	229.72'	28°34'51"	118.60'
C115	28.00'	86°47'03"	36.89'
C116	278.60'	72°28'02"	12.04'
C117	28.00'	86°47'03"	36.89'
C118	28.00'	86°47'03"	36.89'
C119	470.00'	17°34'56"	115.62'
C120	480.00'	18°11'28"	152.39'
C121	480.00'	31°20'31"	230.93'
C122	470.00'	151.60'	191.03'
C123	28.00'	86°47'03"	36.89'
C124	229.72'	28°34'51"	118.60'
C125	28.00'	86°47'03"	36.89'
C126	278.60'	72°28'02"	12.04'
C127	28.00'	86°47'03"	36.89'
C128	28.00'	86°47'03"	36.89'
C129	470.00'	17°34'56"	115.62'
C130	480.00'	18°11'28"	152.39'
C131	480.00'	31°20'31"	230.93'
C132	470.00'	151.60'	191.03'
C133	28.00'	86°47'03"	36.89'
C134	229.72'	28°34'51"	118.60'
C135	28.00'	86°47'03"	36.89'
C136	278.60'	72°28'02"	12.04'
C137	28.00'	86°47'03"	36.89'
C138	28.00'	86°47'03"	36.89'
C139	470.00'	17°34'56"	115.62'
C140	480.00'	18°11'28"	152.39'
C141	480.00'	31°20'31"	230.93'
C142	470.00'	151.60'	191.03'
C143	28.00'	86°47'03"	36.89'
C144	229.72'	28°34'51"	118.60'
C145	28.00'	86°47'03"	36.89'
C146	278.60'	72°28'02"	12.04'
C147	28.00'	86°47'03"	36.89'
C148	28.00'	86°47'03"	36.89'
C149	470.00'	17°34'56"	115.62'
C150	480.00'	18°11'28"	152.39'
C151	480.00'	31°20'31"	230.93'
C152	470.00'	151.60'	191.03'
C153	28.00'	86°47'03"	36.89'
C154	229.72'	28°34'51"	118.60'
C155	28.00'	86°47'03"	36.89'
C156	278.60'	72°28'02"	12.04'
C157	28.00'	86°47'03"	36.89'
C158	28.00'	86°47'03"	36.89'
C159	470.00'	17°34'56"	115.62'
C160	480.00'	18°11'28"	152.39'
C161	480.00'	31°20'31"	230.93'
C162	470.00'	151.60'	191.03'
C163	28.00'	86°47'03"	36.89'
C164	229.72'	28°34'51"	118.60'
C165	28.00'	86°47'03"	36.89'
C166	278.60'	72°28'02"	12.04'
C167	28.00'	86°47'03"	36.89'
C168	28.00'	86°47'03"	36.89'
C169	470.00'	17°34'56"	115.62'
C170	480.00'	18°11'28"	152.39'
C171	480.00'	31°20'31"	230.93'
C172	470.00'	151.60'	191.03'
C173	28.00'	86°47'03"	36.89'
C174	229.72'	28°34'51"	118.60'
C175	28.00'	86°47'03"	36.89'
C176	278.60'	72°28'02"	12.04'
C177	28.00'	86°47'03"	36.89'
C178	28.00'	86°47'03"	36.89'
C179	470.00'	17°34'56"	115.62'
C180	480.00'	18°11'28"	152.39'
C181	480.00'	31°20'31"	230.93'
C182	470.00'	151.60'	191.03'
C183	28.00'	86°47'03"	36.89'
C184	229.72'	28°34'51"	118.60'
C185	28.00'	86°47'03"	36.89'
C186	278.60'	72°28'02"	12.04'
C187	28.00'	86°47'03"	36.89'
C188	28.00'	86°47'03"	36.89'
C189	470.00'	17°34'56"	115.62'
C190	480.00'	18°11'28"	152.39'
C191	480.00'	31°20'31"	230.93'
C192	470.00'	151.60'	191.03'
C193	28.00'	86°47'03"	36.89'
C194	229.72'	28°34'51"	118.60'
C195	28.00'	86°47'03"	36.89'
C196	278.60'	72°28'02"	12.04'
C197	28.00'	86°47'03"	36.89'
C198	28.00'	86°47'03"	36.89'
C199	470.00'	17°34'56"	115.62'
C200	480.00'	18°11'28"	152.39'
C201	480.00'	31°20'31"	230.93'
C202	470.00'	151.60'	191.03'
C203	28.00'	86°47'03"	36.89'
C204	229.72'	28°34'51"	118.60'
C205	28.00'	86°47'03"	36.89'
C206	278.60'	72°28'02"	12.04'
C207	28.00'	86°47'03"	36.89'
C208	28.00'	86°47'03"	36.89'
C209	470.00'	17°34'56"	115.62'
C210	480.00'	18°11'28"	152.39'
C211	480.00'	31°20'31"	230.93'
C212	470.00'	151.60'	191.03'
C213	28.00'	86°47'03"	36.89'
C214	229.72'	28°34'51"	118.60'
C215	28.00'	86°47'03"	36.89'
C216	278.60'	72°28'02"	12.04'
C217	28.00'	86°47'03"	36.89'
C218	28.00'	86°47'03"	36.89'
C219	470.00'	17°34'56"	115.62'
C220	480.00'	18°11'28"	152.39'
C221	480.00'	31°20'31"	230.93'
C222	470.00'	151.60'	191.03'
C223	28.00'	86°47'03"	36.89'
C224	229.72'	28°34'51"	118.60'
C225	28.00'	86°47'03"	36.89'
C226	278.60'	72°28'02"	12.04'
C227	28.00'	86°47'03"	36.89'
C228	28.00'	86°47'03"	36.89'
C229	470.00'	17°34'56"	115.62'
C230	480.00'	18°11'28"	152.39'
C231	480.00'	31°20'31"	230.93'
C232	470.00'	151.60'	191.03'
C233	28.00'	86°47'03"	36.89'
C234	229.72'	28°34'51"	118.60'
C235	28.00'	86°47'03"	36.89'
C236	278.60'	72°28'02"	12.04'
C237	28.00'	86°47'03"	36.89'
C238	28.00'	86°47'03"	36.89'
C239	470.00'	17°34'56"	115.62'
C240	480.00'	18°11'28"	152.39'
C241	480.00'	31°20'31"	230.93'
C242	470.00'	151.60'	191.03'
C243	28.00'	86°47'03"	36.89'
C244	229.72'	28°34'51"	118.60'
C245	28.00'	86°47'03"	36.89'
C246	278.60'	72°28'02"	12.04'
C247	28.00'	86°47'03"	36.89'
C248	28.00'	86°47'03"	36.89'
C249	470.00'	17°34'56"	115.62'
C250	480.00'	18°11'28"	152.39'
C251	480.00'	31°20'31"	230.93'
C252	470.00'	151.60'	191.03'
C253	28.00'	86°47'03"	36.89'
C254	229.72'	28°34'51"	118.60'
C255	28.00'	86°47'03"	36.89'

CURVE DATA TABLE											
	NO	RAJUS	DELTA	CHORD	BEARING						
C6	254.71	293.438	131.50	130.04	S 64°02'24" E	17.50	17.50	17.50	17.50	17.50	17.50
C7	222.00	190.933	73.83	74.69	S 39°48'55" E	17.50	17.50	17.50	17.50	17.50	17.50
C8	47.00	99.003	73.83	86.47	S 14°35'15" E	17.50	17.50	17.50	17.50	17.50	17.50
C9	200.00	273.718	86.42	95.48	N 40°55'12" W	17.50	17.50	17.50	17.50	17.50	17.50
C10	254.71	173.822	78.39	78.08	N 83°03'01" E	17.50	17.50	17.50	17.50	17.50	17.50
C11	500.00	547.1423	45.99	44.02	N 82°39'36" W	17.50	17.50	17.50	17.50	17.50	17.50
C16	229.72	803.535	118.60	117.29	S 64°02'27" W	17.50	17.50	17.50	17.50	17.50	17.50
C17	250.00	285.3329	35.85	32.33	N 14°35'15" E	17.50	17.50	17.50	17.50	17.50	17.50
C18	278.60	670.912	39.80	39.77	S 52°28'43" E	17.50	17.50	17.50	17.50	17.50	17.50
C19	250.00	190.933	82.38	82.67	S 34°48'35" W	17.50	17.50	17.50	17.50	17.50	17.50
C25	250.00	922.7706	43.24	36.10	N 78°29'42" E	17.50	17.50	17.50	17.50	17.50	17.50
C26	500.00	547.1428	28.54	82.97	S 101°29'28" E	17.50	17.50	17.50	17.50	17.50	17.50
C27	125.00	659.222	78.54	27.01	S 87°13'58" E	17.50	17.50	17.50	17.50	17.50	17.50
C28	175.00	1632.42	50.33	50.38	N 51°27'30" W	17.50	17.50	17.50	17.50	17.50	17.50
C29	250.00	374.9217	34.62	16.98	N 23°20'07" E	17.50	17.50	17.50	17.50	17.50	17.50
C30	500.00	292.4622	34.64	67.07	S 83°03'01" E	17.50	17.50	17.50	17.50	17.50	17.50
C31	250.00	547.1421	23.02	22.82	S 75°05'15" E	17.50	17.50	17.50	17.50	17.50	17.50
C32	222.00	1315.98	17.50	51.98	N 52°28'52" E	17.50	17.50	17.50	17.50	17.50	17.50
C33	35.00	99.003	84.88	49.50	S 14°35'15" E	17.50	17.50	17.50	17.50	17.50	17.50
C34	200.00	190.933	56.61	66.30	S 34°48'35" W	17.50	17.50	17.50	17.50	17.50	17.50
C35	500.00	579.9541	60.61	48.48	S 41°29'02" E	17.50	17.50	17.50	17.50	17.50	17.50
C36	500.00	793.3745	69.48	48.48	S 50°28'32" E	17.50	17.50	17.50	17.50	17.50	17.50
C37	500.00	793.3745	69.48	64.03	S 89°12'31" E	17.50	17.50	17.50	17.50	17.50	17.50
C38	250.00	584.008	25.80	24.50	S 64°11'50" W	17.50	17.50	17.50	17.50	17.50	17.50
C39	250.00	2074.911	61.42	33.04	N 62°05'59" W	17.50	17.50	17.50	17.50	17.50	17.50
C40	170.00	592.021	17.00	168.30	S 71°29'07" W	17.50	17.50	17.50	17.50	17.50	17.50
C41	170.00	579.9541	17.00	164.82	S 14°35'15" E	17.50	17.50	17.50	17.50	17.50	17.50
C42	170.00	579.9541	17.00	164.82	S 101°29'07" E	17.50	17.50	17.50	17.50	17.50	17.50
C43	170.00	579.9541	17.00	164.82	S 64°11'50" W	17.50	17.50	17.50	17.50	17.50	17.50
C44	170.00	572.929	96.37	94.93	S 61°43'15" E	17.50	17.50	17.50	17.50	17.50	17.50
C45	225.00	1333.07	6.89	6.09	N 59°57'18" E	17.50	17.50	17.50	17.50	17.50	17.50
C46	225.00	1174.251	68.70	45.92	N 52°18'19" W	17.50	17.50	17.50	17.50	17.50	17.50
C47	50.00	787.948	86.89	83.48	S 42°53'46" E	17.50	17.50	17.50	17.50	17.50	17.50
C48	50.00	1026.253	72.47	52.07	N 68°18'24" E	17.50	17.50	17.50	17.50	17.50	17.50
C49	50.00	1026.253	88.52	77.41	N 15°47'45" W	17.50	17.50	17.50	17.50	17.50	17.50
C50	50.00	32.4257	28.55	28.16	N 59°52'25" W	17.50	17.50	17.50	17.50	17.50	17.50
C51	47.00	3581.04	33.23	29.71	S 11°50'37" E	17.50	17.50	17.50	17.50	17.50	17.50
C58	47.00	50.0516	40.03	42.05	S 39°03'23" E	17.50	17.50	17.50	17.50	17.50	17.50
C60	200.00	1879.297	64.55	64.27	S 39°03'51" W	17.50	17.50	17.50	17.50	17.50	17.50
C61	200.00	1753.24	28.52	2.06	S 47°03'19" W	17.50	17.50	17.50	17.50	17.50	17.50
C62	250.00	1743.16	64.38	64.20	S 57°48'43" W	17.50	17.50	17.50	17.50	17.50	17.50
C63	250.00	2739.36	11.57	11.57	S 46°20'58" W	17.50	17.50	17.50	17.50	17.50	17.50
C64	250.00	1460.31	7.31	7.31	S 48°50'24" W	17.50	17.50	17.50	17.50	17.50	17.50
C69	40.00	4696.12	33.91	31.32	S 28°47'16" W	17.50	17.50	17.50	17.50	17.50	17.50
C70	47.00	7077.25	52.84	49.87	S 11°42'28" W	17.50	17.50	17.50	17.50	17.50	17.50
C71	40.00	9900.02	62.83	56.57	S 42°23'02" W	17.50	17.50	17.50	17.50	17.50	17.50

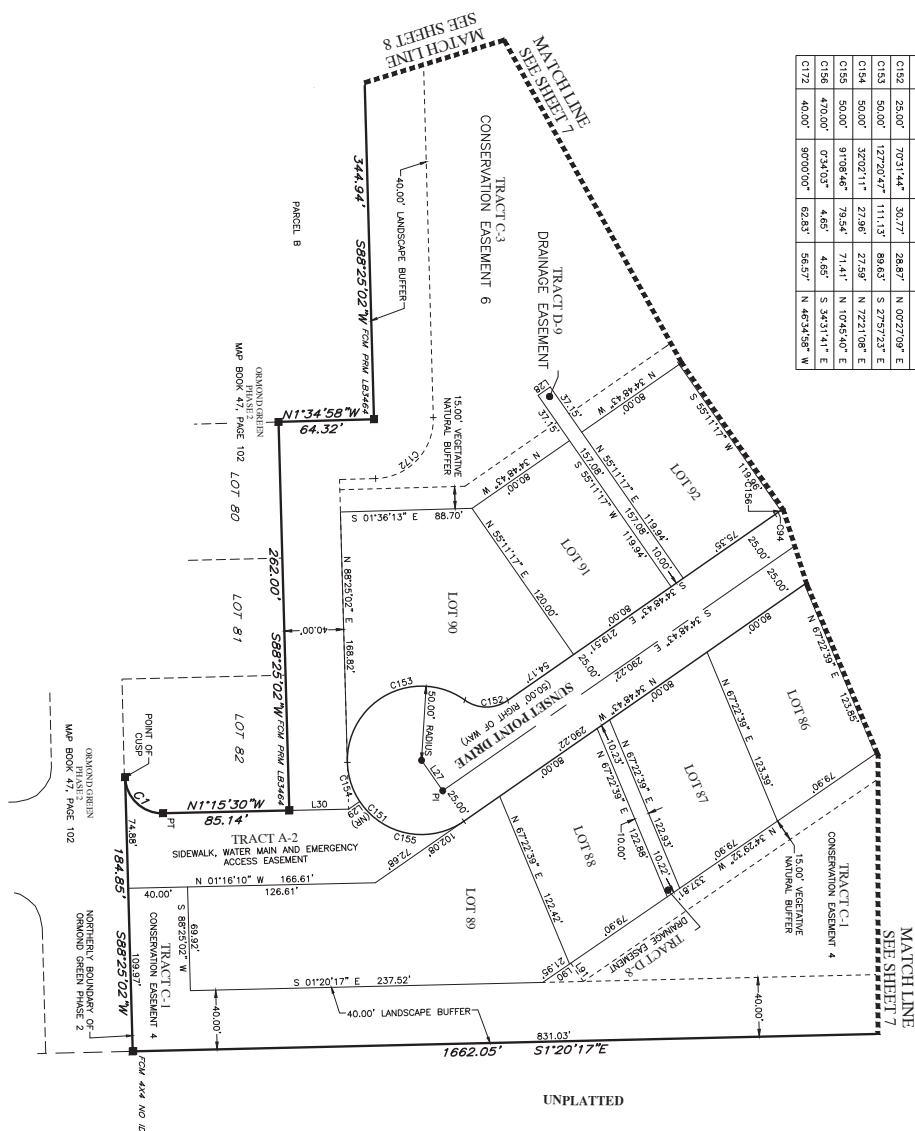
P.R.D. --- indicates Planned Residential Development



[illegible]

LINE DATA TABLE		
NO.	BEARING	LENGTH
L27	N 55°11'17" E	25.00'
L28	N 34°48'43" W	10.00'
L29	S 34°48'43" E	9.13'
L30	N 01°16'10" W	40.00'
L80	S 34°29'32" E	22.93'
L91	N 55°30'28" E	15.00'

CURVE DATA TABLE				
NO.	RADIUS	DELTA	ARC	CHORD
C1	25.007	89.4032°	39.13	35.26
C4	50.007	28.9231°	151.63	151.02
C14	50.007	28.9231°	218.83	81.65
C152	25.007	70.3144°	30.77	28.87
C153	50.007	127.2741°	11.15	88.63
C154	50.007	32.0211°	22.93	27.59
C155	50.007	91.0846°	73.54	71.41
C156	49.007	93.4037°	74.65	74.41
C172	40.007	99.0707°	62.83	56.57
				N 49°34'58" W



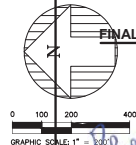
LEGEND:

- indicates (P.M.) Permanent Reference
- ◆ indicates (P.C.P.) Permanent Control Point unless otherwise noted
- ◆ and Disk „1B786 PCP“
- (/r) — indicates road line
- (/rb) — indicates non-road line
- LB — indicates Licensed Business
- PCP — indicates Permanent Control Point
- ID — indicates Identification
- FCM — indicates 4'x4' Found Concrete Monument
- PCN — indicates Permanent Reference Monument
- PI — indicates Point of Intersection
- PRC — indicates Point of Reverse Curve
- PT — indicates Point of Tangency
- P.R.D. — indicates Planned Residential Development



CITY OF
ORMOND BEACH
Site Plan Review Committee

FINAL APPROVED PLANS



Planning Director



ZAHN ENGINEERING, INC.
244 SOUTH PALMETTO AVENUE DAYTONA BEACH, FLORIDA 32114
FAX: (386) 252-6050 PHONE: (386) 252-0020 ZAHNENG.COM

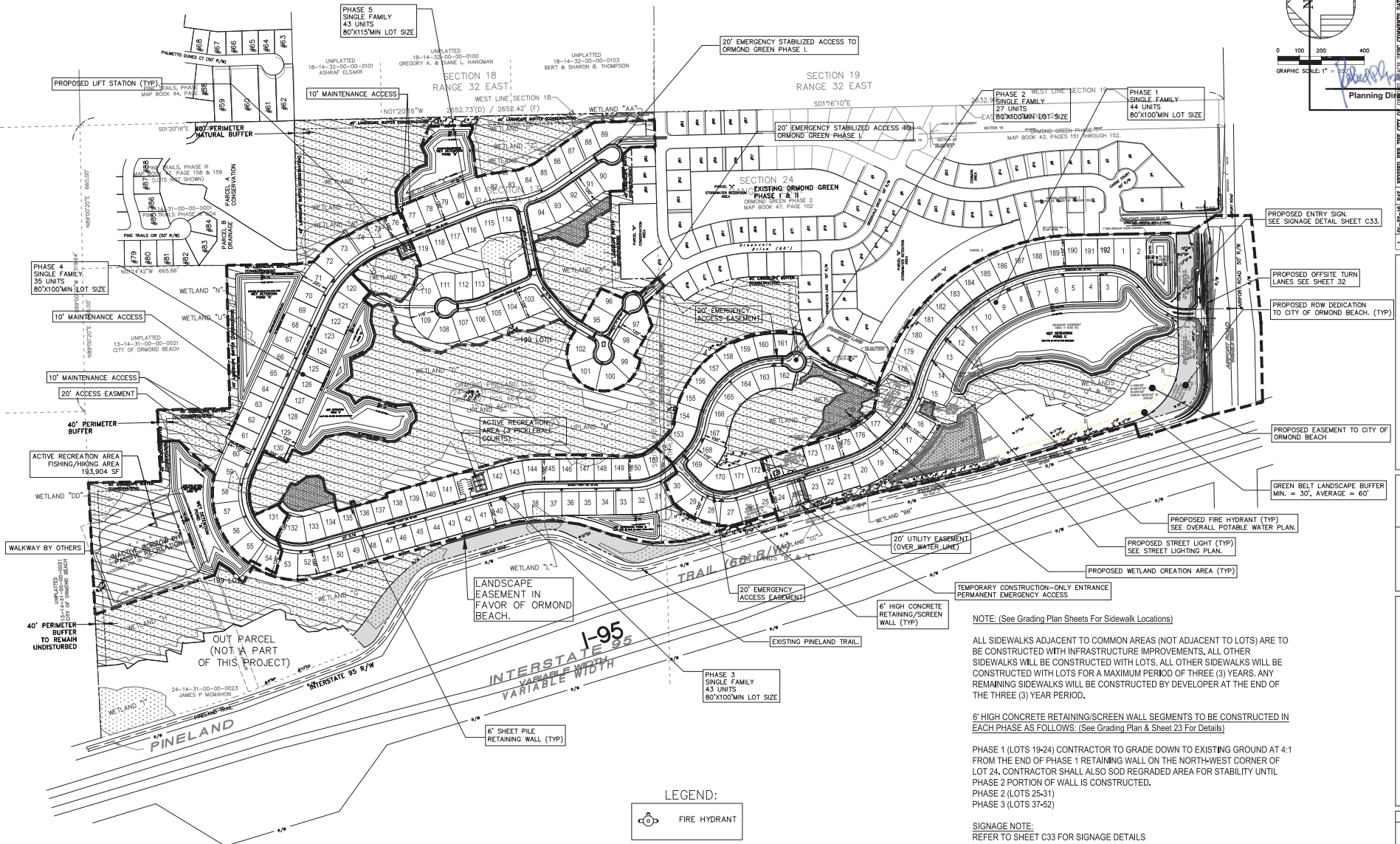
DESIGNED: MMH
DATE: 03/15/15
DRAWN: BJA/MP
CHECKED: PNC
SCALE: 1"=200'

PINELAND SUBDIVISION
ORMOND BEACH, FL
OVERALL DEVELOPMENT PLAN

1505-01M.dwg
PROJECT NO.
1505

JOHN W. WILSON
W. WILSON
DESIGNED
ZAHN ENGINEERING, INC.
JW@ZAHNENG.COM

SHT. C3 OF 45



NOTE:
ALL ELEVATIONS SHOWN ARE
WITH RESPECT TO NGVD '29

NOTE: (See Grading Plan Sheets For Sidewalk Locations)

ALL SIDEWALKS ADJACENT TO COMMON AREAS (NOT ADJACENT TO LOTS) ARE TO BE CONSTRUCTED WITH INFRASTRUCTURE IMPROVEMENTS. ALL OTHER SIDEWALKS WILL BE CONSTRUCTED WITH LOTS. ALL OTHER SIDEWALKS WILL BE CONSTRUCTED WITH LOTS FOR A MAXIMUM PERIOD OF THREE (3) YEARS. ANY REMAINING SIDEWALKS WILL BE CONSTRUCTED BY DEVELOPER AT THE END OF THE THREE (3) YEAR PERIOD.

6' HIGH CONCRETE RETAINING/SCREEN WALL SEGMENTS TO BE CONSTRUCTED IN EACH PHASE AS FOLLOWS: (See Grading Plan & Sheet 23 For Details)

PHASE 1 (LOTS 19-24) CONTRACTOR TO GRADE DOWN TO EXISTING GROUND AT 4:1 FROM THE END OF PHASE 1 RETAINING WALL ON THE NORTH-WEST CORNER OF LOT 24. CONTRACTOR SHALL ALSO SOD REGRADED AREA FOR STABILITY UNTIL PHASE 2 PORTION OF WALL IS CONSTRUCTED.
PHASE 2 (LOTS 25-31)
PHASE 3 (LOTS 37-52)

SIGNAGE NOTE:
REFER TO SHEET C33 FOR SIGNAGE DETAILS

STREET SIGN NOTES:
ALL STREET SIGNS SHALL BE WHITE LETTERING ON A REFLECTIVE GREEN BACKGROUND (3M GRADE OR BETTER) ALL SIGNS SHALL BE FREE OF VISUAL OBSTRUCTIONS. TWO STREET NAME SIGNS SHALL BE PLACED AT 4-WAY INTERSECTIONS, AND ONE SHALL BE PLACED AT T-JUNCTIONS.



CITY OF ORMOND BEACH

City Manager • 22 S. Beach Street • Ormond Beach • Florida • 32174 • (386) 676-3200 • Fax (386) 676-3384

CITY MANAGER MEMORANDUM

To: The Honorable Mayor Partington and City Commissioners

Through: Joyce A. Shanahan, City Manager

From: Joyce A. Shanahan, City Manager

Date: March 2, 2021

Subject: Adequate Shelter Definition - Code of Ordinances

Commission Goal: Governance - Make Ormond Beach a Pet Friendly City

Introduction

This is a request for approval of an ordinance amending the *Code of Ordinances* by adding the definition of "adequate shelter" to Section 5-1, Definition, of Article I, In General, of Chapter 5, Animals and Fowl.

Background

In May 2019, through Ordinance No. 2019-12, the City Commission adopted changes to Chapter 5, Animals and Fowl, of the *Code of Ordinances* to define the terms tether and tethering as it relates to restraining a domesticated animal, and to provide language to allow for enforcement of such violations.

Discussion

Staff has received a request to update the definitions in the aforementioned code section to include the definition of adequate shelter for animals. Other local governments in Volusia County have adopted similar definitions or are in the process. The Florida Legislature also has a bill pending for the 2021 session to add a definition of "adequate shelter" that is identical to the proposed ordinance amendment.

The definition of adequate shelter to be added is as follows:

Adequate Shelter means provision of and access to a secure weather-resistant shelter that is suitable for the age, height, size, breed, and type of each animal; provides adequate air ventilation and adequate space for each animal to stand up, lay down, stretch out, and turn around without being impeded by the shelter; is safe and protects each animal from injury, rain, hail, the adverse effects of heat or cold, physical suffering, and impairment of health; is properly cleaned; enables each animal to be clean and dry, except when detrimental to the species; during hot weather, is properly

shaded with a covering and does not readily conduct heat; during cold weather, has a windbreak at its entrance and provides a quantity of bedding material consisting of straw, cedar shavings, or the equivalent that is sufficient to protect the animal from cold and promote the retention of body heat; and, for dogs and cats, provides a solid surface, resting platform, pad, floor mat, or similar device that is large enough for the animal to lie on in a normal manner and can be maintained in a sanitary manner. A shelter whose wire, grid, or slat floor permits an animal's feet to pass through the openings; sags under the animal's weight; or otherwise does not protect the animal's feet or toes from injury is not adequate shelter for purposes of this section.

Budget Impact

There will be no budgetary impact to the city as a result of this item.

Citizen Impact

The addition of a definition for adequate shelter will aid in the interpretation of regulation regarding cruelty and the tethering of animals, which specify that no person shall unnecessarily deprive an animal of necessary sustenance or shelter.

Recommendation

It is recommended that the City Commission adopt this ordinance adding the definition of adequate shelter to the City's *Code of Ordinances*, Section 5-1, Definition, of Article I, In General, of Chapter 5, Animals and Fowl.

Attachments:

- 21-08 Animal Shelter Definition (P20-0188G) (PDF)

REVIEWED BY:


Kelly McGuire, Finance Director 2/5/2021


Claire Whitley, Assistant City Manager 2/9/2021

APPROVED BY:


Joyce A. Shanahan, City Manager 2/11/2021

ORDINANCE NO. 2021-08

AN ORDINANCE AMENDING SECTION 5-1, DEFINITIONS, OF ARTICLE I, IN GENERAL, OF CHAPTER 5, ANIMALS AND FOWL, OF THE CITY OF ORMOND BEACH *CODE OF ORDINANCES*, BY ESTABLISHING A DEFINITION FOR “ADEQUATE SHELTER”; REPEALING ALL INCONSISTENT ORDINANCES OR PARTS THEREOF; AND SETTING FORTH AN EFFECTIVE DATE.

**BE IT ENACTED BY THE PEOPLE OF THE CITY OF ORMOND BEACH,
FLORIDA, THAT:**

SECTION ONE. Section 5-1, Definitions, of Article I, In General, of Chapter 5, Animals and Fowl, of the City of Ormond Beach, *Code of Ordinances*, is hereby amended by adding the following definition that shall read as follows:

Sec. 5-1. - Definitions.

The following words, terms and phrases, when used in this chapter, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Adequate Shelter means provision of and access to a secure weather-resistant shelter that is suitable for the age, height, size, breed, and type of each animal; provides adequate air ventilation and adequate space for each animal to stand up, lay down, stretch out, and turn around without being impeded by the shelter; is safe and protects each animal from injury, rain, hail, the adverse effects of heat or cold, physical suffering, and impairment of health; is properly cleaned; enables each animal to be clean and dry, except when detrimental to the species; during hot weather, is properly shaded with a covering and does not readily conduct heat; during cold weather, has a windbreak at its entrance and provides a quantity of bedding material consisting of straw, cedar shavings, or the equivalent that is sufficient to protect the animal from cold and promote the retention of body heat; and, for dogs and cats, provides a solid surface, resting platform, pad, floor mat, or similar device that is large enough for the animal to lie on in a normal manner and can be maintained in a sanitary manner. A shelter whose wire, grid, or slat floor permits an animal's feet to pass through the openings; sags under the animal's weight; or otherwise does not protect the animal's feet or toes from injury is not adequate shelter for purposes of this section.

Animal means every living dumb creature.

At large means off the premises of its owner and not under restraint, leash, or chain, or not otherwise controlled by a competent person.

Cat means any member of the animal species *Felis Catus*.

Continuous means without interruption.

Domesticated animal means any of various animals domesticated by man so as to live and breed in a tame condition.

Feral means an unsocialized animal which may be one or more generations removed from a home environment and that may subsist in a colony of similar animals living on the fringes of human existence.

Frequent means happening or appearing often or at close intervals.

Habitual means a usual act, practice or manner that is acquired or displayed by frequent repetition.

Horse includes any mule, burro, pony, jack or jenny.

Kennel means the commercial business of breeding, buying, selling or boarding of dogs or cats.

Livestock means any animal of the equine, bovine, or swine class, including goats, sheep, mules, horses, hogs, cattle, ostriches, and other grazing animals.

Owner means any person that has licensed an animal in accordance with the requirements of this chapter; or who has vaccinated such animal against rabies in accordance with F.S. § 828.30; or who otherwise has or claims ownership or a right of property in any animal.

Repeated means renewed or recurring again and again.

Stray means a free-roaming animal that is not owned by anyone; that has no reliable source of shelter or food from anyone claiming ownership or a right of property in the animal; and that is not licensed pursuant to this chapter, or vaccinated for rabies as required pursuant to F.S. § 828.30.

Tether shall mean a trolley cable, cord, rope, chain, strap, or any other linear thing that restrains, limits or confines the free unimpeded movement of a dog, cat, or other animal to a limited space or area.

Tethering or *tethered* shall mean the act of affixing or attaching a tether to a dog, cat, or other animal. The act of "tethering" shall not include the use of a leash or other restraint when utilized by a person while walking or exercising a dog, cat, or other animal; nor shall it include commercial safety restraint devices that are designed for use in vehicles for the protection of animals while they are being transported from one location to another.

Unlicensed dog or cat means a dog or cat for which the license for the current year has not been paid, or to which the tag provided for in this chapter is not attached.

Wild animal means any animal not ordinarily and customarily domesticated, including, but not limited to, any skunk, raccoon, opossum, squirrel or fox.

SECTION TWO. All Ordinances or parts of Ordinances in conflict herewith are hereby repealed to the extent of such conflict.

SECTION THREE. Any section, paragraph, sentence, clause and phrase of this Ordinance is severable, and if any phrase, clause, sentence, paragraph or section of this Ordinance shall be declared unconstitutional, invalid or unenforceable by the valid judgment or decree of any court of competent jurisdiction, such unconstitutionality, invalidity or unenforceability shall not affect any of the remaining phrases, clauses, sentences, paragraphs and sections of this Ordinance.

SECTION FOUR. This Ordinance shall take effect immediately upon its adoption.

PASSED UPON at the first reading of the City Commission, this 16th day of February, 2021.

PASSED UPON at the second and final reading of the City Commission, this 2nd day of March, 2021.

BILL PARTINGTON
Mayor

ATTEST:

COLBY CILENTO
City Clerk



CITY OF ORMOND BEACH

City Manager • 22 S. Beach Street • Ormond Beach • Florida • 32174 • (386) 676-3200 • Fax (386) 676-3384

CITY MANAGER MEMORANDUM

To: The Honorable Mayor Partington and City Commissioners

Through: Joyce A. Shanahan, City Manager

From: Steven Spraker, Planning Director

Date: March 2, 2021

Subject: 880 South Atlantic Avenue, Impact Fee Preservation Agreement

Commission Goal: Community Development - Other

Introduction

This is a request by the property owner, The Jaffe Corporation as the general partner and registered agent for the J-5 Land Partners LTD, to preserve the impact fee credits for the existing one-story former restaurant building totaling 9,100 square feet from the date of the final inspection/acceptance of the demolition permit for a period of five years (5) years at 880 South Atlantic Avenue, the former Olive Garden restaurant.

Background

On October 6, 2015, the City Commission approved Ordinance No. 2015-44 that allowed structures to be demolished to avoid blight and save impact fee credits associated with the existing buildings. Impact fee credits agreements require City Commission approval. Every existing structure has impact fee credits based upon the number of fixtures (water and sewer impact fees) and the size of the building (stormwater and transportation impact fees).

Prior to Ordinance No. 2015-44, when a building was demolished the impact fee credits would be reduced by 10% each year from the date of the demolition final acceptance if a structure were not re-built. The concern was that property owners were not demolishing blighted buildings in order to preserve the full value of the impact fee credits. Impact fee credits cannot be transferred to other properties. If a new structure is constructed and there are exceeded impact fee credits, these credits have no cash value and are not refunded. The impact fee credits acknowledge the impacts of the existing building to infrastructure facilities (water, sewer, roads, and stormwater) and allow a new building to utilize existing impacts to infrastructure facilities.

The property at 880 South Atlantic Avenue is a 2.24 acre parcel with an existing restaurant of 9,100 square feet with the site plan approved on January 31, 1991. The property was the site of the Olive Garden restaurant and has been vacant for several

years.

Discussion

The impact fee credits based upon the number of fixtures and the size of the building are as follows:

- Water: credit of \$12,478.60.
- Sewer: credit of \$12,164.70.
- Transportation: credit of \$22,837.30.
- Stormwater: credit of \$ 1,283.19.

Budget Impact

There is no budget impact as the result of this request. Impact fees are specific to the building based on the number of fixtures and the square footage of the building. Prior to 2015, property owners would allow vacant buildings to remain and not demolish the buildings leading to blighted structures. The building impact fees cannot be transferred and the new construction would have an impact analysis when the building permit is submitted.

Citizen Impact

There is no direct citizen impact. Vacant buildings can lead to blight and issues for surrounding neighborhoods, so the demolition of such buildings can have a positive impact.

Recommendation

It is recommended that the City Commission **APPROVE** the attached resolution for the requested preservation of impact fee credits for the existing one-story building totaling 9,100 square feet at 880 South Atlantic Avenue, from the date of the final inspection/acceptance of the demolition permit for a period of five (5) years preserving the following impact credits:

- Water: credit of \$12,478.60.
- Sewer: credit of \$12,164.70.
- Transportation: credit of \$22,837.30.
- Stormwater: credit of \$ 1,283.19.

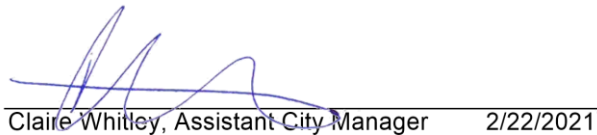
Attachments:

- 21-54 800 Atlantic Ave-Impact Fee Preservation Agreement (P21-0011G) (PDF)
- Impact Fee Preservation Agreement (P21-0011G) (PDF)
- LEGAL DESCRIPTION - 880 S Atlantic Ave (PDF)
- Exhibit B, Combined (02.09.21) (PDF)
- 880 South Atlantic Avenue, aerial (PDF)

- 880 South Atlantic Avenue, existing building to be demolished (PDF)

REVIEWED BY:


Kelly McGuire, Finance Director 2/22/2021


Claire Whitley, Assistant City Manager 2/22/2021

APPROVED BY:


Joyce A. Shanahan, City Manager 2/24/2021

RESOLUTION NO. 2021-54

A RESOLUTION AUTHORIZING THE EXECUTION OF AN IMPACT FEE PRESERVATION AGREEMENT BETWEEN THE CITY OF ORMOND BEACH AND J-5 LAND PARTNERS, LTD FOR PROPERTY AT 880 SOUTH ATLANTIC AVENUE, ORMOND BEACH, FLORIDA, AS PART OF THE DEMOLITION OF THE EXISTING BUILDING; PROVIDING RECORDATION; AND SETTING FORTH AN EFFECTIVE DATE.

WHEREAS, J-5 Land Partners LTD, a Florida Limited Partnership (the “Property Owner/Applicant”), has applied for the preservation of impact fee credits for the existing one-story former restaurant building totaling 9,100 square feet at 880 South Atlantic Avenue, Ormond Beach, Florida, Volusia County Parcel Number 4224-01-06-0020, for a period of five (5) years, and

WHEREAS, The Jaffe Corporation, a Florida Profit Corporation is the general partner and registered agent for J-5 Land Partners LTD, a Florida Limited Partnership, and

WHEREAS, city staff recommends the preservation of impact fees for a period of five (5) years, similar to other agreements, with an ability to request an extension for City Commission action if economic conditions delay redevelopment of the property, and

WHEREAS, Section 1-27(1)(e)(2), Impact fees, of Chapter 1, General Administration, Article IV, Schedule of Development Review and Impact Fees, of the City of Ormond Beach *Land Development Code* states preservation of full impact fee credit may continue as an incentive to abate blighted structures beyond the date of demolition provided the City

Commission approves such credit through a Development Agreement or other acceptable legal instrument to the City, and

WHEREAS, in order to prevent the conditions of blight along the South Atlantic Avenue corridor, the Property Owner/Applicant has sought to demolish the existing structure and preserve the impact fee credits associated with the building at 880 South Atlantic Avenue and on lands owned by the Property Owner/Applicant, and

WHEREAS, the appropriate city staff members have conducted an inspection of the building and verified the number of water and sewer fixture units, totaling \$12,478.60 in water impact fee credits and \$12,164.70 in sewer impact fee credits, and

WHEREAS, a mobility fee has been calculated based on the existing use totaling \$22,837.30, and

WHEREAS, a stormwater impact fee has been calculated based on the building square footage totaling \$1,283.19, 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 Impact Fee Preservation Agreement between the City of Ormond Beach and J-5 Land Partners LTD, a Florida Limited Partnership, a copy of said Agreement is attached hereto and incorporated herein by reference.

SECTION TWO. A certified copy of this Resolution, and the executed original Impact Fee Preservation Agreement, shall be recorded in the public records of Volusia County, Florida.

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

APPROVED AND AUTHENTICATED this 2nd day of March, 2021.

BILL PARTINGTON
Mayor

ATTEST:

COLBY CILENTO
City Clerk

THIS INSTRUMENT PREPARED BY:
 RANDAL A. HAYES, ESQUIRE
 Florida Bar No. 0747157
 173 South Beach Street
 Post Office Box 277
 Ormond Beach, FL 32175-0277
 386-676-3217
LOCATION: 880 South Atlantic Avenue
PARCEL ID NOS.: 4224-01-06-0020

IMPACT FEE PRESERVATION AGREEMENT

This Agreement is entered into by and between the **CITY OF ORMOND BEACH**, Florida, a municipal corporation (the “City”), and **J-5 LAND PARTNERS**, a Florida Limited Partnership (the “Property Owner”).

WITNESSETH:

WHEREAS, the Property Owner owns the real property located at 880 South Atlantic Avenue, Ormond Beach, Florida, including an existing building and appurtenances situated thereon consisting of 9,100 square feet (“the Property”) and

WHEREAS, The Jaffe Corporation, a Florida for-profit corporation is the general partner and registered agent for J-5 Land Partners LTD, and

WHEREAS, the Property Owner has requested the preservation of impact fee credits for the existing one-story former restaurant building totaling 9,100 square feet at 880 South Atlantic Avenue for a period of five (5) years, and

WHEREAS, city staff recommends the preservation of impact fees for a period of five (5) years, similar to other agreements, with an ability to request an extension from the City Commission if economic conditions delay redevelopment of the Property, and

WHEREAS, Section 1-27(1)(e)(2), Impact fees, of Chapter 1, General Administration, Article IV, Schedule of Development Review and Impact Fees, of the City of Ormond Beach *Land Development Code* states preservation of full impact fee credit may continue

as an incentive to abate blighted structures beyond the date of demolition provided the City Commission approves such credit through a Development Agreement or other acceptable legal instrument to the City, and

WHEREAS, On January 31, 1991, the Site Plan Review Committee approved a site plan for the development of the Property as a restaurant and associated site improvements, and

WHEREAS, in order to prevent the conditions of blight along the South Atlantic Avenue corridor, the Property Owner desires to demolish the existing structure and preserve the impact fee credits associated with the building at 880 South Atlantic Avenue, and

WHEREAS, the appropriate city staff members have conducted an inspection of the building and verified the number of water and sewer fixture units, totaling \$12,478.60 in water impact fee credits and \$12,164.70 in sewer impact fee credits, and

WHEREAS, a mobility fee has been calculated based on the existing use totaling \$22,837.30, and

WHEREAS, a stormwater impact fee has been calculated based on the building square footage totaling \$1,283.19, and

NOW THEREFORE, the preservation of impact fee credits are granted under the following conditions:

1. **IMPACT FEE CREDITS.** The impact fee credits for the existing one-story building totaling 9,100 square feet shall be:

(a) water = \$12,478.60

(b) Sewer = \$12,164.70

(c) Mobility = \$22,837.30

(d) Stormwater = \$1,283.19.

2. **LAND AREA FOR IMPACT FEE CREDITS.** The preserved impact fee credits can be used by the Property Owner, for and on the Property more particularly, described and depicted in the legal description attached hereto and incorporated herein by reference (Volusia County parcel number: 4224-01-06-0020).

3. **TIMEFRAME FOR PRESERVATION.** The preservation of impact fee credits shall be five (5) years commencing from the final inspection of the building demolition. After five years, any remaining impact fees shall decrease as required by the Ormond Beach Land Development Code, except that the Property Owner may seek an extension(s) of the impact fee credits as provided in paragraph 4 of this Agreement.

4. **EXTENSION.** Nothing in this Agreement shall prevent the Property Owner from requesting an additional extension prior to the expiration of this Agreement. Any such extension must be approved by the City Commission.

5. **USE OF IMPACT FEE CREDITS.** The impact fee credits are intended to be used by the Property for and on the property. Impact fee credits shall be applicable for building related projects and shall have no cash value. The impact fee credits can neither be transferred nor used for other properties.

6. **EFFECTIVE DATE.** This Agreement shall be effective on the date it is last executed by the respective parties. The officials who have subscribed their names below are duly authorized representatives of the Property Owner.

7. **REMEDIES.** Nothing in this Agreement will be construed to limit the right of either the Property Owner or the City to pursue any and all legal and/or equitable remedies for non-performance under this Agreement, including specific performance. The City will not be deemed to have waived sovereign immunity in any manner or respect whatsoever and the City hereby expressly reserves and retains all rights, privileges, benefits, limitations, and immunities of sovereign immunity, as the same presently exists or may hereafter be amended.

8. **DISCLAIMER OF THIRD PARTY BENEFICIARIES.** This Agreement is solely for the benefit of the City and the Property Owner and its successors in interest. No right or cause of action will accrue by reason hereof to or for the benefit of any other person or entity. Nothing in this Agreement, expressed or implied, is intended or will be construed to confer upon or give any person or entity any right, remedy or claim under or by reason of this Agreement or any provisions or conditions hereof, other than the parties hereto and their respective successor and assigns.

9. **SUCCESSORS AND ASSIGNS.** This Agreement and the terms and conditions hereof will be binding upon and inure to the benefit of the City and Property Owner and their respective successors in interest.

10. **APPLICABLE LAW.** This Agreement and the provisions contained herein will be construed, controlled and interpreted according to the laws of the State of Florida.

11. **BINDING EFFECT.** Each party hereto represents to the other that it has undertaken all necessary actions to execute this Agreement, and that it has the legal authority to enter into this Agreement and to undertake all obligations imposed on it.

12. **RECORDING.** The City shall, within five (5) business days following full execution of this Agreement and its acceptance by the Ormond Beach City Commission, record a fully executed counterpart of this Agreement and certified copy of the Resolution in the Public Records of Volusia County, Florida.

13. **CHOICE OF LAW, JURISDICTION AND VENUE.** This Agreement, and the acts performed hereunder, shall at all times be consistent with all applicable Federal, State, and local laws, rules and regulations. Florida law will govern the interpretation and enforcement of this Agreement. In any action or proceeding to enforce or interpret the terms of this Agreement, jurisdiction shall lie exclusively in the circuit or county courts of the Seventh Judicial Circuit in and for Volusia County, Florida; and venue will be exclusively in Volusia County, Florida. The parties waive jurisdictional and venue in any other forum.

14. **CONSTRUCTION OR INTERPRETATION OF THE AGREEMENT.** This Agreement is the result of *bona fide* arms length negotiations between the City and the Property Owner. Both parties have contributed substantially and materially to the preparation of the Agreement. Accordingly, this Agreement will not be construed or interpreted more strictly against any one party than against any other party.

15. **ATTORNEYS' FEES AND COSTS.** In the event of any action to enforce the terms of this Agreement, the prevailing party will be entitled to recover reasonable attorneys' fees and taxable court costs incurred, through and including all appeals.

16. **SEVERABILITY.** If any provisions of this Agreement, the deletion of which would not adversely affect the receipt of any material benefits by either party to the

Agreement or substantially increase the burden of either party to the Agreement, is held to be unconstitutional, invalid or unenforceable to any extent by a court of competent jurisdiction, such portion will be deemed a separate, distinct, and independent provision and the same will not affect in any respect whatsoever the validity or enforceability of the remainder of this Agreement.

17. NOTICES. Any notice that is to be delivered hereunder will be in writing and will be deemed to be delivered (whether or not actually received) when (i) hand delivered to the official hereinafter designated; or (ii) upon receipt of such notice when deposited in the United States mail, postage prepaid, certified mail, return receipt requested, addressed to the parties as follows (facsimile transmittal is not acceptable as a form of notice in this Agreement):

CITY:

Joyce Shanahan, City Manager
City of Ormond Beach
22 South Beach Street
Post Office Box 277
Ormond Beach, FL 32174

PROPERTY OWNER:

Sam Jaffe
Executive Vice President
The Jaffe Corporation
300 North Nova Road
Ormond Beach, Florida 32174

18. ENTIRE AGREEMENT. This Agreement constitutes the complete and entire Agreement between the City and the Property Owner with respect to the subject matter hereof, and supersedes any and all prior agreements, arrangements or understandings, whether oral or written, between the parties relating thereto, all of which have been integrated herein.

19. MODIFICATION. This Agreement may not be amended, changed, or modified, and material provisions hereunder may not be waived, except by a written document, of

equal dignity herewith, approval by the City Commission and Property Owner, and signed by both parties to this Agreement.

20. COUNTERPARTS. This Agreement may be executed in any number of counterparts, each of which shall be deemed an original, but all of which, taken together, will constitute one and the same document.

IN WITNESS WHEREOF, the City and the Property Owner have each caused this Agreement to be executed on the dates described below.

DATED: _____, 2021 **CITY OF ORMOND BEACH**, a Florida municipal corporation

WITNESSES:

Signature: _____
Print Name: _____

By: _____
BILL PARTINGTON, Mayor
 22 South Beach Street
 Ormond Beach, FL 32174

Signature: _____
Print Name: _____

Attest: _____
JOYCE SHANAHAN, City Manager
 22 South Beach Street
 Ormond Beach, FL 32174

STATE OF FLORIDA)
) ss
COUNTY OF VOLUSIA)

The foregoing instrument was acknowledged before me this _____ day of _____, 2021, by **BILL PARTINGTON** and **JOYCE SHANAHAN**, in their official capacity as the Mayor and the City Manager, respectively, of the City of Ormond Beach, a Florida municipal corporation who are personally known to me.

NOTARY PUBLIC State of Florida at large
My Commission Expires:

DATED: _____, 2021 **J-5 LAND PARTNERS, a Florida limited partnership**

WITNESSES:

Signature: _____
Print Name: _____

By: _____
Name: _____
Title: _____

Signature: _____
Print Name: _____

STATE OF FLORIDA)
) ss
COUNTY OF VOLUSIA)

The foregoing instrument was acknowledged before me this _____ day of _____, 2021, by _____, in his official capacity as Managing Officer of J-5 Land Partners, a Florida limited partnership, who provided _____ as identification or is personally known to me.

NOTARY PUBLIC State of Florida at large
My Commission Expires:

DATED: _____, 2021 **THE JAFFE CORPORATION** a Florida Profit Corporation and general partner of J-5 Land Partners

WITNESSES:

Signature: _____
Print Name: _____

By: _____
SAM JAFFE
 Title: _____
 300 North Nova Road
 Ormond Beach, FL 32174

Signature: _____
Print Name: _____

[illegible]

The foregoing instrument was acknowledged before me this ____ day of _____, 2021, by **SAM JAFFE**, in his official capacity as the Executive Vice President of The Jaffe Corporation, a Florida Profit Corporation, who provided _____ as identification or is personally known to me.

NOTARY PUBLIC State of Florida at large
My Commission Expires:

LEGAL DESCRIPTION (Per Book 4425, Page 4725)

Lots 2, 3, 4, 5, and 6 all in Block 6, Replat of Ortona Park, Section Two, in Ormond Beach, Florida, as per in Map Book 23, Page 226, Public Records of Volusia County, Florida

OWNER: J-5 Land Partners LTD, a Florida Limited Partnership with The Jaffe Corporation as the general partner and registered agent

ADDRESS: 880 South Atlantic Avenue

PARCEL ID#: 4224-01-06-0020

EXHIBIT OF LAND AREA OF IMPACT FEE PRESERVATION



Impact fee credit summary for 880 South Atlantic Avenue

Impact fee	Credit
Water	\$12,478.60
Sewer	\$12,164.70
Mobility (Transportation)	\$22,837.30
Stormwater	\$1,283.19
Total:	\$48,763.79

CITY OF ORMOND BEACH

DEPARTMENT OF BUILDING & GENERAL INSPECTIONS

Equivalent Living Unit Calculation Form

PROJECT NAME: Olive Garden DemolitionJOB SITE ADDRESS: 880 S. Atlantic Blvd Ormond BchDATE: 2-2-2021WATER METER SIZE: 2"

ONLY NUMBER OF FIXTURES TO BE FILLED OUT BY APPLICANT

FIXTURE TYPE	*EXISTING	NEW	FIXTURE VALUE	FIXTURE UNITS
Bathtub			8	
Bedpan Washers			10	
Combination Sink & Tray			3	
Dental Unit			1	
Dental Lavatory			2	
Drinking Fountain (Cooler)	11 (2)		1	2
Drinking Fountain (Public)	11 (3)		2	6
Kitchen Sink: 1/2" Connection			7	
3/4" Connection			3	
Lavatory: 3/8" Connection			2	
1/2" Connection			4	
Laundry Tray: 3/8" Connection			3	
3/4" Connection			7	
Shower Head (Shower Only)			4	
Service Sink: 1/2" Connection	1 (1)		3	3
3/4" Connection	11 (7)		7	49
Urinal: Pedestal Flush Valve	11 (3)		11.6	39.8
Wall or Stall			12	
Trough (2' Unit)			2	
Wash Sink (Each Set of Faucets)	111 (3)		4	52
Water Closet: Flush Valve	111 (8)		11.6	92.8
Tank Type			3	
Dishwasher: 1/2" Connection			4	
3/4" Connection	1 (1)		10	10
Washing Machine: 1/2" Connection			5	
3/4" Connection			12	
1" Connection			25	
Hose Connections (Wash Down): 1/2"	1 (1)		6	6
3/4"			10	
Hose (50' Length-Wash Down): 1/2"			6	
5/8"			9	
3/4"			12	

BUILDING DEPARTMENT USE ONLY

Existing Units:

New Units:

Total Units: 255.60

FIXTURE UNIT CHART

Fixture Units	ELU	NEW UNITS
0-60	1	÷ 60 = Number of ELUS: <u>4.3</u>
1 ELU for every sixty (60) fixture units or fraction thereof, computed to one (1) decimal place		
*Existing is for use when expanding/adding or demolishing an existing facility		
	Impact Fees:	Water <u>\$2,902</u> x <u>4.3</u> = <u>\$12,478.60</u>
		Sewer <u>\$2,829</u> x <u>4.3</u> = <u>\$12,164.70</u>
	Total	x <u>24,643.30</u>

Exhibit "B"**Page 3 of 9**

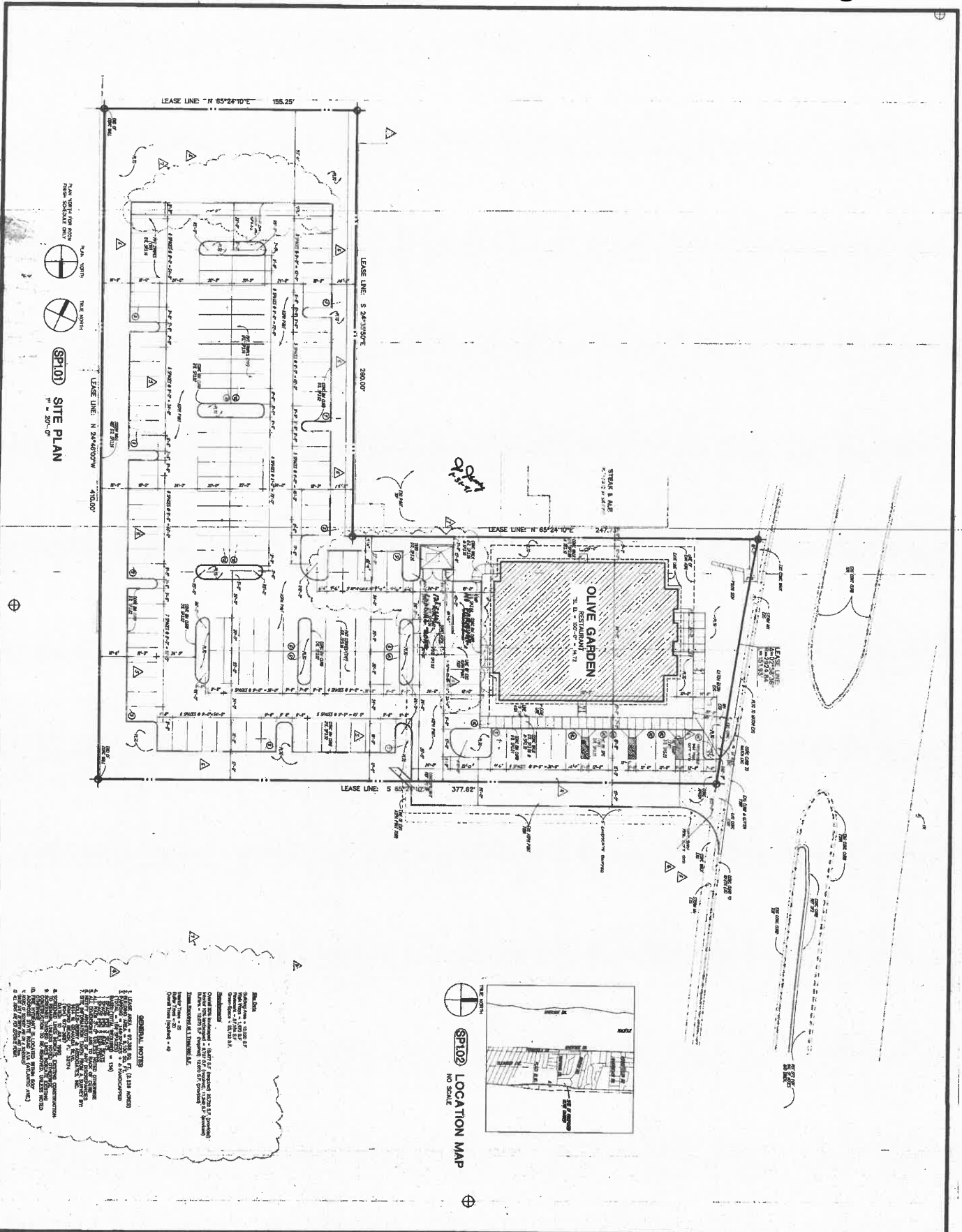
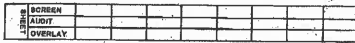
880 South Atlantic Avenue		
Restaurant		
GSF	9100 Square feet	
Divide by 1000	9.1	
TTGR per 1000	128	ITE #932, High turnover, sit down restaurant
TTGR =	1160	
ICR/PB	0.18	18% passer by
Deduct IC/PB trips	209	
TGR - IC/PB	951.55	
Person Trips	1.50	
Total Person Trips	1427	
Roads	\$1.76	\$2,512.10
Transit	\$8.00	\$11,418.65
Bike/Ped	\$6.24	\$8,906.55
	\$16.00	\$22,837.30
GSF = Gross Square Feet		
TGR = Trip Generation Rate		
IC = Internal Capture		
TTR = Total Trip Generation		
AVO = Average Vehicle Occupancy		
SF = Square Feet		

\$22,837.30 Net mobility fee

880 South Atlantic Avenue stormwater impact fee credits

Stormwater impact fee credit - 880 South Atlantic Avenue	
Gross floor area	9,100 square feet
Divide by 1,000	9.10 Section 1-27 of LDC
Stormwater fee:	\$141.01 fee
Total fee:	\$1,283.19

Impact fee credit: \$1,283.19





CITY OF ORMOND BEACH

Planning Department

22 South Beach Street, Ormond Beach, FL 32174

Tel: (386) 676-3238

www.ormondbeach.org

comdev@ormondbeach.org

PUBLIC HEARING- APPLICATION

For Planning Department Use

Application Number

Date Submitted

APPLICATION TYPE AND FEES

	Application	Advertising Deposit for Advisory Board	Advertising Deposit for Commission	Total*
☐ Annexation				No Fees
☐ Annexation Agreement	100	--	--	100
☐ Land Development Code (LDC) Amendment	1000	300	300	1600
☐ Large-Scale Comprehensive Plan Amendment (Map)	2500	700	1400	4600
☐ Official Zoning Map Amendment, 10.01 acres or more	1000	700	1400	3100
☐ Official Zoning Map Amendment, 10 acres or less	1000	300	600	1900
☐ Planned Development, 10.01 acres or more	2000	800	1500	4300
☐ Planned Development, 10 acres or less	2000	300	600	2900
☐ Planned Development Amendment - Major	1000	800	1500	3300
☐ Small-Scale Comprehensive Plan Amendment (Map)	2000	400	800	3200
☐ Special Exception - New Construction/Redevelopment	850	400	400	1650
☐ Special Exception - Downtown CRA Redevelopment	400	400	400	1200
☐ Street Vacation	500	--	1500	2000
☒ Other Impact fee credits	TBD	TBD	TBD	TBD

* The Land Development Code requires the applicant to pay the full costs of public advertising. The deposit is the average of past applications. Applicants shall receive a refund where costs paid are greater than advertising costs and will be if advertising costs are greater than the deposit paid.

APPLICANT INFORMATION

This application is being submitted by ☒ Property Owner ☐ Agent, on behalf of Property Owner**

Name J-5 Land Partners, Ltd and The Jaffe Corporation

Full Address 300 N. Nova Road, Ormond Beach, FL 32174

Telephone 386-673-3100

Email kfriedman@thejaffecorp.com

** If this application is being submitted by a person other than the property owner, please provide the following Property Owner Information as well as a notarized letter designating you as agent.

PROPERTY OWNER INFORMATION***

Name J-5 Land Partners, Ltd and The Jaffe Corporaiton

Full Address 300 N. Nova Road, Ormond Beach, FL 32174

Telephone 386-673-3100

Email kfriedman@thejaffecorp.com

***If the property owner does not reside on the property for which the application refers, please provide the following Property Details.

PROPERTY DETAILS

Full Address 880 South Atlantic Avenue, Ormond Beach, FL 32176

Legal Description LOT 2 & 3 & N 110 FT LOT 4 BLK 6 ORTONA PARK REPLAT SEC 2 MB 23 PG 226 EXC E 298.4 FT

PROJECT COORDINATOR

Name _____

Full Address _____

Telephone _____ Email _____

PROJECT INFORMATION

Name DEMOLITION OF 880 S. ATLANTIC AVENUE

Description DEMOLITION OF THE BUILDING ONLY LOCATED AT 880 S. ATLANTIC AVENUE, ORMOND BEACH, FL. ASPHALT PARKING AND ENTRANCES SHALL REMAIN.

CERTIFICATION

By submitting this application, I hereby certify that the information provided above is true and correct to the best of my knowledge and that I am aware of the application submittal requirements and review process for this application. I hereby authorize City of Ormond Beach Staff to place legal notice on my property and to take pictures pertaining to my request. I am aware of the required pre-application meeting and am aware that if all the required information is not provided, my application will be continued to the next regularly scheduled hearing.

Signature: _____

STATE OF FLORIDA
COUNTY OF Volusia

The foregoing instrument was acknowledged before me this 1st day of Feb, 2021, by SAM JASSE
as Exec. VP (title*) for The JASSE CORP (name of corporation*),
who ☐ provided _____ as identification, or ☒ who is personally known to me.



JOY C. FOSHER
Commission # GG 150057
Expires November 13, 2021
Bonded Thru Budget Notary Services

Notary Public, State of Florida
My Commission Expires: 11/13/2021

*If you are executing this document on behalf of a corporation please complete the spaces with your title and the name of your company as indicated.



January 29, 2021

**ELECTRONIC MAIL ONLY TO:
STEVEN.SPRAKER@ORMONDBEACH.ORG**

Steven Spraker, AICP, Planning Director
City of Ormond Beach
22 South Beach Street, Room 104
Ormond Beach, FL 32175

**RE: 880 S. Atlantic Avenue
(Olive Garden Building)
Ormond Beach, FL**

Dear Steven:

We hereby request a 5 year impact fee preservation for J-5 Land Partners, Ltd for the property located at 880 S. Atlantic Avenue, Ormond Beach, FL.

We will be submitting a permit with the building department to demo the existing building previously occupied by Olive Garden Restaurant.

Attached please find the property appraiser print-out of the building.

Thank you for your assistance with this process. If any additional information is needed, please do not hesitate to contact me or Kimberley Friedman.

**J-5 LAND PARTNERS, LTD.
THE JAFFE CORPORATION**



Sam Jaffe
Executive Vice President

Enc.

880 South Atlantic Avenue

10.A.e



02/03/2020

Packet Pg. 557

880 South Atlantic Avenue, existing building to be demolished



Source: <https://www.google.com/maps/@29.2704474,-81.0297423,3a,75y,251.26h,93.14t/data=!3m6!1e1!3m4!1swFWZCpUpQemlf1IbYpDulw!2e0!7i16384!8i8192>