



City of North Port
FINANCE DEPARTMENT/PURCHASING DIVISION
4970 CITY HALL BLVD, STE 337
NORTH PORT, FLORIDA 34286
Office: 941.429.7170
Fax: 941.429.7173
Email: purchasing@cityofnorthport.com



SEPTEMBER 22, 2017
ADDENDUM 5 - FINAL

TO: PROSPECTIVE BIDDERS

RE: RFB NO. 2018-02 SPRING HAVEN DRIVE RECLAIMED WATER MAIN EXTENSION

DUE DATE: SEPTEMBER 25, 2017 AT 2:00 PM (EST)
City Hall, Room 302 (Bids need to be delivered to Room 337 so they can be date and time stamped on or before 2:00 PM. Bid opening will commence in Room 302 shortly thereafter)

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ITEM #1: The bid schedule was inadvertently attached to addendum #4. The bid schedule has not changed since addendum #2 (you may use the excel format in addendum #2 or the word format in addendum #2)

Note: If you have mailed your submittal, please e-mail me the addenda acknowledgement sheet.

Firms are required to acknowledge receipt of this addendum on their proposal forms. All other terms and conditions of the original proposal and contract documents remain the same.

Alla V. Skipper

Alla V. Skipper, CPPB
Senior Contract Specialist
Finance Department/Purchasing Division
4970 City Hall Blvd.
North Port, Florida 34286
Tel: 941.429.7172
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Receipt of Addendum No. 5 shall be noted within the Bid Form in the appropriate section.
End of Addendum No. 5



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SEPTEMBER 22, 2017
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ITEM #1: QUESTIONS/ANSWERS

Q1: I am looking at the changes and conflicts per addendum 2.
 On the revised sheet 8 of 16 the new sheet shows 127 LF of HDPE to be “open trenched” under the existing box culvert @ Sta. 22+38+/-
 The Drawing for the HDPE looks like a profile for a directional drill rather than open cut. It seems that it would make more sense for this to be installed by HDD rather than open cut. In fact it would be very difficult and costly to even try to open trench this. It would seem to make more sense to install this by HDD and to also extend the HDD to approximately around Sta. 23+10 +/- in order to go past the existing 24” RCP @ Sta. 22+87 +/-
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2C	12-INCH PVC C-900, DR-14 PIPE AND FITTINGS	LF	2800 2100		\$
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5	AIR RELEASE ASSEMBLY	EA	2		\$
6A	CONNECTION TO EXISTING 16-INCH STUB-OUT AT PAN AMERICAN BOULEVARD	LS	1	XXXXXXXXXXXX XX	\$
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7	DEFLECTION AT FUTURE STORM CULVERT OR UTILITY MAINS [BID ALTERNATE ITEM]	EA	6 5		\$
SUBTOTAL					\$
1	Mobilization/Demobilization (shall not exceed five percent (5%) of the sub-total of bid of Items 2-7)	1	LS	XXXXXXXXXXXX XX	\$
GRAND TOTAL BID					\$

SIGNATURE (Person authorized to bind the company): _____ **Date:** _____

NAME (printed): _____ **Title:** _____

THIS PAGE MUST BE COMPLETED AND SUBMITTED
REVISED – PER ADDENDUM #3



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SEPTEMBER 21, 2017
ADDENDUM 3

TO: PROSPECTIVE BIDDERS

RE: RFB NO. 2018-02 SPRING HAVEN DRIVE RECLAIMED WATER MAIN EXTENSION

DUE DATE: SEPTEMBER 25, 2017 AT 2:00 PM (EST)
City Hall, Room 302 (Bids need to be delivered to Room 337 so they can be date and time stamped on or before 2:00 PM. Bid opening will commence in Room 302 shortly thereafter)

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- Q2:** The technical specs require the contractor to submit an MOT plan. Will MOT be required on Spring Haven approaching West Price and if so there is not a pay item on the bid form. Will one be added?
- A2:** **A formal MOT plan will not be required but the contractor will be required to provide MOT at the connection points at the ends of the project and along the improved segment of Spring Haven Drive when construction vehicles are present performing work.**
- Q3:** pipe vendors are telling us that we could experience long lead times for delivery of PVC and HDPE pipe, up to 10 – 12 weeks. The resin needed to manufacture both the PVC and HDPE pipe are predominantly manufactured in Texas, the Houston area, and they were hit hard with the hurricane and as a result a lack of resin. Our vendors are also telling us that pricing is very volatile and unless we can place an order before October 1, 2017 we may incur a price increase. This job has a substantial completion time of ninety (90) days with an additional thirty (30) days for final completion which if we have to wait 10 – 12 weeks for delivery of pipe will not afford us enough time to complete the job and we could incur liquidated damages as a result. We request the City of North Port revise the time for construction and allow to compensate the contractor for any pipe price increase.



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A3: The City of North Port will not extend the contract time to complete this project at this time. Once the project is bid and delays in delivery of pipe from multiple manufacturers can be demonstrated and documented the City may consider revising the contract time in concert with discussions with the South Florida Water Management District. The City will not consider variability of pricing regarding pipe or any other materials.

ITEM #2: CLARIFICATION:

CL1: There is no separate Bid item for the two (2) Project Signs detailed in SP-26. Payment for the Project Signs is considered to be included as part of the other Bid items.

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A3: The City of North Port will not extend the contract time to complete this project at this time. Once the project is bid and delays in delivery of pipe from multiple manufacturers can be demonstrated and documented the City may consider revising the contract time in concert with discussions with the South Florida Water Management District. The City will not consider variability of pricing regarding pipe or any other materials.

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SEPTEMBER 19, 2017
ADDENDUM 2

TO: PROSPECTIVE BIDDERS

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ITEM #1: CORRECTION:

- C1: DELETE, BID SCHEDULE, and REPLACE** with the attached revised schedule.
Excel version will be provided as an attachment.
- C2. Delete, Section 01025 Measurement and Payment Bid item 3, and REPLACE** with the revised **Section 01025 Measurement and Payment Bid item 3 (See below).**

'REVISED' Section 01025 Measurement and Payment Bid item 3

- C. HDPE Reclaimed Water Main and Fittings (Item 3): Payment for HDPE directional bores and open trench installation will be made at the contract unit price per linear foot of each size and dimension ration (DR) of a fully functional reclaimed water main furnished and installed in place and ready for service. The price shall include all necessary labor, equipment, fittings, and materials for furnishing, installing, and testing of the reclaimed water main and shall include but not be limited to:
 - Project layout;
 - Staging;
 - Coordinating with utility owners for locating buried cables and other utilities during construction;
 - Restraining utility poles;
 - Protecting of existing facilities;
 - Clearing and grubbing;
 - Exploratory excavations;
 - Excavation of all material encountered including rock encountered during the drilling/boring and open trench process.
 - Sheeting and bracing;

- Dewatering;
- HDPE pipe with welded joints;
- Connections to adjacent pipe, including but not limited to welded connections/adapters, ductile iron fittings, gaskets, and mechanical joint restraints;
- Detectable tape for open trench;
- Locator wire for pipe;
- Sub-aqueous crossing signs;
- Removal of drillers bentonite mud;
- Fill materials, including temporary fill;
- Undercutting;
- Removal and replacement of unsuitable subgrade;
- Compaction and compaction testing;
- Grading;
- Replacement of grass, sod, unpaved roadway, and all other surface materials disturbed but not specifically designated as a separate bid item;
- Cleanup;
- Repair of existing utilities that are disturbed during construction;
- Temporary and permanent connections and appurtenances for filling and/or testing as required and/or as shown on the Construction Plans;
- Flushing;
- Pigging;
- Pressure testing;
- Placing into service;
- Furnishing, installation and maintenance of erosion control measures such as but not limited to silt fence and floating turbidity barriers;
- As-built record data, including but not limited to surveying and recording as-built information; and
- All other work incidental to the installation of the pipe complete in place.

Price shall also include the removal and replacement of all obstructions located in the path of the work including but not limited to signs, fences, trees, ornamental vegetation, landscaping structures, sidewalk, curbing, culverts, storm sewers, etc., unless paid for under a separate bid item.

Measurement of the pipe shall be to the nearest foot along the centerline of the pipe as measured in the horizontal plane between the limits shown on the Construction Plans. If the City agrees that field conditions (e.g., minimum radius, installation conditions) require the beginning and/or end of directional drills be extended, the extension will be paid for at the unit price bid for Item “2B – 12-INCH PVC C-900, DR-18 RJ PIPE AND FITTINGS” or 2D. “12-INCH PVC C-900, DR-14 R.J. PIPE AND FITTINGS”.

BID ITEM	DESCRIPTION	UNITS
3A	12-INCH HDPE DR-11 DIRECTIONAL BORE UNDER DRIVEWAY AT STA 32+60	LF
3B	12-INCH HDPE DR-11 DIRECTIONAL BORE UNDER DRIVEWAY AT STA 38+20	LF
3C	12-INCH HDPE DR-11 OPEN TRENCH UNDER BOX CULVERT AT STA 22+35	LF

ITEM #2: QUESTIONS/ANSWERS

Q1: Does this project require an Underground Utility License or a General Contractor License?

A1: **Since this is a pipeline project, either a State of Florida Certified Underground Utility or General Contractor are acceptable.**

Q2: What is Engineer estimate?

A2: **\$589,000**

Q3: Reference plan sheet 10 of 16, at about station 31+15, the plan shows cutting and capping an existing "out of service force main", has this force main pipe been flushed and raw sewage removed, has it been pumped full of concrete grout, what are we going to encounter when cutting into this pipe? Please clarify.

A3: **The 6" force main was drained/emptied when it was placed out of service.**

Q4: Reference bid form, bid item 7, Deflection at Future Storm Culvert or Utility Mains, how is the pipe for each of these to be paid, from the pipe bid items?

A4: **The reclaimed water main pipe will be paid for under Item 2 (PVC Reclaimed Water Main Pipe and Fittings) as measured along the centerline of the pipe as measured in the horizontal plane.**

Q5: Reference bid form, bid item 7, please provide depth and approximate location for each of these deflections.

A5: **The future storm culverts and box culvert crossings on Spring Haven Drive are shown on the attached Charlotte Engineering/American Consulting Engineers roadway plans. The roadway plans are not expected to change significantly with regards to the storm culverts and box culvert crossings. A table summarizing the potential conflicts between the reclaimed water main and the future storm culvert and box culvert crossings is provided on Attachment No. 1.**

Detail for the deflection with the future box culvert (Conflict No 5) and future storm culvert (Conflict No 4) is provided on the updated Plan and Profile Sheet 8 of 16. A HDPE pipe is proposed to be installed using an open trench to cross under the conflicts. Payment for the HDPE pipe will be made under the new Bid item 3C as described in the 'REVISED' Section 01025 Measurement and Payment Bid item 3 shown above in C2.

Q6: Reference bid form, bid items, 2A, 2B, 2C and 2D, each of these items makes fittings incidental to the unit price per foot of pipe installed, this is not a fair way for fittings to be paid, if the total footage of pipe installed is less than the bid quantity we will not be able to recover all our costs for fittings, please make a separate bid item for fittings.

A6: **No change will be made to the bid form.**

Q7: I just finished going through the plans and I found an inconsistency in the plan quantity versus the bid form quantity.

Bid Item 2A of the Bid Form shows 260 LF of 12" DR-18. On sheet 7 of 16 it shows a qty. of 498 LF of DR-18.

It seems that this should read as 498 LF of DR-14 rather than DR-18.

Please advise.

A6: **The PVC pipe on sheet 7 of 16 should read as DR-14.**

Firms are required to acknowledge receipt of this addendum on their proposal forms. All other terms and conditions of the original proposal and contract documents remain the same.

Alla V. Skipper

Alla V. Skipper, CPPB
Senior Contract Specialist
Purchasing Department

**4970 City Hall Blvd.
North Port, Florida 34286
Tel: 941.429.7172
Fax: 941.429.7173**

E-mail: askipper@cityofnorthport.com

**Receipt of Addendum No. 2 shall be noted within the Bid Form in the appropriate section.
End of Addendum No. 2**

'REVISED' BID SCHEDULE - SUMMARY OF PAYITEMS

It is understood that the estimated summary of pay item quantities are approximate only and are solely for the purpose of facilitating the comparison of bids, and that the Contractor's compensation shall be computed upon the basis of the actual quantities in the completed work, whether they be more or less than those shown.

Preparation of Bid Schedules: Contractor MUST use the bid schedule below (DO NOT RECREATE THIS FORM). All blank spaces in the schedule below must be legibly. *Bidder should not reference the words "No Charge, N/A, included, dash, etc." in any of the blocks. If vendor is not providing a bid price for an item, zero (0) must be designated on that line item. Failure to identify a monetary amount properly may cause bidder's to be deemed non-responsive and bid response be rejected.*

BID ITEM	DESCRIPTION	UOM	EST. QTY	UNIT COST	TOTAL
2A	12-INCH PVC C-900, DR-18 PIPE AND FITTINGS	LF	260		\$
2B	12-INCH PVC C-900, DR-18 R.J. PIPE AND FITTINGS	LF	320		\$
2C	12-INCH PVC C-900, DR-14 PIPE AND FITTINGS	LF	2800 2100		\$
2D	12-INCH PVC C-900, DR-14 R.J. PIPE AND FITTINGS	LF	380 930		\$
3A	12-INCH HDPE DR-11 DIRECTIONAL BORE UNDER DRIVEWAY AT STA 32+60	LF	104		\$
3B	12-INCH HDPE DR-11 DIRECTIONAL BORE UNDER DRIVEWAY AT STA 38+20	LF	800		\$
3C	<u>12-INCH HDPE DR-11 OPEN TRENCH UNDER BOX CULVERT AT STA 22+35</u>	<u>LF</u>	<u>127</u>		\$
4	6-INCH STUB-OUT WITH GATE VALVE	EA	2		\$
5	AIR RELEASE ASSEMBLY	EA	2		\$
6A	CONNECTION TO EXISTING 16-INCH STUB-OUT AT PAN AMERICAN BOULEVARD	LS	1	XXXXXXXXXXXX XX	\$
6B	CONNECTION TO EXISTING 6-INCH MAIN AT DRIVEWAY AT STA 38+20	LS	1	XXXXXXXXXXXX XX	
6C	CONNECTION TO EXISTING 6-INCH AND 12-INCH MAINS AT WEST PRICE BOULEVARD	LS	1	XXXXXXXXXXXX XX	\$
7	DEFLECTION AT FUTURE STORM CULVERT OR UTILITY MAINS [BID ALTERNATE ITEM]	EA	6 5		\$
SUBTOTAL					\$
1	Mobilization/Demobilization (shall not exceed five percent (5%) of the sub-total of bid of Items 2-7)	1	LS	XXXXXXXXXXXX XX	\$
GRAND TOTAL BID					\$

SIGNATURE (Person authorized to bind the company): _____ **Date:** _____

NAME (printed): _____ **Title:** _____

THIS PAGE MUST BE COMPLETED AND SUBMITTED

REVISED – PER ADDENDUM #2

RFB No. 2018-02 Spring Haven Drive Reclaimed Water Main Extension

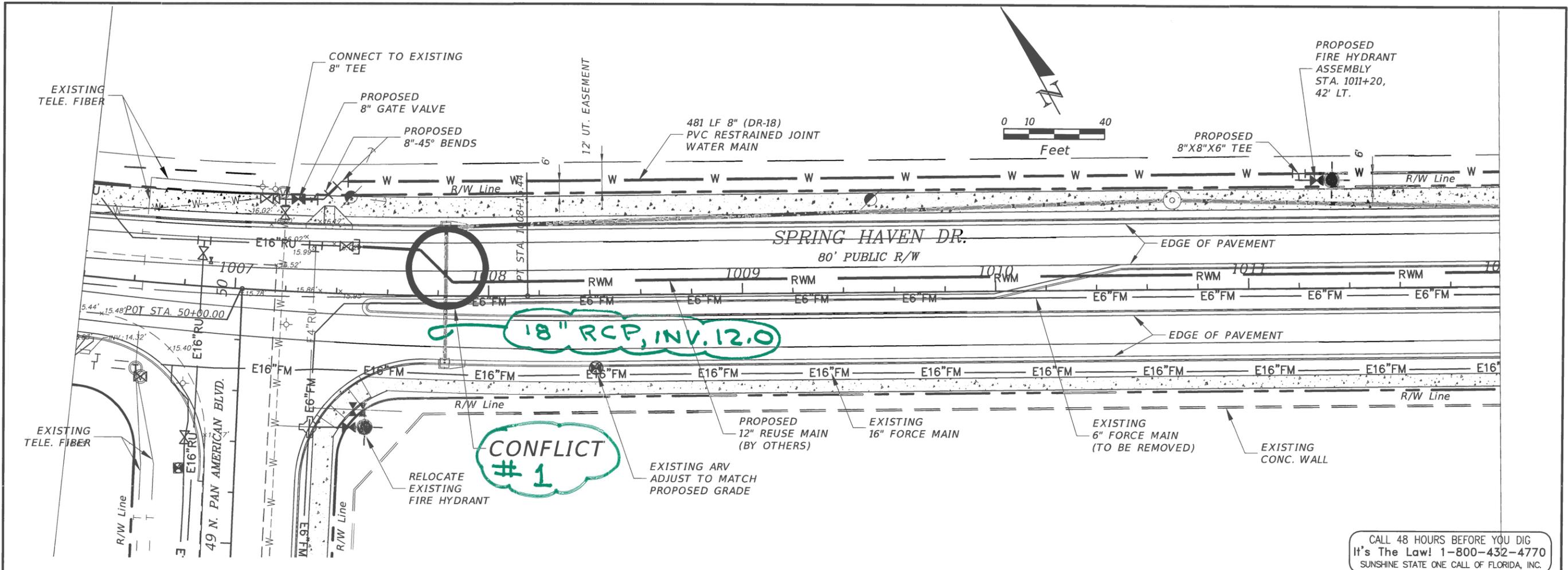
Addendum No. 2

Attachment No. 1

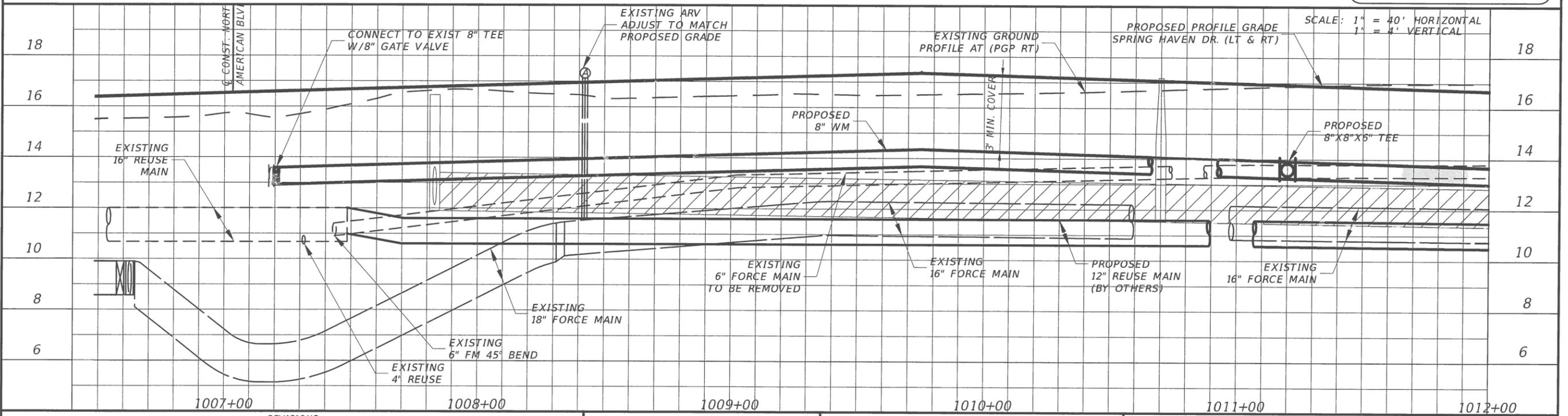
Conflict Number	Approx. Station	Approx. Offset	Pipe Dia - Material	Pipe Invert	Notes
1	1+94	9.1 (L)	18" RCP	12.00	RWM to deflect under stormwater pipe, 12-inches minimum separation
2	7+66	7.3 (L)	18" RCP	11.61	RWM to deflect under stormwater pipe, 12-inches minimum separation
3	15+07	8.6 (L)	18" RCP	10.55	RWM to deflect under stormwater pipe, 12-inches minimum separation
4	21+58	11.5 (L)	18" RCP	10.55	RWM to deflect under box culvert using 12-inch HDPE pipe, 12-inches minimum separation
5	22+35	11.9 (L)	10'x4' Box	10.40	RWM to deflect under box culvert using 12-inch HDPE pipe, 2-feet minimum separation
6	22+92	12.2 (L)	24" RCP	12.90	Existing stormwater pipe to remain. RWM to cross under without deflection.
7	27+27	13.7 (L)	18" RCP	9.65	RWM to deflect under stormwater pipe, 12-inches minimum separation
8	29+01	14.1 (L)	42" RCP	7.65	RWM to deflect under stormwater pipe, 12-inches minimum separation

Notes:

1. The Contractor shall refer to the American Consulting Engineers of Florida, LLC roadway plans for the actual location, size, and invert elevations of the stormwater pipes.
2. The Contractor shall stake-out the location of the proposed drainage pipe in the field to ensure the deflection is constructed correctly.
3. The Contractor shall coordinate with NPUD to ensure they are referencing the latest roadway design plans.
4. If directed by NPU to perform deflection at Conflict No'ss 1, 2, 3, 7, and 8, payment will be made under Bid item 7.
5. Payment for deflection at Conflict No's 4, and 5 will be made under Bid Item 3C
6. No deflection anticipated at Conflict No 6.



CALL 48 HOURS BEFORE YOU DIG
 It's The Law! 1-800-432-4770
 SUNSHINE STATE ONE CALL OF FLORIDA, INC.



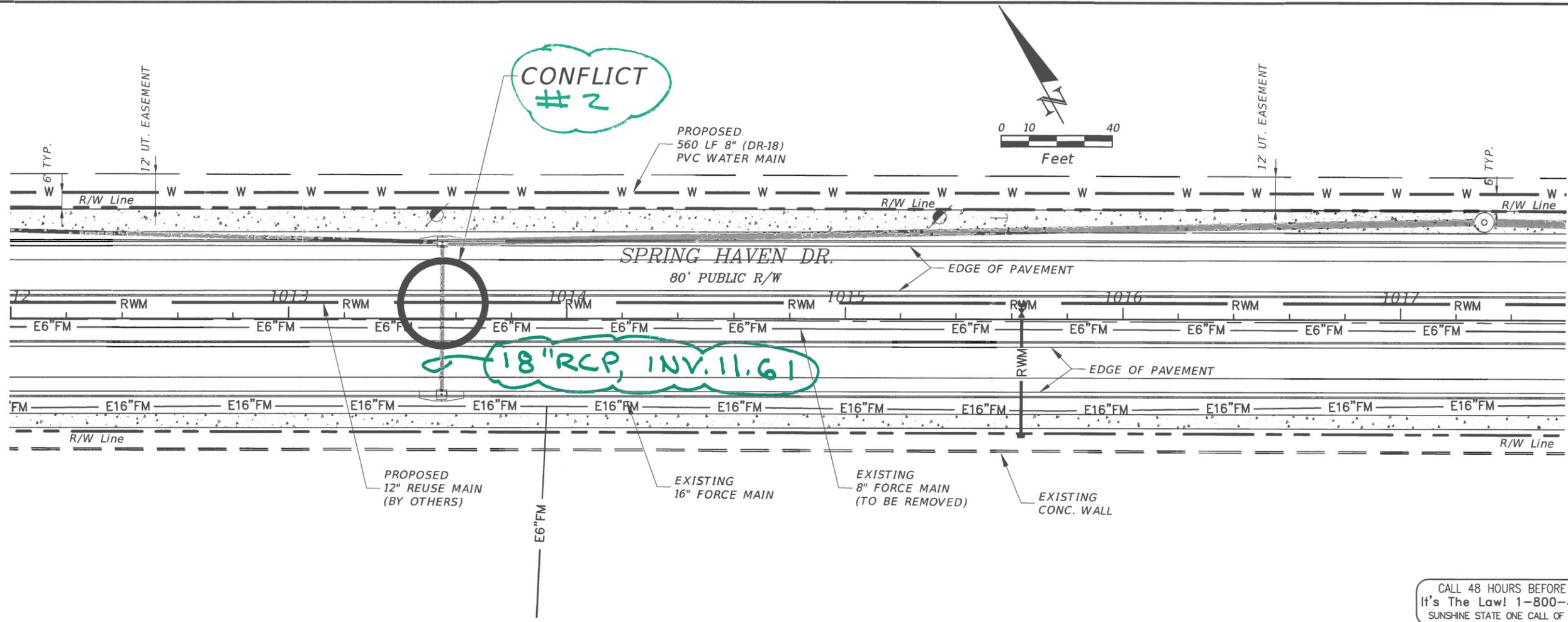
DATE	DESCRIPTION	DATE	DESCRIPTION

AMERICAN CONSULTING ENGINEERS OF FLORIDA, LLC
 2818 Cypress Ridge Blvd, Suite 200
 Wesley Chapel, Florida 33544
 Phone: (813) 435-2600 Fax: (813) 435-2601
 Certificate of Authorization No. 9302
 Joseph S. Menen, P.E. No. 44745

CITY OF NORTH PORT
 SPRING HAVEN DRIVE
 ROADWAY IMPROVEMENTS

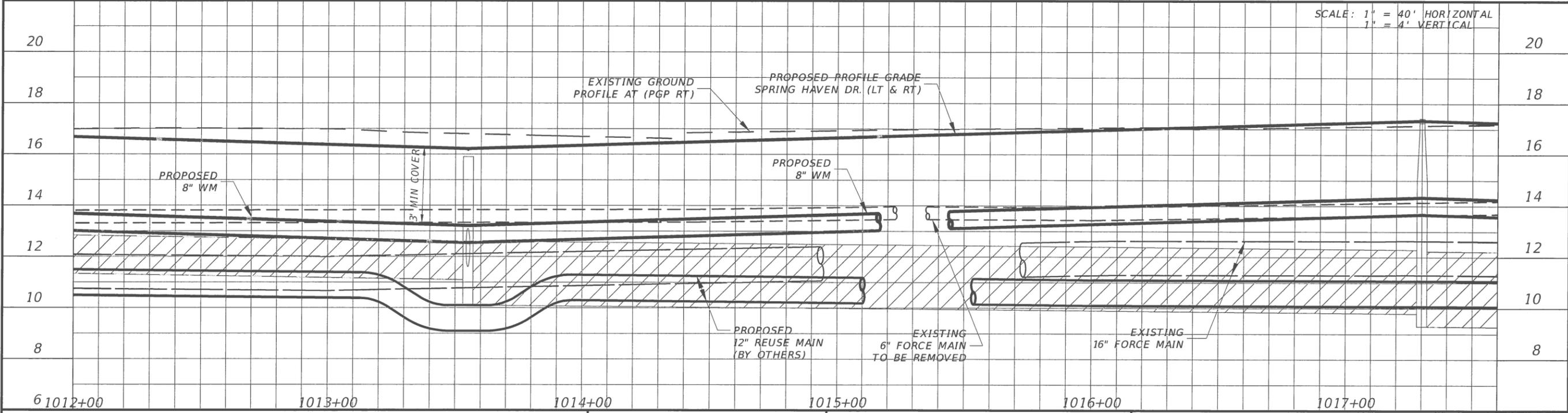
UTILITY ADJUSTMENTS
 SPRING HAVEN DRIVE
 STA. 1007+19 TO 1012+00

SHEET NO.
 30



CALL 48 HOURS BEFORE YOU DIG
 It's The Law! 1-800-432-4770
 SUNSHINE STATE ONE CALL OF FLORIDA, INC.

SCALE: 1" = 40' HORIZONTAL
 1" = 4' VERTICAL



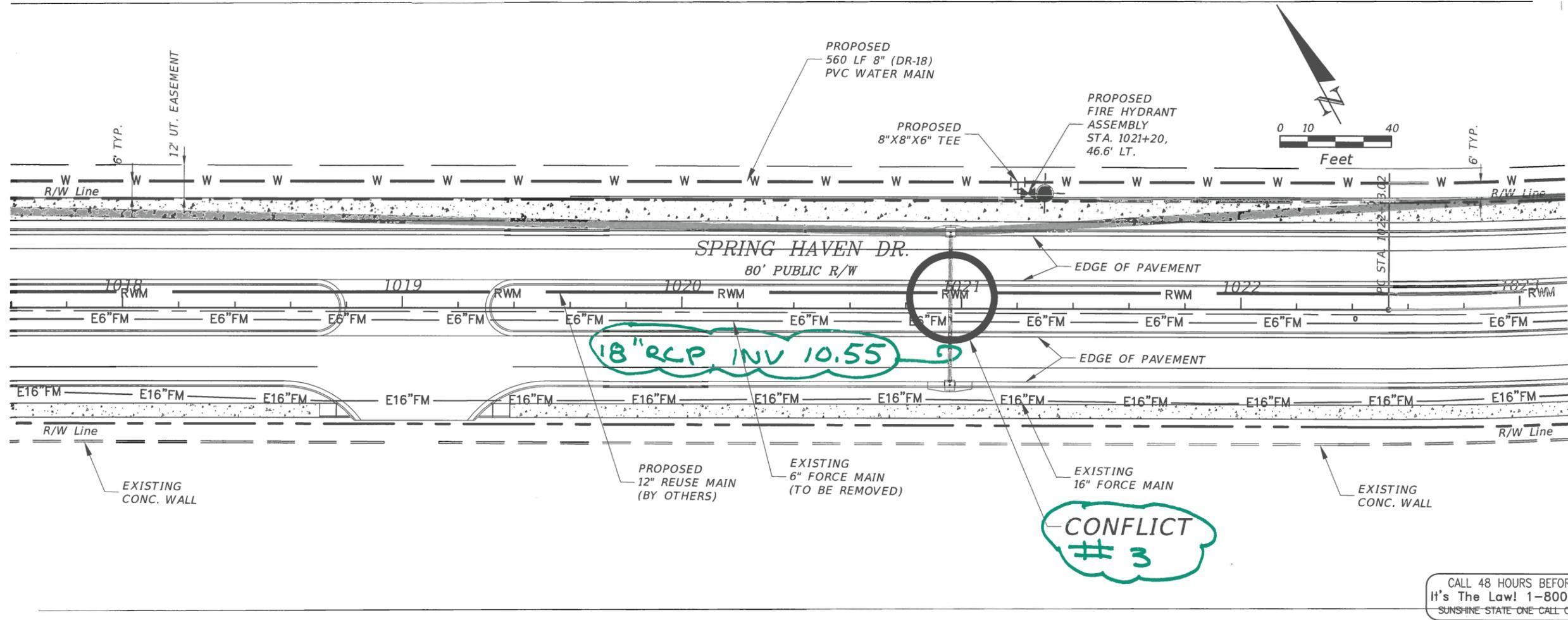
REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

AMERICAN CONSULTING ENGINEERS OF FLORIDA, LLC
 2818 Cypress Ridge Blvd, Suite 200
 Wesley Chapel, Florida 33544
 Phone: (813) 435-2600 Fax: (813) 435-2601
 Certificate of Authorization No. 9302
 Joseph S. Menez, P.E. No. 44745

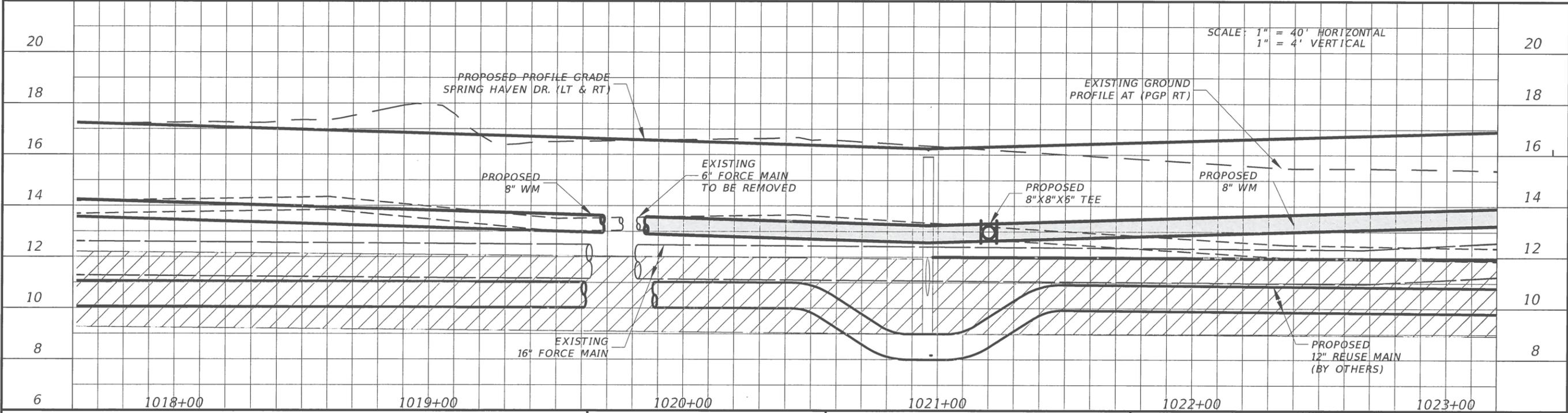
CITY OF NORTH PORT
 SPRING HAVEN DRIVE
 ROADWAY IMPROVEMENTS

UTILITY ADJUSTMENTS
 SPRING HAVEN DRIVE
 STA. 1012+00 TO 1017+60

SHEET NO.
 31



CALL 48 HOURS BEFORE YOU DIG
 It's The Law! 1-800-432-4770
 SUNSHINE STATE ONE CALL OF FLORIDA, INC.



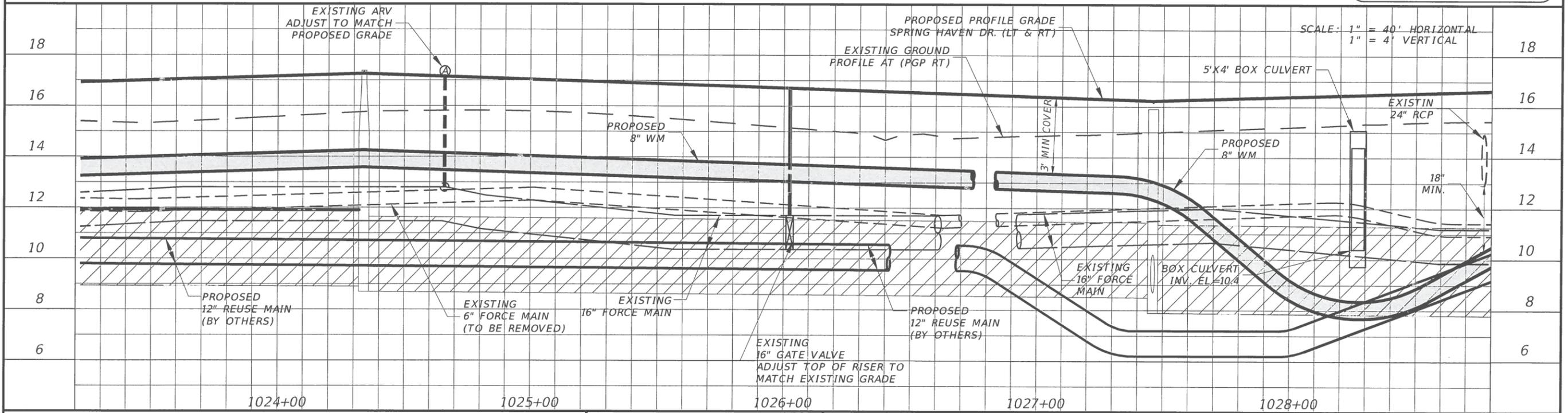
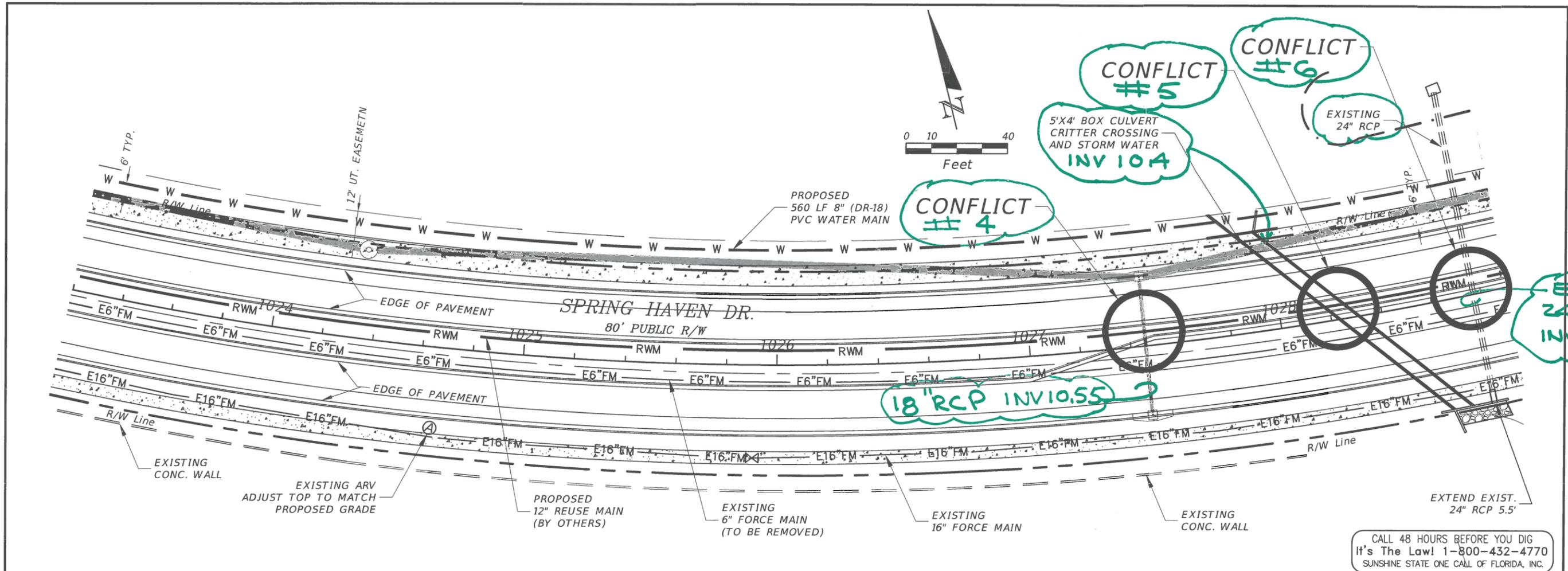
REVISIONS	
DATE	DESCRIPTION

AMERICAN CONSULTING ENGINEERS OF FLORIDA, LLC
 2818 Cypress Ridge Blvd, Suite 200
 Wesley Chapel, Florida 33544
 Phone: (813) 435-2600 Fax: (813) 435-2601
 Certificate of Authorization No. 9302
 Joseph S. Menden, P.E. No. 44745

CITY OF NORTH PORT
 SPRING HAVEN DRIVE
 ROADWAY IMPROVEMENTS

UTILITY ADJUSTMENTS
 SPRING HAVEN DRIVE
 STA. 1017+60 TO 1023+20

SHEET NO.
 32



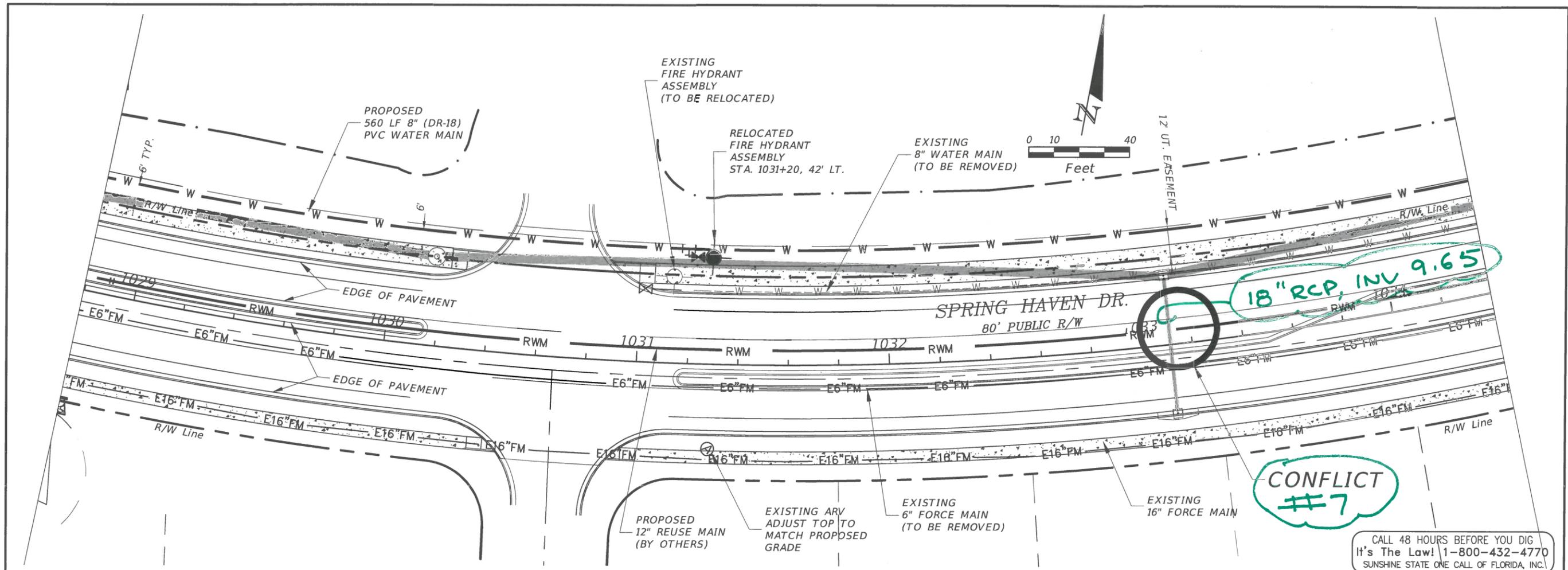
REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

AMERICAN CONSULTING ENGINEERS OF FLORIDA, LLC
 2818 Cypress Ridge Blvd, Suite 200
 Wesley Chapel, Florida 33544
 Phone: (813) 435-2600 Fax: (813) 435-2601
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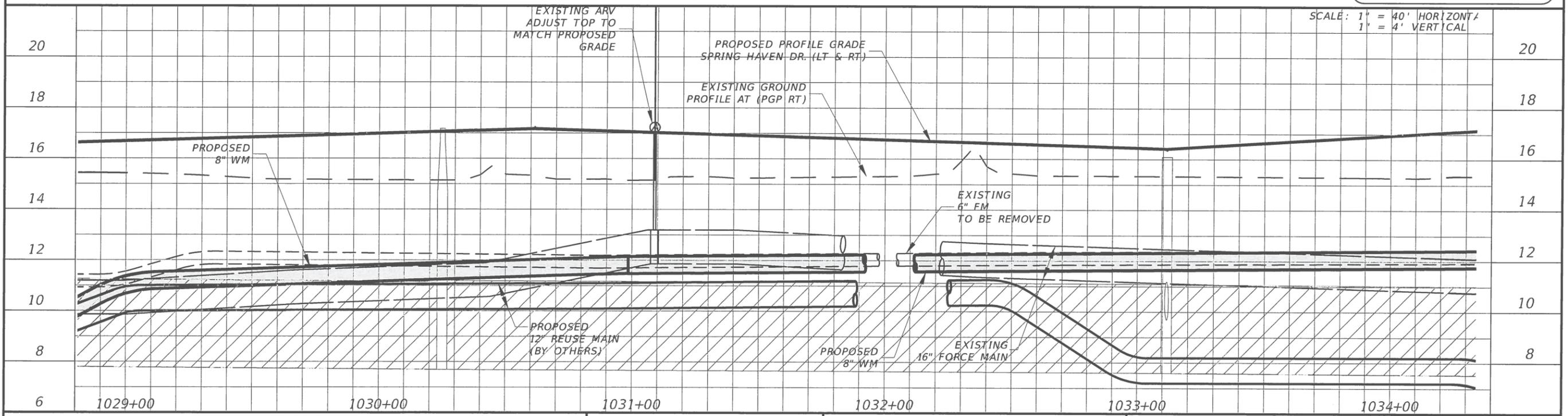
CITY OF NORTH PORT
 SPRING HAVEN DRIVE
 ROADWAY IMPROVEMENTS

UTILITY ADJUSTMENTS
 SPRING HAVEN DRIVE
 STA. 1023+20 TO 1028+80

SHEET NO.
 33



CALL 48 HOURS BEFORE YOU DIG
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SUNSHINE STATE ONE CALL OF FLORIDA, INC.



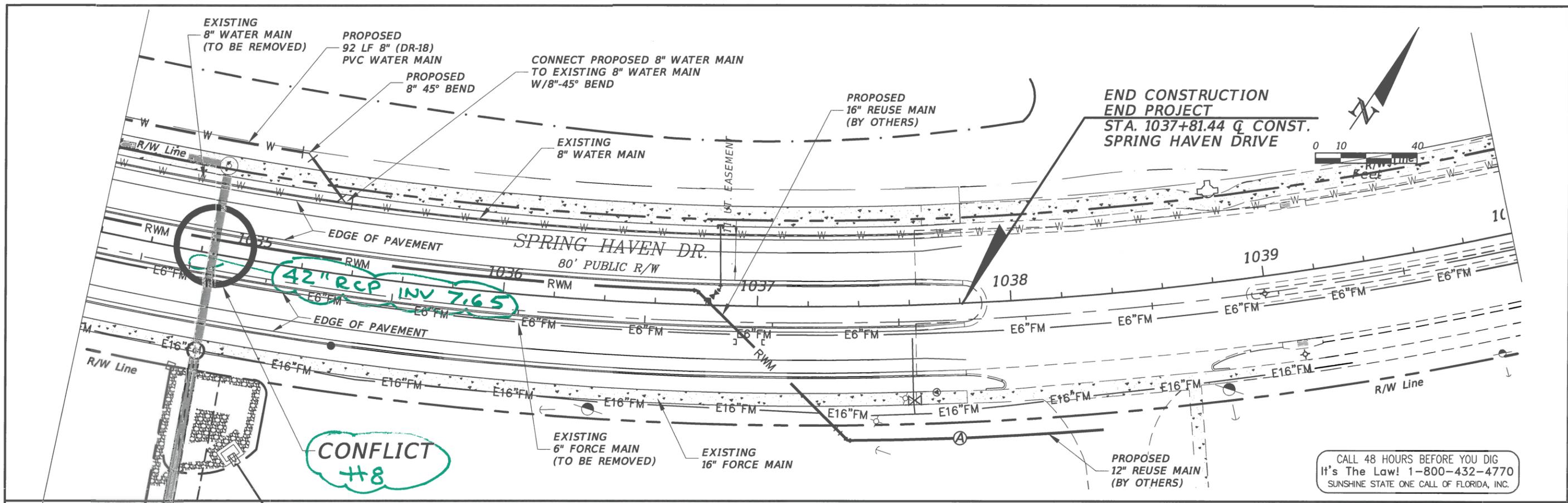
REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

AMERICAN CONSULTING ENGINEERS OF FLORIDA, LLC
2818 Cypress Ridge Blvd, Suite 200
Wesley Chapel, Florida 33544
Phone: (813) 435-2600 Fax: (813) 435-2601
Certificate of Authorization No. 9302
Joseph S. Menez, P.E. No. 44745

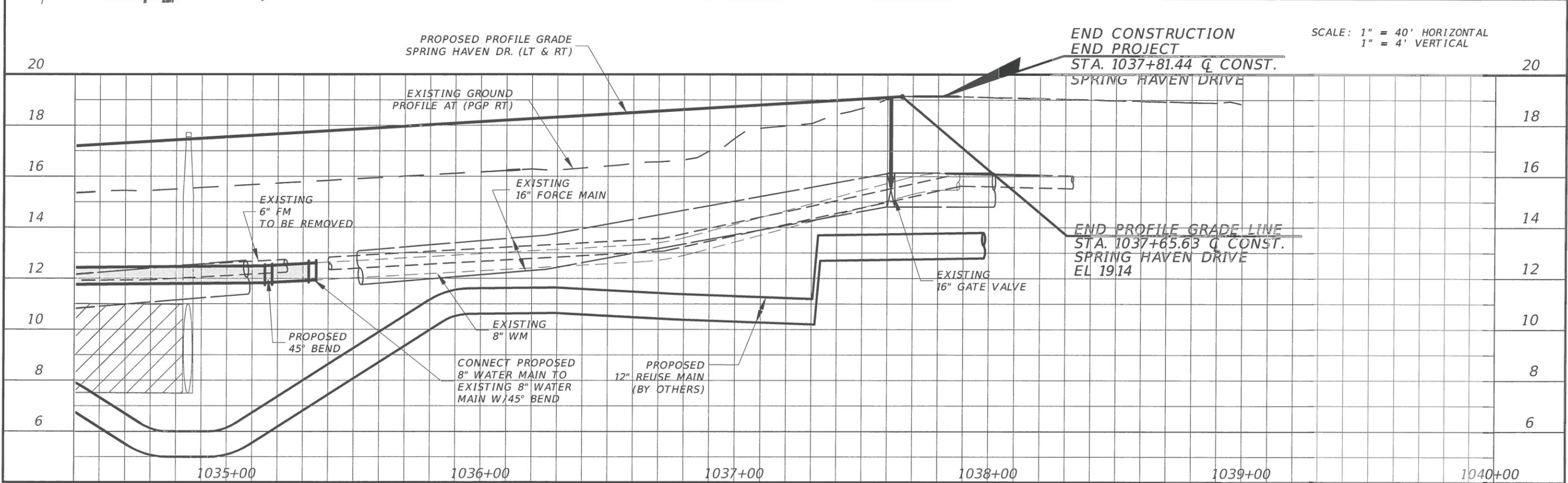
CITY OF NORTH PORT
SPRING HAVEN DRIVE
ROADWAY IMPROVEMENTS

UTILITY ADJUSTMENTS
SPRING HAVEN DRIVE
STA. 1028+80 TO 1034+40

SHEET NO.
34



CALL 48 HOURS BEFORE YOU DIG
It's The Law! 1-800-432-4770
SUNSHINE STATE ONE CALL OF FLORIDA, INC.



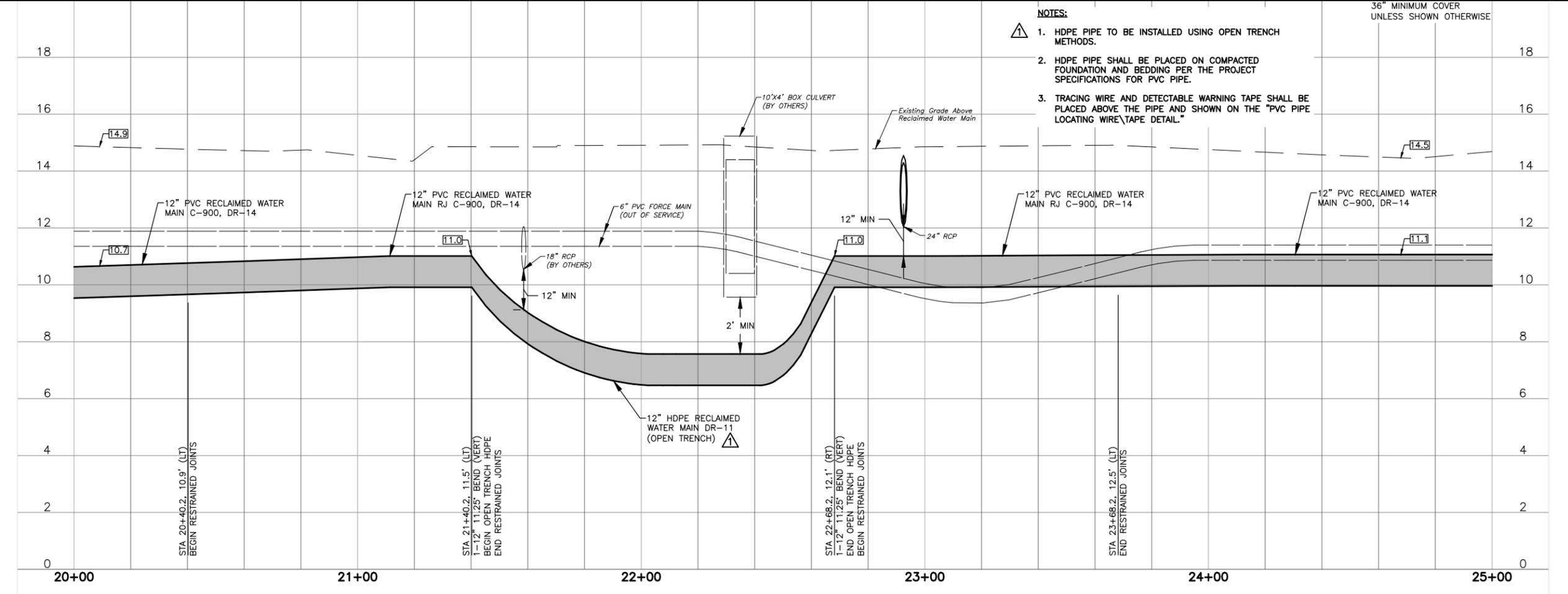
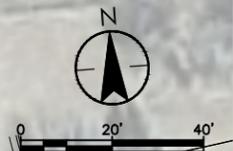
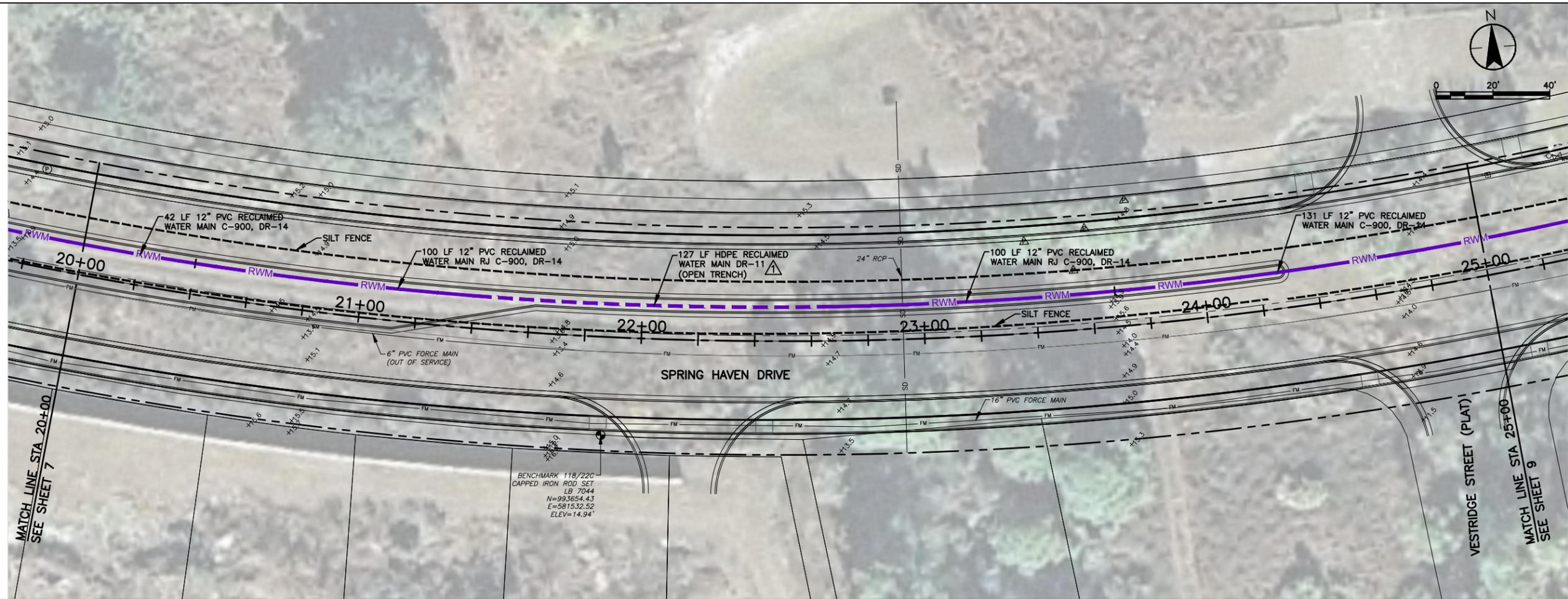
REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

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2818 Cypress Ridge Blvd, Suite 200
Wesley Chapel, Florida 33544
Phone: (813) 435-2600 Fax: (813) 435-2601
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Joseph S. Menen, P.E. No. 44745

CITY OF NORTH PORT
SPRING HAVEN DRIVE
ROADWAY IMPROVEMENTS

UTILITY ADJUSTMENTS
SPRING HAVEN DRIVE
STA. 1034+40 TO 1040+00

SHEET NO.
35



- NOTES:**
1. HDPE PIPE TO BE INSTALLED USING OPEN TRENCH METHODS.
 2. HDPE PIPE SHALL BE PLACED ON COMPACTED FOUNDATION AND BEDDING PER THE PROJECT SPECIFICATIONS FOR PVC PIPE.
 3. TRACING WIRE AND DETECTABLE WARNING TAPE SHALL BE PLACED ABOVE THE PIPE AND SHOWN ON THE "PVC PIPE LOCATING WIRE TAPE DETAIL."

36" MINIMUM COVER UNLESS SHOWN OTHERWISE

BENCHMARK 118/22C
 CAPPED IRON ROD SET
 LB 7044
 N=993654.43
 E=581532.52
 ELEV=14.94'

Revision	By	Appd.	TY	MM	DD
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97	KG	SM	17	03	13
98	KG	SM	17	03	13
99	KG	SM	17	03	13
100	KG	SM	17	03	13

Client/Project
 CITY OF NORTH PORT
 PHASE 3 RECLAIMED WATER MAIN
 EXTENSIONS SPRING HAVEN DRIVE
 NORTH PORT, FL
 Title
 PLAN AND PROFILE
 STA 20+00 TO 25+00

Permit-Seal
 STEPHEN C. MACEACHERN, P.E.
 FLORIDA LICENSE No. 76020
 Project Number: 177310592
 File Name: 10592cu-008.dwg
 Dwn. Chkd. Dsgn. 17.03.13
 Drawing No. Revision Sheet

V:\177310592\177310592.dwg
 2017/03/13 12:21 PM By: G08arath\Gan



City of North Port
FINANCE DEPARTMENT/PURCHASING DIVISION
4870 CITY HALL BLVD, STE 337
NORTH PORT, FLORIDA 34287
 Office: 941.429.7170
 Fax: 941.429.7173
 Email: purchasing@cityofnorthport.com



September 13, 2017

ADDENDUM 1

TO: PROSPECTIVE BIDDERS

RE: RFB NO. 2018-02 SPRING HAVEN DRIVE RECLAIMED WATER MAIN EXTENSION

DUE DATE EXTENSION

(NEW DATE): SEPTEMBER 25, 2017 AT 2:00 PM (EST)

City Hall, Room 302 (Bids need to be delivered to Room 337 so they can be date and time stamped on or before 2:00 PM. Bid opening will commence in Room 302 shortly thereafter)

Bidders are hereby notified that this addendum shall be made part of the above-named bid and contract documents. The following changes to the above bid are issued to modify, and/or clarify the bid and contract documents (the deletions are as ~~striketroughs~~ and additions as underlined). These items shall have the same force and effect as the original documents, and bids to be submitted on the specified date shall conform with the additions, deletions and revisions as listed herein.

ITEM #1: DUE DATE CHANGE: The bid due date scheduled for September 18, 2017 @ 2:00 PM has been RESCHEDULED FOR SEPTEMBER 25, 2017.

Firms are required to acknowledge receipt of this addendum on their proposal forms. All other terms and conditions of the original proposal and contract documents remain the same.

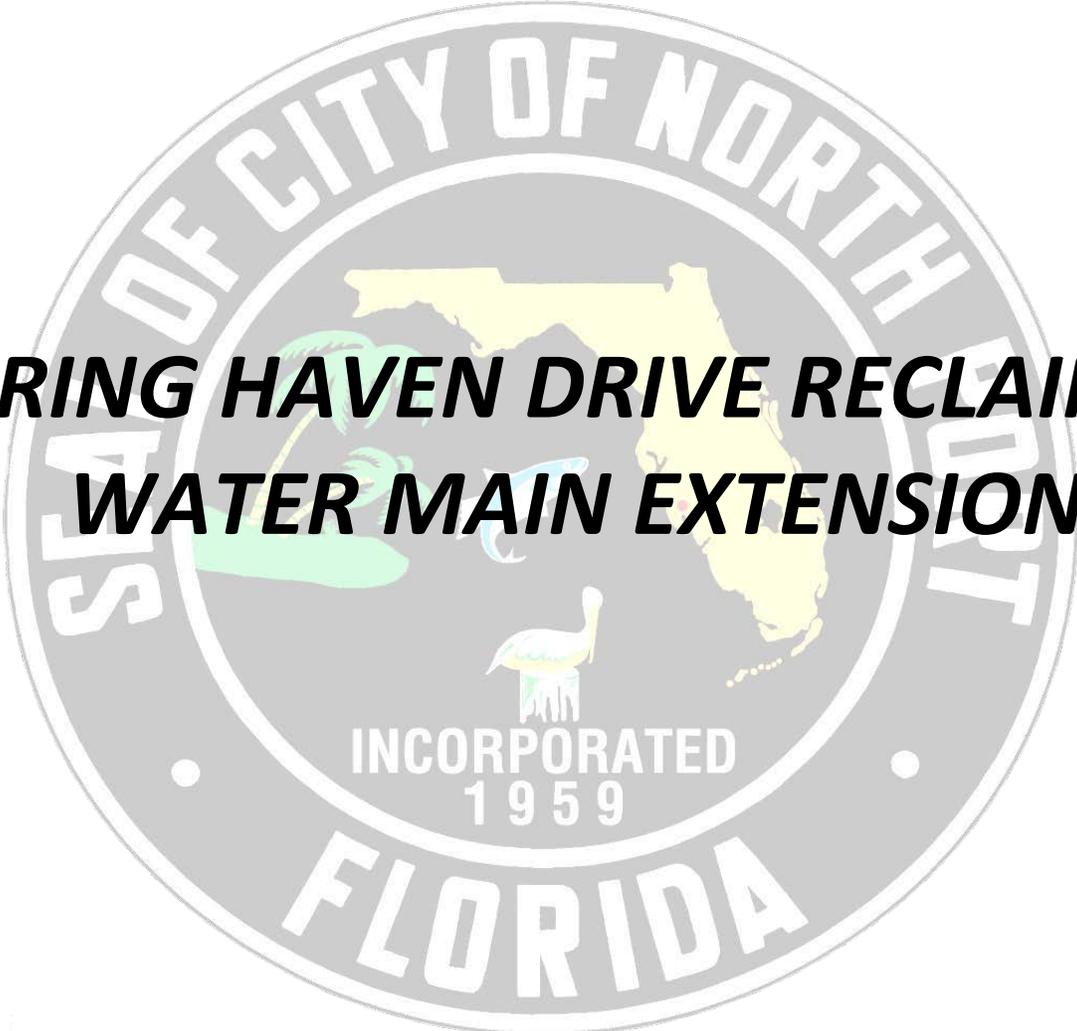
Alla V. Skipper

Alla V. Skipper, CPPB
Senior Contract Specialist
Purchasing Department
4970 City Hall Blvd.
North Port, Florida 34286
Tel: 941.429.7172
Fax: 941.429.7173

E-mail: askipper@cityofnorthport.com

Receipt of Addendum No. 1 shall be noted within the Bid Form in the appropriate section.
End of Addendum No.1

City of North Port



***SPRING HAVEN DRIVE RECLAIMED
WATER MAIN EXTENSION***

Request for Bid No. 2018-02



City of North Port
FINANCE DEPARTMENT/PURCHASING
DIVISION 4970 CITY HALL BLVD
NORTH PORT, FL 34286

Office: 941.429.7170

Fax: 941.429.7173

Email: purchasing@cityofnorthport.com



NOTICE OF AVAILABILITY OF BID SPECIFICATIONS

REQUEST FOR BID NO. 2018-02
SPRING HAVEN DRIVE RECLAIMED WATER MAIN EXTENSION

The City of North Port is requesting sealed bids to secure the services of an experienced, professional, licensed, and qualified Contractor capable of providing construction services in accordance with the specification and drawings for the installation of new 12-inch diameter reclaimed water distribution lines to loop existing reclaimed water lines on Spring Haven Drive. The Spring Haven Drive pipeline segment is approximately 4,700 linear feet of 12-inch reclaimed water main. This alignment includes two (2) horizontal directional drills of approximately 104 and 800 horizontal linear feet. This project is partially funded by the Southwest Florida Water Management District (SWFWMD).

NON-MANDATORY PRE-BID MEETING: August 30, 2017 AT 9:00 AM
4970 CITY HALL BOULEVARD, ROOM 302, NORTH PORT, FLORIDA 34286

All potential Bidders are recommended to attend the non-mandatory pre-bid conference. The purpose of the Pre-Bid Meeting is to provide a briefing on the City's expectations and performance requirements for submission of Bid documents.

OPENING: September 18, 2017 AT 2:00 PM
4970 CITY HALL BOULEVARD, ROOM 302, NORTH PORT, FLORIDA 34286

****ALL BIDS ARE DATE AND TIME STAMPED IN THE FINANCE DEPARTMENT, SUITE 337 FIRST AND THEN ARE OPENED IN SUITE 302****

Information regarding this project may be viewed and downloaded from Demandstar's website at www.demandstar.com. Links to DemandStar are also available from the city website at www.cityofnorthport.com. Bid specifications are posted on the City FTP site at <http://apps.cityofnorthport.com/ftpinfo/> (go to the drop down box, select Purchasing and scroll to Project RFB No. 2018-02); however, the only place to obtain addenda are on www.demandstar.com. If you have any questions, concerns, or problems accessing the bid package using the link, please contact Alla V. Skipper, CPPB, Senior Contract Specialist, at 941.429.7172. Requests for additional information or clarification regarding the specifications must be sent via facsimile to 941.429.7173 or via email to purchasing@cityofnorthport.com. No verbal requests will be honored. All questions and clarifications must be submitted via e-mail of facsimile by **September 11, 2017 at 2:00 PM**.

The City of North Port does not discriminate on the basis of race, color, national origin, sex, age, disability, family or religious status in administration of its programs, activities or services.

PUBLISH: AUGUST 19, 2017 Herald Tribune

POST: AUGUST 18, 2017 www.cityofnorthport.com & www.demandstar.com

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Non-Submittal Response Page	4
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SECTION IV: Insurance Requirements	43
SECTION V: Bid Form and Required Forms45 Sample Contract Document Forms	64

"THIS IS A 'SAMPLE CONTRACT' ISSUED FOR INFORMATIONAL PURPOSES ONLY AND AS SUCH IS SUBJECT TO CHANGE"

ATTACHMENTS:

1. Construction Technical Specifications
2. Construction Plans
3. Cooperative Funding Agreement btwn Southwest Florida Water Management District and City of North Port

STATEMENT OF NON-SUBMITTAL

If you **do not** intend to submit a bid on this service, please return this form (see information below) immediately.

We, the undersigned, have declined to submit a bid on the requested Request for Bid **2018-02 SPRING HAVEN DRIVE WATER MAIN EXTENSION**

- Insufficient time to respond to the Request for Bid.
- We do not offer this product/service.
- Our schedule would not permit us to perform.
- Unable to meet bond/insurance requirements.
- Specifications are unclear (explain below).
- OTHER (please specify below).

REMARKS: _____

COMPANY NAME: _____

ADDRESS: _____

CITY: _____ STATE: _____ ZIP CODE: _____

TELEPHONE: _____ FAX: _____

E-MAIL ADDRESS: _____

SIGNATURE: _____ DATE: _____

Note: "Statement of No Bid" may be faxed or e-mailed to the Purchasing Division at purchasing@cityofnorthport.com or faxed to 941.429.7173.

SECTION I. INSTRUCTIONS TO BIDDERS

THESE CONDITIONS ARE STANDARD FOR ALL BIDS FOR COMMODITIES/SERVICES ISSUED BY THE CITY OF NORTH PORT. THE CITY OF NORTH PORT MAY DELETE, SUPERSEDE OR MODIFY ANY OF THESE GENERAL CONDITIONS FOR A PARTICULAR CONTRACT BY INDICATING SUCH CHANGE IN SPECIAL CONDITIONS TO BIDDERS OR IN THE BID SHEETS. ANY AND ALL SPECIAL CONDITIONS THAT MAY VARY FROM THE GENERAL CONDITIONS SHALL HAVE PRECEDENCE. BIDDER AGREES THAT THE PROVISIONS INCLUDED WITH THIS REQUEST FOR BID SHALL PREVAIL OVER ANY CONFLICTING PROVISIONS WITHIN ANY STANDARD FORM CONTRACT OF THE BIDDER REGARDLESS OF ANY LANGUAGE IN BIDDER'S CONTRACT TO THE CONTRARY.

DEFINITIONS: Terms used in these Instructions to Bidders are defined and have the meanings assigned to them.

- Addenda: a written change to a solicitation
- Bid: any offer submitted in response to this request for Bid.
- Bidder: One that submits a bid in response to this Request for Bid.
- Bid Documents: Includes the General Terms and Conditions; Special Conditions; Technical Specifications, the Bid Form; Non-Collusive Affidavit; Public Entity Crime Form; Certificate(s) of Insurance, if required; Payment and Performance Bonds, if required; Corporate Resolution; Bid Bond, if required; Local Business Affidavit, Scrutinized Company Affidavit and Certification and all Addendums issued prior to receipt of bids.
- City: Shall refer to City of North Port, a municipal corporation of the State of Florida.
- Contract: The agreement to perform the services set forth in this solicitation. The Contract will be comprised of the Bid documents signed by both parties including any addenda and other attachments specifically incorporated.
- Responsible: Refers to a bidder that has the capacity and capability to perform the work required under a Request for Bid, and is otherwise eligible for award.
- Responsive: Refers to a bid that contains no exceptions or deviations from the terms, conditions, and specifications set forth in the Request for Bid.
- Request for Bid (RFB): Shall mean this solicitation document, including any and all addenda. A RFB contains well-defined terms, conditions, and specifications, and is awarded to the lowest priced responsive and responsible bidder.
- Solicitation: The written document requesting either bids or proposals from the marketplace.
- Successful Bidder: The lowest responsive, responsible Bidder to whom City (on basis of City's evaluation) makes an award.
- Vendor or Contractor: A general reference to any entity responding to this solicitation or performing under any resulting Contract.

The City has established for purposes of this Request for Bid (RFB) that the words "shall," "must," or "will" are equivalent and indicate a mandatory requirement or condition, the material deviation from which shall not be waived by the City. A deviation is material if, in the City's sole discretion, the deficient response does not substantially satisfy this RFB's mandatory requirements. The words "should" or "may" are equivalent in this RFB and indicate very desirable conditions, or requirements that are permissive in nature.

1. INSTRUCTIONS TO BIDDERS

A. QUALIFICATIONS OF BIDDER: It is intent to the City to award this Contract to the lowest responsible bidder, qualified by experience and solvency, with proven reliability and the ability to provide the services or items required under this Contract within a reasonable time frame acceptable to the City. Bidder may be required to supply information in writing at the request and discretion of the City prior to award of bids, in order to verify above requirements.

B. EXAMINATION OF BID DOCUMENTS: Prior to submission of a bid form, bidders shall carefully examine the General Terms and Conditions, Special Conditions, Technical Specifications, and all other related bid documents, including

all modifications thereof, incorporated in the bid package, plus fully informing themselves as to all existing conditions and limitations that effect the work to be performed under this contract.

Discrepancies, omissions, or questions about the intent of the documents should be submitted to the Purchasing Division in written form as a request for interpretation no later than five (5) days prior to bid opening (or shall be verbally addressed at the pre-bid conference, if applicable).

It shall be the responsibility of the bidder, prior to submitting their response, to either visit www.demandstar.com to view the solicitation and download all issued addenda or contact Purchasing to determine if addenda were issued.

Examination of site: Prior to submitting a bid form, each bidder may examine the site and all conditions thereon. All bid forms shall be presumed to include all such existing conditions as may affect any work to be done on this project. Failure to familiarize himself with such conditions will in no way relieve the successful bidder from the necessity of furnishing any materials or performing any work that may be required to complete the work in accordance with the drawings and Specifications.

C. CLARIFICATION AND ADDITIONAL INFORMATION: Discrepancies, omissions, or questions about the intent of the documents will be submitted to the City of North Port Purchasing Manager, or his/her designee in written form as a request for interpretation no later than five (5) business days prior to the bid opening (or may be verbally addressed at the pre-bid meeting, if applicable).

Interpretations made will be in the form of an addendum to the documents, which will be forwarded to all bidders. Receipt by each bidder must be acknowledged on the bid form, indicating the addendum number and date of issue, therein becoming part of the Contract. No oral explanations shall be binding. The City will attempt to notify all prospective bidders of addenda issued to the bid documents; however, it shall be the responsibility of the bidder, prior to submitting their bid, to contact the Purchasing Manager, or his/her designee, to determine if addenda were issued, acknowledging and incorporating it into their bid.

D. MODIFICATION OR WITHDRAWAL OF BIDS: Bid modifications will be accepted from a bidder only if received in writing, properly signed by an officer of the bidder, and received prior to the opening of bids. Bid modifications must be identified as such and will be opened with the bidder's bid form.

Bids may be withdrawn by request of the bidder prior to the time fixed for opening. Error or negligence on the part of the bidder in preparing the bid confers no right for the withdrawal of the bid after it has been opened.

E. NO BID: A respondent who is on the bid notification list and decides not to submit a response is requested to complete the Statement of Non-Submittal Form and return it to the City.

F. CONFLICTS WITHIN SOLICITATION: Where there appears to be a conflict between the General Terms and Conditions, Special Conditions, the Technical Specifications, the Bid Form, or any addendum issued, the order of precedence shall be: the last addendum issued, the Bid Form, the Technical Specifications, the Special Conditions, and then the General Terms and Conditions. It is incumbent upon the vendor to identify such conflicts to the designated purchasing representative prior to the bid or proposal response date.

G. PROMPT PAYMENT: It is the policy of the City that payment for all purchases by the City shall be made in a timely manner and that interest payments will be made on late payments in accordance with Part VII, Chapter 218, Florida Statutes, known as the Local Government Prompt Payment Act. The bidder may offer cash discounts for prompt payments; however, such discounts will not be considered in determining the lowest price during bid evaluation.

2. PREPARATION AND SUBMISSION OF BID FORM

Bid Form: Bids shall be made on forms supplied by the City, or as otherwise specified. Each bid must state the name of the bidder, the bidder's full business address and state the type of business entity, followed by the original signature and designation of the officer or other person authorized to bind the corporation. Any erasures or other corrections in the bid form must be explained or noted over the signature of the bidder. Bid forms containing any conditions, omissions, unexplained erasures, alterations, or irregularities of any kind may be rejected by the City.

Bid Bond: Each bid must be accompanied by a bidder's bond or Cashier's check with their bid in the amount of NOT LESS THAN 5% of their total amount of the bid. This security shall ensure that the Bidder does not revoke the bid after bid opening, or fails to execute any necessary additional documents. Cashier's checks will be returned to all bidders after award of bid.

Bid Documents: Bid documents and forms shall be submitted sealed to the City of North Port, Purchasing, 4970 City Hall Boulevard, Suite 337, North Port, Florida 34286. The envelope/package shall be clearly marked with the Bid Number, Name and Business Address of the bidder. All interested firms are required to submit one (1) original and one (1) copy of their completed bid offer.

Submission of a response constitutes a binding offer and shall be subject to all terms and conditions specified in the solicitation.

For your bid to be acceptable, ***all blank spaces*** must be completely annotated where and when requested. All bids must contain a manual signature of the authorized representative of the bidder in the space provided on the Bid Certification Form.

Responsibility for getting this bid to the City on or before the specified date and time is solely and strictly the responsibility of the bidder. The City will not be responsible for any delay, for any reason whatsoever. Bids must be received and stamped with the date and time on the outside of the envelope, and must be in the City Purchasing Office by the date and time specified for opening.

Bids postmarked prior to said date and time but not received shall not be considered and will be returned to bidder unopened.

Bid Guarantee: The bid form shall be signed where indicated constituting an agreement that the bidder will not withdraw his/her bid for a period of ninety (90) days after the opening of the bids.

Source of Supply and Subcontractors: Bidders are to complete the attached Source of Supply and Subcontractors form. This form must be completed and included with the bid form. If bidder does not have a source of supply or subcontractor, insert "to be determined". When source or subcontractor is determined, selection will be subject to City approval.

Bid Opening: All bids received by the date and time so specified shall be opened and **the name of each bidder and total bid price of each bidder** read aloud within the designated room at City Hall, at the bid opening. The opening and reading shall be in the presence of the City Clerk and the Purchasing Manager or their designees. Bidders and the general public are not required to be present, but are invited and encouraged to attend.

Late Bids: Bids received after the date and time of bid opening will not be considered and will not be opened. It will be the bidder's responsibility to make arrangements for the return of the bid package at their expense.

3. CITY RIGHTS: The City of North Port reserves the right to accept or reject any and/or all bids in whole or in part, to waive irregularities and technicalities, and to request resubmission with or without cause and/or to accept the bid that, in its judgment, will be in the best interest of the City. Also, the City reserves the right to accept all or any part of the bid and to increase or decrease quantities to meet additional or reduced requirement of the City. In the event the city receives only one response; the bid may be either accepted or rejected by the City depending on available competition and the timely needs of the City.

4. AWARD OF BID: The award shall be let to the lowest responsive, responsible bidder who fulfills all criteria and specifications with consideration to favorable references and local preference and whose evaluation by the City indicates that the award will be in the best interest of the City.

Errors: For the purpose of the initial evaluation of bids, the following will be utilized in resolving arithmetic discrepancies found on the face of the bidding schedule as submitted by bidders:

Obviously misplaced decimal points will be corrected.

In case of discrepancy between unit price and extended price, the unit price will govern. Apparent errors in extension will be corrected.

Apparent errors in addition of lump sum and extended prices will be corrected.

For the purpose of bid evaluation, the City will proceed on the assumption that the bidder intends his/her bid be evaluated on the basis of the unit prices, extensions, and totals arrived at by resolution of arithmetic discrepancies as provided above and the bid will be so reflected on the tabulation of bids.

5. BID TABULATIONS: Pursuant to Florida Statute §119.071(1)(b), all bid tabulations shall be posted in the City Hall, 4970 City Hall Boulevard, North Port, Florida and on DemandStar's website at www.demandstar.com within thirty (30) days after bid opening or at such time as the agency provides notice of a decision or intended decision, whichever is earlier.

6. WARRANTY: All warranties express and implied, shall be made available to the City for goods and services covered by this solicitation. All goods furnished shall be fully guaranteed by the vendor against factory and workmanship defects. At no expense to the City, the vendor shall correct any and all apparent and latent defects that may occur within the manufacturer's standard warranty period. The special conditions of the solicitation may supersede the manufacturer's standard warranty.

7. DESCRIPTIVE INFORMATION: Unless otherwise specifically provided in the Technical specifications, all equipment, materials and articles incorporated in the work covered by this Contract are to be new and of the most suitable grade for the purpose intended. Unless otherwise specifically provided in the Technical specifications, reference to any equipment, material, article or patented process, by trade name, make or catalog number, shall be regarded as establishing a standard of quality and shall not be construed as limiting competition. If the bidder wishes to make a substitution to the specifications, the bidder shall furnish the City the name of the manufacturer, the model number and other identifying data and information necessary to aid in the City in evaluating the substitution. Such substitution shall be subject to City approval. Substitutions shall be approved only if determined by the City to be equivalent to the specifications. A bid containing substitution is subject to disqualification if the City does not approve the substitution.

8. TAXES/FREIGHT: The bid shall include any freight, handling, delivery, surcharges or other incidental charges. Unless otherwise specified in the solicitation, prices quoted shall be F.O.B. Destination. The City is exempt from the payment of Federal and State taxes, including sales tax. The bid offer shall not include sales tax to be collected from the City. The City's sales tax exemption is not available to vendor for items vendor purchases, regardless of whether these items will be transferred to the City.

In the event the project is declared a sales tax recovery project by the City, the following procedure shall apply:

(a) The City representative shall make a recommendation to the Division of Procurement Services regarding the materials to be purchased;

(b) When those materials are purchased by the City, all purchase orders shall be issued directly from Purchasing;

(c) The City shall take title to those materials directly from the manufacturer/supplier and shall bear the risk of loss or damage to the materials which are delivered directly from the manufacturer/supplier;

(d) The City shall be invoiced directly for the materials from the manufacturer/supplier and shall pay the invoices directly to the manufacturer/supplier, presenting its sales tax exemption certificate at the time of payment.

The cost of any materials purchased through the sales tax recovery program shall be deducted from the Contract amount and the vendor shall no longer be responsible for providing those materials. A written change order shall be executed.

9. CONTINUATION OF WORK: Any work that commences prior to and will extend beyond the expiration date of the current Contract period shall, unless terminated by mutual written agreement between the City and the vendor, continue until completion without change to the then current prices, terms and conditions.

10. TERMINATION OF CONTRACT:

Funding in Subsequent Fiscal Years: It is expressly understood by the City and the vendor that funding for any successive fiscal years of the Contract is contingent upon appropriation of monies by the City Commissioners. In the event that funds are not available or appropriated, the City reserves the right to terminate the Contract. The City will be responsible for payment of any outstanding invoices and work completed by the vendor prior to such termination.

Termination With or Without Cause: The City shall have the right to unilaterally cancel, terminate or suspend this Contract, in whole or in part, by providing the Contractor thirty (30) days written notice by certified mail.

The City reserves the right to terminate this Contract, in part or in whole, in the event the vendor fails to perform in accordance with the terms and conditions stated herein. The vendor will be notified by letter of the City's intent to terminate. In the event of termination for default, the City may procure the required goods and/or services from any source and use any method deemed in its best interest. All re-procurement cost shall be borne by the vendor.

Termination by Vendor: Vendor shall have the right to terminate services only in the event of the City failing to pay Vendor's properly documented and submitted invoice within ninety (90) calendar days of the approval by the City's Administrative Agent, or if the project is suspended by the City for a period greater than ninety (90) calendar days.

11. PROPRIETARY OR CONFIDENTIAL INFORMATION: Bidders are hereby notified that all information submitted as part of, or in support of bid submittals will be available for public inspection after opening of bids in compliance with Chapter 119 of the Florida Statutes, the Public Record Act. The bidder should not submit any information in response to this solicitation which the bidder considers proprietary or confidential. The submission of any information to the City in connection with this solicitation shall be deemed conclusively to be a waiver of any protection from release of the submitted information unless such information is exempt from disclosure under the Public Records Act, and such information is marked as exempt. Failure to mark a trade secret as exempt waives the exemption.

12. RULES, REGULATIONS AND LICENSES: The vendor shall comply with all federal, state, and local laws and regulations applicable to provision of the goods and/or services specified in this solicitation.

It shall be the responsibility of the Contractor to assure compliance with OSHA, EPA and/or other local, federal, or State of Florida rules, regulations or other requirements, as each may apply.

When applicable and as required by law, the bidder will provide a material safety data sheet with each delivery of a toxic substance.

The vendor shall maintain books, records, documents, and other evidence directly pertaining to or connected with the services under this Agreement which shall be available and accessible at the vendor's offices for the purpose of inspection, audit, and copying during normal business hours by the CITY, or any of its authorized representatives. Such records shall be retained for a minimum of five (5) years after completion of the services.

13. CODE OF ETHICS: With respect to this bid, if any bidder violates or is a party to a violation of the Florida Statutes, Chapter 112, Part III, Code of Ethics for Public Officers and Employees, such bidder may be disqualified from furnishing the goods or services for which the bid is submitted and shall be further disqualified from submitting any future bids for goods or services for the City.

14. COLLUSION: By offering a submission to this RFB, the bidder certifies that the bidder has not divulged to, discussed or compared his/her bid with other bidders and has not colluded with any other bidder or parties to this bid whatsoever. Also, bidder certifies, and in the case of a joint bid each party thereto certifies as to his/her own organization, that in connection with this bid: any prices and/or cost data submitted have been arrived at independently, without consultation, communication, or agreement, for the purpose of restricting competition, as to any matter relating to such prices and or cost data, with any other bidder or with any competitor; any prices and/or data quoted for this bid have not been knowingly disclosed by the bidder and will not knowingly be closed by the bidder prior to the scheduled opening directly or indirectly to any other bidder or to any competitor; no attempt has been made or will be made by the bidder to induce any other person or firm to person or persons interested in this bid, principal or principals is/are named therein and that no person other than therein mentioned has any interest in this bid or in the Contract to be entered into; and no person or agency has been employed or retained to solicit or secure this Contract upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee excepting bona fide employees of the bidder.

15. PUBLIC ENTITY CRIMES: In accordance with Florida Statutes Sec. 287.133(2)(a), "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 bid on a Contract to provide any goods/services to public entity, may not submit a bid on a Contract with a public entity for construction or repair of 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 in excess of the threshold amount provided in Sections 287.017, for Category Two, for a period of 36 months from the date of being placed on the convicted vendor list." By submitting a bid, vendor certifies that vendor is not currently prohibited from transacting business with the City due to the above statute. The vendor shall comply with the terms of this statute both before and during the term of this Contract.

16. DRUG FREE WORKPLACE PREFERENCE: The City has adopted a policy in observation of the Drug Free Workplace Act of 1988. Therefore, it is unlawful to manufacture, distribute, dispense, possess, or use any controlled substance in the City workplace.

The City requests that the attached Drug Free Workplace Affidavit accompany the bid response. This form has been adopted by the City in accordance with the Drug Free Workplace Act. The City will not disqualify any bidder who does not sign the affidavit. The Drug Free Workplace Affidavit is primarily used as a tie breaker when two or more separate entities have submitted bids at the same price, terms and conditions, with preference given to the bidder who has signed the affidavit.

17. EQUAL EMPLOYMENT OPPORTUNITY: The City of North Port, Florida, in accordance with the provisions of Title VII of the Civil Rights Act of 1964 (78 Stat. 252) and the Regulations of the Department of Commerce (15 CFR, Part 8) issued pursuant to such Act, hereby notifies all bidders that it will ensure that in any Contract entered into pursuant to this advertisement, minority business enterprises will be afforded full opportunity to submit replies in response to this advertisement and will not be discriminated against on the ground of race, color or national origin in consideration for an award.

18. NON-DISCRIMINATION: The City of North Port does not discriminate on the basis of race, color, national origin, sex, age, disability, family or religious status in administration of its programs, activities or services. Pursuant to F.S. §287.134(2)(a), an entity or affiliate who has been placed on the discriminatory vendor list may not submit a bid, proposal, or reply on a contract to provide any goods or services to a public entity; may not submit a bid, proposal, or reply on a contract with a public entity for the construction or repair of a public building or public work; may

not submit bids, proposals, or replies 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.

19. DECLARATION OF EXEMPTION FROM PUBLIC RECORD: Pursuant to Florida Statute §119.07(1)(b)(2), all bid documents are exempt from public record until such time as the City provides notice of an intended decision or until 30 days after opening the bids, whichever is earlier.

In accordance with Florida Statutes 119.0701, Contractor shall comply with all public records laws, and shall specifically:

1. Keep and maintain public records required by the City to perform the service.
 - a. The timeframes and classifications for records retention requirements must be in accordance with the General Records Schedule GS1-SL for State and Local Government Agencies.
(See <http://dos.dos.state.fl.us/library-archives/records-management/general-records-schedules/>).
 - b. "Public records" means and includes those items specified in Florida Statutes 119.011(12), as amended from time to time, and currently defined as: All documents, papers, letters, maps, books, tapes, photographs, films, sound recordings, data processing software, or other material, regardless of the physical form, characteristics, or means of transmission, made or received pursuant to law or ordinance or in connection with the transaction of official business with the City. Contractor's records under this Contract include but are not limited to, supplier/subcontractor invoices and contracts, project documents, meeting notes, e-mails and all other documentation generated during this Contract.
2. Upon request from the City's custodian of public records, provide the City, at no cost, 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 for by law. All records kept electronically must be provided to the City, upon request from the City's custodian of public records, in a format that is compatible with the information technology systems of the City.
3. Ensure that project 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, if the Contractor does not transfer the records to City following completion of the contract, for the time period specified in General Records Schedule GS1-SL for State and Local Government Agencies.
4. Upon completion of the contract, transfer, at no cost, to the City all public records in Contractor's possession 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.
5. **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 CUSTODIAN OF PUBLIC RECORDS, 4970 CITY HALL BOULEVARD, NORTH PORT, FLORIDA 34286, 941.429.7063 OR HOTLINE**

941.429.7270; E-MAIL: padkins@cityofnorthport.com.

6. Failure of the Contractor to comply with these requirements shall be a material breach of this Contract. Further, Contractor may be subject to penalties under Florida Statutes 119.10.

20. FORCE MAJEURE: The parties will exercise every reasonable effort to meet their respective obligations hereunder, but shall not be liable for delays resulting from force majeure or other causes beyond their reasonable control, including, but not limited to, compliance with any Government law or regulation, acts of nature, acts or omissions of the other party, Government acts or omissions, fires, strikes, national disasters, wars, riots, transportation problems and/or any other cause whatsoever beyond the reasonable control of the parties. Any such cause will extend the performance of the delayed obligation to the extent of the delay so incurred.

21. GOVERNING LAWS: The interpretation, effect, and validity of any Contract resulting from this RFB shall be governed by the laws and regulations of the State of Florida. Exclusive venue of any court action shall be in Sarasota County, Florida.

22. SUBCONTRACTING: Unless otherwise specified in this solicitation, the vendor shall not subcontract any portion of the work without the prior written consent of the City. The ability to subcontract may be further limited by the Special Conditions. Subcontracting without the prior consent of the City may result in termination of the Contract for default.

23. MODIFICATION OF CONTRACT: Any Contract resulting from this solicitation may be modified by mutual consent of duly authorized parties, in writing through the issuance of a modification to the Contract and/or change order as appropriate. This presumes the modification itself is in compliance with all applicable City procedures.

24. SUCCESSORS AND ASSIGNS: The vendor shall not assign any interest in any Contract resulting from this solicitation and shall not transfer any interest in same (whether by assignment or novation) without prior written consent of the City, except that claims for the money due or to become due to the vendor from the City under any Contract may be assigned to a financial institution or to a trustee in bankruptcy without such approval from the City. Notice of such transfer or assignment due to bankruptcy shall be promptly given to the City.

25. CONTRACTING WITH CITY EMPLOYEES OR BOARD MEMBERS: Any City employee, Board member or member of his or her immediate family seeking to Contract with the City shall seek a conflict of interest opinion from the purchasing manager or their designated representative prior to submittal of a response or application of any type to Contract with the City. The affected employee or Board member shall disclose his or her assigned function within the City and interest or the interest of his or her immediate family in the proposed Contract and the nature of the intended Contract.

Florida Statute §112.313(12) Standards Of Conduct For Public Officers, Employees Of Agencies, And Local Government Attorneys controls contracting with City employees or board members, and provides as follows:

(12) EXEMPTION.--The requirements of subsections (3) and (7) as they pertain to persons serving on advisory boards may be waived in a particular instance by the body which appointed the person to the advisory board, upon a full disclosure of the transaction or relationship to the appointing body prior to the waiver and an affirmative vote in favor of waiver by two-thirds vote of that body. In instances in which appointment to the advisory board is made by an individual, waiver may be effected, after public hearing, by a determination by the appointing person and full disclosure of the transaction or relationship by the appointee to the appointing person. In addition, no person shall be held in violation of subsection (3) or subsection (7) if:

(b) The business is awarded under a system of sealed, competitive bidding to the lowest or best bidder and:

1. The official or the official's spouse or child has in no way participated in the determination of the bid specifications or the determination of the lowest or best bidder;

2. The official or the official's spouse or child has in no way used or attempted to use the official's influence to persuade the agency or any personnel thereof to enter such a contract other than by the mere submission of the bid; and

3. The official, prior to or at the time of the submission of the bid, has filed a statement with the Commission on Ethics, if the official is a state officer or employee, or with the supervisor of elections of the county in which the agency has its principal office, if the official is an officer or employee of a political subdivision, disclosing the official's interest, or the interest of the official's spouse or child, and the nature of the intended business.

26. TRUTH-IN-NEGOTIATIONS CERTIFICATE: If applicable, execution and signature by the vendor of the Bid Form shall act as the execution of a truth-in-negotiation certificate certifying that the wage rates and costs used to determine the compensation provided for in this Contract are accurate, complete, and current as of the date of the Contract.

For professional service Contracts, the original Contract price and any additions thereto will be adjusted to exclude any significant sums by which the City determines the Contract price was increased due to inaccurate, incomplete, or noncurrent wage rates and other factual unit costs. The City shall exercise its rights under this "Certificate" within one (1) year following payment.

27. GRANT FUNDING: In the event any part of the Contract is to be funded by federal, state, or other local agency monies, the vendor hereby agrees to comply with all requirements of the funding entity applicable to the use of the monies, including full application of requirements involving the use of minority firms, women's business enterprises, and labor surplus area firms. Vendors are advised that payments under the Contract may be withheld pending completion and submission of all required forms and documents required of the vendor pursuant to the grant funding requirements. A copy of the requirements shall be supplied to the vendor by the City upon request.

28. PERFORMANCE/PAYMENT BOND: The successful bidder shall provide the required performance and payment bond or other acceptable security to the City within **ten (10) business days of being awarded the bid. Failure by the successful bidder to provide the bond within ten (10) business days shall be considered a default under Sec. 2-404 of the City of North Port Administrative Code.** Such default shall only be curable at the option of the City. In addition, the Contractor shall be responsible and bear all costs associated to record Performance and Payment Bond with Sarasota County Clerk's Office. Receipt of said recording and certified copy of the bond shall be furnished to the Purchasing Department at the time of the pre-construction meeting. Such default shall only be curable at the option of the City.

In addition, the Contractor shall be responsible and bear all costs associated to record Performance and Payment Bond with Sarasota County Clerk's Office. Receipt of said recording and certified copy of the bond shall be furnished to the Purchasing Department at the time of the pre-construction meeting. Such default shall only be curable at the option of the City.

Upon such default the City may immediately award the bid to the next lowest responsive and responsible bidder, and recover from the original successful bidder the difference in cost between the original winning bid and the next lowest responsive and responsible bidder.

PERFORMANCE/PAYMENT BOND REQUIREMENTS:

The Contractor shall provide a Performance Bond and a Payment Bond, in the form prescribed in Section 3, Contract Documents, each in the amount of 100% of the Contract amount, the costs of which are to be paid by the Contractor. The bonds will be acceptable to the City only if the following minimum conditions are met:

- a. is licensed to do business in the State of Florida;
- b. holds a certificate of authority authorizing it to write surety bonds in this state;
- c. has twice the minimum surplus and capital required by the Florida Insurance Code at the time the invitation to bid is issued;
- d. is otherwise in compliance with the provisions of the Florida Insurance Code; and
- e. holds a currently valid certificate of authority issued by the United States Department of Treasury under 31 U.S.C. §§ 9304-9308.
- f. The Surety Company must have a current rating of at least Excellent (A or A-) as reported in the most current Best Key Rating Guide, published by A.M. Best Company, Inc., of 75 Fulton Street, New York, New York 10038, with an underwriting limitation of **at least two times the dollar amount of the contract.**

If the Surety Company for any Bond furnished by the Contractor files for bankruptcy, has a receiver appointed, is declared bankrupt, becomes insolvent, has an assignment made for the benefit of creditors, has its right to do business terminated in the State of Florida, or ceases to meet the requirements imposed by the Contract Documents, the Contractor shall, within five (5) calendar days thereafter, substitute another Bond and Surety Company, both of which shall be subject to the City's approval.

By execution of these bonds, the Surety Company acknowledges that it has read the surety qualifications and surety obligations imposed by the Contract documents and hereby satisfies those conditions.

29. STATE REGISTRATION REQUIREMENTS: Any bidder required by Florida law to register to do business in this state shall either be registered or have applied for registration with the Florida Department of State in accordance with the provisions of Chapter 607, 608, 617, or 621, Florida Statutes, unless they are exempt. A copy of the registration/application may be required prior to award of a contract. Any partnership submitting a bid in response to this RFB shall have complied with the applicable provisions of Chapter 620, Florida Statutes.

30. NOTICE TO PROCEED/DELIVERY: After award of bid, a Notice to Proceed shall be issued bearing the terms of delivery. Upon receipt of Notice to Proceed, successful bidder shall acknowledge receipt of same by either fax or mail and shall commence prosecution of the order so that the agreed upon delivery date will be satisfied.

31. PERFORMANCE EVALUATION: At the end of the Contract, the receiving department may evaluate the successful bidder's performance. This evaluation will become public record.

32. PURCHASING AGREEMENTS WITH OTHER GOVERNMENTAL AGENCIES: All bidders submitting a response to this RFB agree that such response also constitutes a bid in accordance with the terms of the RFB to all political subdivisions of Sarasota County and the State of Florida, under the same conditions, for the same prices as this bid, unless otherwise stipulated by the bidder.

33. NONEXCLUSIVE CONTRACT: Award of this Contract shall not require the City to use the Vendor for all work of this type, which may develop during the Contract term. This Contract is non-exclusive. The city reserves the right to concurrently Contract with other entities for similar work if it deems such action to be in the best interests of the City.

34. AUDIT: City shall have the right to audit vendor's records that relate to this Contract. Records shall be maintained for a period of three (3) years from the date of final payment.

35. UNAUTHORIZED ALIEN WORKERS: The City will not intentionally award publicly-funded contracts to any Contractor who knowingly employs unauthorized alien workers, constituting a violation of the employment provisions contained in U.S.C. Section 1324a(e) [Section 274A(e) of the Immigration and Nationality Act ("INA")]. The City shall consider employment by any Contractor of unauthorized aliens a violation of Section 274A(e) of the INA. Such violation by the Contractor of the employment provisions contained in Section 274A(e) of the INA shall be grounds for termination of this Agreement by the City.

36. E- VERIFY: The Contractor shall utilize the U.S. Department of Homeland Security's E-Verify system to verify the employment eligibility of all new employees hired by the Contractor during the term of the Contract and shall expressly require any subcontractors performing work or providing services pursuant to the Contract to likewise utilize the U.S. Department of Homeland Security's E-Verify system to verify the employment eligibility of all new employees hired by the subcontractor during the Contract term.

It is the awarded Bidder's responsibility to ensure that all its employees and subcontractors comply with the employment regulations required by the US Department of Homeland Security. The City shall have no responsibility to check or verify the legal immigration status of any employee of the awarded Bidder.

37. EMPLOYEE BACKGROUND CHECK: If an owner, except a stockholder in a publicly traded corporation, or an employee of the Contractor has been convicted of any offenses requiring registration as a sexual offender or sexual predator, regardless of the location of conviction, the Contractor shall ensure that the offender's or predator's work on the project is consistent with the terms of his probation and registry requirements.

38. PAYMENT: Two (2) original requests for payment must be submitted to the City of North Port on a form approved by the CITY. In lieu of the hard copies of the pay request submittal, scanned signed digital files of the requests for payments may be submitted as an attachment to an e-mail. Each pay request must be accompanied by written consent of the surety, when applicable, and an updated work schedule to reflect progress of work. Payment shall be subject to the approval and direction of the surety in accordance with F.S. §255.05(11). Price shall be net and all invoices payable according to the Florida Local Government Prompt Payment Act (F.S. ch. 218). Upon certification and approval by the CITY or its duly authorized agent, progress payments may be made to the CONTRACTOR upon his/her application for all services or work completed or materials furnished in accordance with the Contract. Prior to fifty percent (50%) completion, the CONTRACTOR will be paid monthly the total value of the work completed and accepted during the preceding month, less ten percent (10%) retainage. After fifty percent (50%) completion of the construction services purchased pursuant to the Contract, the CITY must reduce to five percent (5%) the amount of retainage withheld from each subsequent progress payment made to the CONTRACTOR upon request of the CONTRACTOR. For purposes of this subsection, the term "fifty percent (50%) completion" is the point at which the CITY has expended fifty percent (50%) of the total cost of the construction services purchased as identified in the Contract together with all costs associated with existing change orders and other additions or modifications to the construction services provided for in the Contract. The CITY shall inform the Contractor's Surety of any reduction in retainage. The CONTRACTOR must update each new pay request in accordance with any changes made to the previous submittal. The CITY or its duly authorized administrative agent, shall approve final payment for all work, materials and services furnished under this Contract.

Retainage may be reduced upon issuance of the Certificate of Substantial Completion by the CITY if, in the sole opinion of the CITY, sufficient progress on the schedule has been accomplished, the surety does not object, and the CITY has retained adequate coverage for the project through the achievement of Final Completion.

39. MBE: Contractors awarded construction contracts who intend to subcontract material or service requirements of the project are encouraged to subcontract to certified minority business/women business enterprises firms or show good faith effort.

40. DBE Contract Assurance (IF APPLICABLE): The contractor, sub-recipient, or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate.

41. SWORN STATEMENT, COMPLIANCE WITH FLORIDA TRENCH ACT: Bidder shall be solely responsible for complying with the Florida Trench Safety Act (553.60-553.64 Florida Statutes) and Occupational Safety and Health Administration excavation safety standards, 29 CFR 1926.650 (subpart P) as amended. All costs associated with complying with these requirements shall be included in the separate line items of the bid and shall be as detailed in the Sworn Statement of Compliance with the Florida Trench Safety Act. Bidder shall submit the Statement of Compliance with the Florida Trench Safety Act form provided herein with his bid or with each work assignment.

42. INSURANCE REQUIREMENTS: The successful Bidder shall be required to supply, at their cost, insurance coverage in form and amount as required by the City, as outlined in the bid specifications.

43. CONTACT PROHIBITION: All prospective Bidders are hereby instructed **NOT** to contact any member of the City of North Port Commission, the City Manager, or City of North Port staff member other than the Authorized Contact Persons identified in this Solicitation regarding this solicitation package, Bidder's submittal package, City's Intent to Award, or City's Intent to Reject (if applicable) at any time prior to the FORMAL AWARD for this project. Any such contact shall be cause for rejection of your submittal.

44. SCRUTINIZED COMPANIES: For contracts of \$1,000,000.00 or more, the Bidder shall certify that it is not on the Scrutinized Companies with Activities in Sudan list or the Scrutinized Companies with Activities in Iran Petroleum Energy Sector list as defined in Florida Statutes §215.473, as required by §287.135, Florida Statutes. The City shall supply the certification form. Providing a false certification is punishable by civil penalty equal to twice the contract amount plus reasonable attorney's fees and costs, in addition to the Bidder being ineligible to bid on any contract for three years after the date it was determined that a false certification was made.

By submitting a bid, proposal or response, the company, principals, or owners certify that they are not listed on the Scrutinized Companies with Activities in Sudan List or listed on the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List or is engaged in business operations in Cuba or Syria.

45. EMPLOYEE BACKGROUND CHECK: If an owner, except a stockholder in a publicly traded corporation, or an employee of the Contractor has been convicted of any offenses requiring registration as a sexual offender or sexual predator, regardless of the location of conviction, the Contractor shall ensure that the offender's or predator's work on the project is consistent with the terms of his probation and registry requirements.

END OF SECTION I

SECTION II. GENERAL PROVISION

1. SCOPE OF WORK

1.1 Intent of Contract: Bid forms shall set forth firm bid unit prices for furnishing all necessary materials and completing all work, including but not limited to labor, transportation, supervision, electricity, water, equipment, startup, testing, training and all other work needed for a complete and operational system, as described in the Technical Specifications and/or shown on the Contract Drawings attached herewith. The City reserves the right to establish the exact limits of work in the field and to add or delete from the Project, as it deems necessary.

The intent of the Technical Specifications and Contract Drawings is to describe a complete project to be constructed in accordance with the Contract Documents. The Contract Documents comprise the entire Agreement between the City and the Contractor. They may be altered only by modification.

1.2 Definitions:

1.2.1 The successful bidder for this Contract will be referred to as the **CONTRACTOR**; Department Director or his/her representative, acting personally or through an assistant duly authorized for such act by the City will be referred to as City. For the purposes of this Contract, the word "Project" shall mean the services limits of **CONTRACTOR**.

1.2.2 The Contract documents consist of the Request for Bids, Instructions to Bidders, Bid Forms, Technical Specifications, Construction Drawings, General Provisions, Special Provisions, Insurance Requirements, and all other related documents, including all modifications thereof incorporated in the documents before their execution. These form the Contract.

1.2.3 Written notice shall be deemed to have been duly served three days after date of postmark, and upon receipt, if delivered to the individual or member of the firm or an officer of the corporation for whom it is intended.

1.2.4 Subcontractor(s), as employed herein, includes only those having a direct Contract with the Contractor and it includes one who furnishes material worked to a special design according to the plans and specifications of this work, but does not include one who merely furnishes material not so worked.

1.2.5 The term "work" of the Contractor includes labor or materials or both, equipment, transportation, or other facilities necessary to complete the Contract.

1.2.6 All time limits stated in the Contract documents are of essence to the Contract.

1.2.7 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."

1.3 Time of Completion: The Contractor shall complete the work within the time set forth in the Contract. The Contractor shall complete each portion of the work within such time as set forth in the Contract for such portion. The time of completion of the Contract shall be expressed in calendar days.

All work for this project shall be performed during regular business hours. A regular workday shall be considered to be a maximum of ten (10) hours duration. The cost for inspection time for work performed on weekends, holidays, or in excess of ten (10) hours may be billed to the Contractor at the prevailing wage plus overhead costs for those

persons involved.

A working day is any day within the period between the start of the Contract time and the date provided in the Contract for completion or upon field acceptance by the City of all work provided for in the Contract, or as stipulated in the Technical Specifications, or whichever comes first, other than: Saturday, Sunday, any day designated as a holiday by the City, any day the Contractor is prevented from working during the first five (5) hours of the work day, with at least sixty percent (60%) of the normal work force, due to inclement weather.

Request for planned overtime by the Contractor must be submitted in writing to the City, forty-eight (48) hours in advance, and may not proceed without the City's approval.

1.4. Quality of Work: The Contractor agrees to do the work covered under this Contract to the best of his/her ability and conforming to this Contract and specifications and of a quality acceptable to the trades. The Contractor further agrees to follow proper and appropriate instructions by the City.

2. PROSECUTION AND PROGRESS

2.1 Subletting or Assigning of Contracts: The Contractor shall not sublet, sell, transfer, assign, or otherwise dispose of the Contract or any portion thereof, or his right, title, or interest therein, without written consent of the City.

2.2 Performance and Payment Bond: The awarded Contractor shall furnish a certified recorded copy from Sarasota County Clerk's Office of the Performance and Payment Bond in the amount of 100% of the total project price within ten (10) calendar days after notification of award to the Purchasing Department. The undersigned shall be responsible and bear all costs associated to record Performance and Payment Bond with Sarasota County Clerk's Office. Receipt of said recording and a certified copy of the Bond shall be furnished to the Purchasing Department at the time of the pre-construction meeting.

2.3 Submission of Work Schedule/Order of Completion: At the preconstruction meeting, the successful bidder shall have on hand a working schedule for the Project, showing in detail the order in which the Contractor proposes to perform the work. He/she shall indicate the dates on which major equipment will be delivered and various major items of work will start and the estimated completion dates of the major items. Construction Schedule provides additional information for ongoing scheduling requirements associated with this Contract.

2.4 Submission of Schedule of Values: A Schedule of Values to reflect value of equipment, materials and work performed per unit price, with totals shall be submitted at preconstruction meeting. Both parties are to agree on proposed schedule of values prior to any work being performed.

2.5 Provisions for Convenience of Public: The Contractor shall schedule his/her operations so as minimize any inconvenience to adjacent businesses for residences. Where necessary, the City may require the Contractor to construct first the work in any areas along the Project where restrictions caused by construction operations would represent a more serious handicap, before beginning construction in the less affected areas.

3. CONTROL OF THE WORK AND MATERIALS

3.1 Control of Work:

3.1.1 Plans and Contract Documents: If required for the project, the Contractor will be furnished a CD and four (4) signed and sealed building permit 11x17 copies of the Plans, Technical Specifications, General and Special Provisions. Additional signed & sealed copies, if needed to obtain permits for the Work associated with this Contract, will be submitted upon written request. Other copies that may be needed by the Contractor shall be produced by the Contractor at his own expense; or, the Contractor may request additional full-size hardcopy of the plans for a cost of \$50.00 for each set of plans. Check shall be written out to North Port Utilities and brought to Utilities' Field Office in exchange for plans.

3.1.2 Detail Drawings and Instructions: The City may furnish, with reasonable promptness, additional instructions by means of drawings or otherwise, necessary for the proper execution of the work. All such drawings and instructions shall be consistent with the Contract documents, true developments thereof, and reasonable inferable there from.

3.1.3 Order of Precedence: These documents are integral parts of the Contract, and a requirement occurring on one is as binding as though occurring in all. They are intended to be complementary and to describe and provide for a complete work. In cases of discrepancy, the governing order of documents shall be as follows:

- 3.1.3.1** Permits from Agencies as required by law
- 3.1.3.2** Change Orders
- 3.1.3.3** Contract Documents, including Technical Specifications
- 3.1.3.4** Construction Plans
 - 3.1.3.4.1** Dimensions given in figures govern scaled dimensions.
 - 3.1.3.4.2** Detail drawings govern over general drawings.
 - 3.1.3.4.3** Addenda/Change order drawings govern over Contract documents.
- 3.1.3.5** FDOT Roadway and Traffic Design Standards, January, latest edition (if applicable).
- 3.1.3.6** FDOT Standard Specifications, for Road & Bridge Construction, latest edition (if applicable).
- 3.1.3.7** North Port Utilities Standard Details and Specifications

3.1.4 Conformity of Work with Plans: All work performed and all materials furnished shall be in reasonably close conformity with lines, grades, cross sections, dimensions, and material requirements, including tolerances, shown on the Plans or indicated in the Technical Specifications or Special Provisions.

3.1.5 Authority of the City: All work shall be done under the supervision of the City or the City's representative and performed to its satisfaction. It is agreed by the parties hereto that the City shall decide all questions and disputes which may arise relative to the interpretation of the plans, construction, prosecution, and fulfillment of the Contract, and as to the character, quality, amount, and value of any work done, and material furnished, under or by reason of the Contract.

3.1.6 City's Status: The City and/or the City's Representative shall examine and inspect the work to assure compliance with the requirements of these Contract Documents. The City and/or the City's Representative shall determine the quality and acceptability of materials and workmanship relative to the requirements of the Plans and Technical Specifications.

The City has the authority to:

- 3.1.6.1** Stop the work whenever such stoppage may be necessary to insure the proper execution of the Contract.
- 3.1.6.2** Reject all work that does not conform to the Contract.
- 3.1.6.3** Resolve questions that arise in the execution of the work.

The City's Representative has the authority to:

- 3.1.6.4** Reject all work that does not conform to the Contract.
- 3.1.6.5** Resolve questions that arise in the execution of the work.

3.1.7 Suspension of Work: The City may at any time suspend work by giving ten (10) calendar days' notice to the Contractor in writing. The City shall reimburse the Contractor for expenses incurred by the Contractor

in connection with work under the Contract as a result of such suspension, unless such suspension was caused by actions of the Contractor. However, if the work or any part thereof shall be stopped by a notice in writing aforesaid, and if the City does not give written notice to the Contractor to resume work within thirty (30) calendar days of the date fixed in the written notice to suspend, then the Contractor will be entitled to the estimates and payment for all work done, unless such suspension was caused by actions of the Contractor.

3.1.8 *The City's Right to do Work:* If the Contractor should neglect to prosecute the work properly or fail to perform in accordance with the provisions of this Contract, the City, after three days written notice, may without prejudice to any other remedy it may have, make good any deficiencies and deduct from the payment due the Contractor.

3.1.9 *The City's Right to Terminate Contract:* If the Contractor refuses or fails to complete the work within the time specified for this Contract, or any extension thereof, the City may terminate the Contractor's right to proceed. In such event, the City may take over the work and prosecute the same to completion by the Contract or otherwise and the Contractor will be liable for any excess cost occasioned by the City. The City may take possession of and utilized in completing the work such materials and equipment as may be on the site of the work and necessary therefore.

If the Contractor should be adjudged a bankrupt, or should make a general assignment for the benefit of his/her creditors, or if a receiver should be appointed due to insolvency, or if he/she should refuse or fail, except in cases which time extension is provided to supply enough workmen, or if he/she should fail to make payment to subcontractors for labor and/or material, or disregard laws, ordinances or the instructions of the City, or be guilty of a violation of a provision of the Contract, then the City may, without prejudice to any other right or remedy and after giving seven (7) calendar days' notice, terminate employment of the Contractor and possess materials, tools, and appliances thereon and finish work by methods it may deem expedient. Expenses incurred by the City and the damage incurred through the Contractor's default.

In any circumstance, the City shall have the right to unilaterally cancel, terminate or suspend this Contract, in whole or in part, by providing the Contractor thirty (30) calendar days written notice by certified mail.

In the event of termination, the Contractor shall be entitled to compensation for services rendered and costs incurred through the effective date of termination. All finished or unfinished documents, material, or work shall become the property of the City and shall be delivered to the City without reservation.

3.1.10 *City May Stop the Work:* If the Work is defective, or the Contractor fails to supply sufficient skilled supervisory personnel or workmen or suitable materials or equipment or the work area is deemed unsafe, the City may order the Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of the City to stop the Work shall not give rise to any duty on the part of the City to exercise this right for the benefit of the Contractor or any other party. The City will not award any increase in Contract Price or Contract Time if the Work is stopped due to the circumstances described herein.

3.1.11 *City's Decision:* The City shall, within a reasonable time after their presentation, make decisions in writing on claims by the Contractor and on all other matters relating to the execution and progress of the work or the interpretation of the Contract Documents.

3.1.12 *Authority and Duties of City's Inspectors:* The City's Inspectors shall be authorized to inspect all work done and all materials furnished. They shall be authorized to call to the attention of the Contractor any failure of the work or materials to conform to the Technical Specifications and Contract. The presence of the Inspector shall in no way lessen the responsibility of the Contractor.

3.1.13 *Inspection of Work:* The City and its representative shall at all times have access to the work wherever

it is in preparation or progress and the Contractor shall provide proper facilities for such access and inspection. If the Specifications/Conditions, the City's instruction, laws, ordinances or any public authority require any work to be specially tested or approved, the Contractor shall give to the City timely notice of its readiness for inspection and, if the inspection is by an authority other than the City, the date fixed for such inspection. Inspections by the City shall be promptly made and, where practicable, at the source of supply. If any work should be covered up without approval or consent of the City, it must, if required by the City, be uncovered for examination at the Contractor's expense. Re-examination of questioned work may be ordered and the work must be uncovered by the Contractor.

3.1.14 Contractor's Supervision and Employees: The Contractor shall supervise, inspect, and direct the work completely 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. The Contractor shall be solely responsible for the means, methods, techniques, sequence and procedures necessary for the orderly progress of the work, and to maintain all safety precautions and programs incidental thereto. The Contractor shall at all times enforce strict discipline and good order among his/her employees, and shall not employ any unfit person or anyone unskilled in the work assigned to him/her. The Contractor shall be responsible to see that the completed work complies fully with the Contract Documents.

The Contractor will employ and maintain on the Work a qualified supervisor or superintendent who shall have been designated in writing by the Contractor as the Contractor's representative at the site. The supervisor shall have full authority to act on behalf of the Contractor and all communications given to the supervisor shall be as binding as if given to the Contractor.

As the work progresses, the Contractor shall keep on the job at all times an English-speaking Supervisor, Superintendent or designee, technically qualified, who is an employee of the Contractor and who shall not be replaced without written notice and approval of the City. The Superintendent or his/her qualified designee shall be present at the job site and direct the work of subcontractors, as well as employees of the Contractor. This supervisor will be equipped with a communication device enabling him/her to contact suppliers, subcontractors or his/her office who in turn can convey necessary communications to others. The Contractor shall issue all communications to the City or his/her representative.

The Contractor's Superintendent shall be present on the job site **at all times** while work is in progress, and shall be available by phone for emergencies twenty-four hours per day, seven days per week. Failure to observe this requirement shall be considered suspension of the work by the Contractor until such time as such Superintendent is again present on the job.

If the Contractor, in the course of the work, finds any discrepancy between the drawing and the physical conditions of the site, or any errors or omissions in drawing, or in the construction layout points and instructions, he/she shall immediately inform the City, in writing, and the City shall promptly verify same. Any work done after such discovery will be done at the Contractor's risk.

Neither party shall employ or hire any employee of the other party without the concurrence of each party.

3.1.15 Contractor's Understanding: It is understood and agreed that the Contractor has, by careful examination, satisfied himself/herself as to the nature and locations of the work, the conformation of the ground, the character, quality, and quantity of materials to be encountered, the character of equipment and facilities needed prior to and during prosecution of the work under this Contract. No verbal agreement or conversation with any officer, agent, or employee of the City, either before or after execution of this Contract, shall affect or modify the terms or obligations herein contained.

3.1.16 Permits and Regulations: Permits and licenses necessary for the prosecution of the work shall be

secured by the Contractor and paid for by the City, unless otherwise specified. The Contractor shall give all notices and comply with all laws, ordinances, rules, and regulations bearing on the conduct of the work as drawn and specified. If the Contractor observes that the specifications and drawings are at variance therewith, he shall promptly notify the City in writing, and any necessary changes shall be adjusted as provided in the Contract for changes in the work. If the Contractor performs any work knowing it to be contrary to such laws, ordinances, rules, and regulations, and without such notice to the City, he/she shall bear all costs arising there from.

3.1.17 Protection of Work and Property: The Contractor shall continuously maintain protection of all his/her work from damage and shall protect the City's property from injury or loss arising in connection with this Contract. He/she shall adequately protect adjacent property as provided by law and the Contract Documents. He/she shall provide and maintain all passageways, guard fences, lights, and other facilities for protection required by public authority or local conditions. In an emergency affecting the safety of life or of the work, or of adjoining property, the Contractor, without special instruction or authorization from the City, is hereby permitted to act, at his discretion, to prevent such threatened loss or injury, and he/she shall so act, without appeal, if so instructed or authorized. Any compensation claimed by the Contractor on account of emergency work shall be determined by agreement between the Contractor and the City.

The Contractor shall not occupy private land outside of any easements or rights of way unless a written authorization has been signed by the property owner. It shall be the Contractor's responsibility to provide these agreements prior to construction, if required. Prior to the use of private lands, the Contractor shall submit a copy of the agreement(s) to the City. In the event the Contractor uses private property for any purpose without first having obtained the necessary approvals from the property owner and provided the necessary agreements to the City, the City will direct the Contractor in writing to immediately cease using such property.

Prior to application for final payment, the Contractor shall provide documentation from the owner of each piece of private property for which an agreement for use was provided, or for which the City has issued written notification to the Contractor, that each owner is satisfied with the manner in which the Contractor has restored the property. Final payment or reduction in retainage shall not be paid until such documentation is received by the City.

3.1.18 Changes in the Work: The City, without invalidating the Contract, may order extra work or make changes by altering, adding to or deducting from the work, the Contract sum being adjusted accordingly. Such work shall be executed under the conditions of the original Contract. The change and amount of compensation must be agreed upon in writing in a document of equal dignity herewith prior to any deviation from the terms of this Contract.

In giving instructions, the City shall have authority to make minor changes in the work, not involving extra cost, and not inconsistent with the purposes of the work. Except in an emergency endangering life or property, no extra work or change shall be made unless in pursuance of a written order by the City; and no claim for an addition to the Contract sum shall be valid, unless ordered. Value of any such extra work or change shall be determined in one or more of the following ways:

- 3.1.18.1** By estimate and acceptance in a lump sum.
- 3.1.18.2** By unit prices named in the Contract or subsequently agreed upon.
- 3.1.18.3** By cost and percentage or by cost and a fixed fee.

If none of the previous methods are agreed upon, the Contractor, provided he/she receives an order as above, shall proceed with the work. In such case and also under case, he/she shall keep amendment in such form as the City may direct, a correct amount of the net cost of labor and materials, together with vouchers. The City

shall certify to the amount, including reasonable allowance for overhead and profit, due to the Contractor. Pending final determination of value, no payment on changes shall be made. When requiring a change in the scope of services the Contractor shall notify the City by written notice that a change order is requested within five (5) days of any occurrence.

3.1.19 *Deductions for Uncorrected Work:* If the City deems it inexpedient to correct work injured or done not in accordance with the Contract, some equitable deductions from the Contract price shall be made thereof.

3.1.20 *Delays and Extension of Time:* If the Contractor should be delayed at any time in the progress of work by any act of neglect of the City or of its employees or by any other Contractor employed by the City, or by changes ordered in the work, or by such causes beyond the Contractor's control, or by delay authorized by the City, or by any cause which the City shall decide to justify the delay, then the time of completion shall be extended for such reasonable time as the City may decide. However, no time delay shall be allowed if judged by the City to be caused by the Contractor's negligence.

No such extension shall be made for delay occurring more than seven (7) calendar days before claim therefore is made in writing to the City. In the case of a continuing cause of delay only one (1) claim is necessary. This article does not exclude the recovery of damages for delay by either party under other provisions in the Contract Documents.

3.1.21 *Correction of Work Before Final Payment:* All work, materials, whether incorporated in the work or not, all processes of manufacturer, and all methods of construction shall be at all times and places subject to the inspection of the City who shall be the final judge of quality and suitability of the work, materials, processes of manufacture, and methods of construction for the purposes for which they are used. Should they fail to meet City's approval; they shall be forthwith reconstructed, made good, replaced, and/or corrected, as the case may be, by the Contractor at his/her own expense. Rejected material shall be immediately removed from the site. If, in the opinion of any portion of the work injured or not performed in accordance with the Contract Documents, the compensation to be paid to the Contractor hereunder shall be reduced by such amount as in the judgment of the City to be equitable.

3.1.22 *Contractor Right to Stop Work or Cancel Contract:* If the work should be stopped under an order of any court or other public authority for a period of three (3) months through no act or fault of the Contractor or of anyone employed by him, or if the City fails to pay the Contractor within thirty (30) calendar days of maturity and presentation of any sum certified by the City, then the Contractor may, upon seven (7) calendar days written notice to the City, stop work and terminate this Contract.

3.1.23 *Removal of Equipment:* In the case of annulment of this Contract before completion from any cause whatever, the Contractor, if notified to do so by the City, shall promptly remove any part or all of his equipment and supplies from property of the City and/or site of work, failing which the City has the right to remove such equipment and supplies at the Contractor's expense.

3.1.24 *Use of Completed Portions:* The City has the right to take possession of and use any completed or partially completed portions of the work, notwithstanding the time for completing the entire work of such portions may not have expired, but taking possession and use shall not be deemed an acceptance of any work not completed in accordance with the Contract Documents. If such prior use increases the cost of or delays the work, the Contractor shall be compensated as the City may determine and the City approves.

3.1.25 *Payments Withheld:* The City may withhold payment to the Contractor from loss on account of:

- 3.1.25.1** Defective Work not remedied.
- 3.1.25.2** Claims filed or evidence indicating probable filing of claims.
- 3.1.25.3** Failure of the Contractor to make payment properly to Subcontractors or for material/labor.
- 3.1.25.4** A reasonable doubt that the Contract can be completed for the balance then unpaid.
- 3.1.25.5** Damage to another Contractor
- 3.1.25.6** When the above grounds are removed, payment shall be made for amounts withheld because of them.

3.1.26 Damages: Any claim for damage arising under this Contract shall be made in writing to the party liable within a reasonable time of the first observance of such damage and not later than the time of final payment, except as expressly stipulated otherwise in the case of faulty work, and shall be adjusted by agreement.

3.1.27 Assignment: Neither party to the Contract shall assign the Contract or sublet it as a whole without the written consent of the other, nor shall the Contractor assign any monies due or to become due to him/her hereunder without the previous written consent of the City.

3.1.28 Right of Various Interests: Before work being done by the City's forces or by other Contractor's forces, contiguous to work covered by this Contract, the respective rights of the various interests involved shall be established by the City before such commencement, to secure the completion of the various portions of the work in general harmony.

3.1.29 Separate Contracts: The City reserves the right to let other Contracts in connection with this work. The Contractor shall afford other Contractors reasonable opportunity for the introduction and storage of their materials and execution of the work, and shall properly connect and coordinate his/her work with theirs. If any part of the Contractor's work depends on proper execution or results upon the work of any other Contractor, the Contractor shall inspect and promptly report to the City any defects in such work that render it unsuitable for such proper execution and results. His/her failure to so inspect and report shall constitute an acceptance of the other Contractors, work as fit and proper for the reception of his work, except as to defects, which may develop on the other Contractor's, work after execution of his work.

3.1.30 Subcontractors: The Contractor shall provide a list of Subcontractors with his/her proposal for approval. The 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 he is responsible for the acts and omissions of persons directly employed by him. Nothing in the Contract Documents shall create any contractual relationship between City or City's Engineer of Record and any Subcontractor or other person or organization having a direct contract with Contractor, nor shall it create any obligation on the part of City or City's Engineer of Record 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. City or City's Engineer of Record 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 in accordance with the schedule of values.

Substitutions must be submitted in writing and shall be subject to the approval by the City. To insure proper execution of his/her subsequent work, the Contractor shall measure work already in place and shall at once report to the City any discrepancy between the executed work and the drawings.

Acceptance of any such Subcontractor, person or organization shall not constitute a waiver of any right of the City, City's Representative, or Engineer to reject defective Work, material or equipment; or, Work, material or equipment not in conformance with the requirements of the Contract Documents.

The divisions and sections of the Specifications and the identifications of any Drawings shall not control the Contractor in dividing the Work among Subcontractors or delineating the Work to be performed by any specific trade.

The Contractor agrees to bind specifically every Subcontractor to the applicable terms and conditions of the Contract Documents for the benefit of the City.

All Work performed for the Contractor by a Subcontractor shall be pursuant to an appropriate agreement between the Contractor and the Subcontractor.

The Contractor shall be responsible for the coordination of the trades, Subcontractors and materialmen engaged upon his Work.

- The Contractor shall cause appropriate provisions to be inserted in all subcontracts relative to the Work to bind Subcontractors to the Contractor by the terms of these General Conditions and other Contract Documents insofar as applicable to the Work of Subcontractors, and to give the Contractor the same power in regards to terminating any subcontract that the City may exercise over the Contractor under any provisions of the Contract Documents.
- The City, City's Representative, or Engineer will not undertake to settle any differences between the Contractor and his Subcontractors or between Subcontractors.
- If in the opinion of the City, City's Representative, or Engineer, any Subcontractor on the Project proves to be incompetent or otherwise unsatisfactory, he shall be replaced if and when directed in writing.

3.1.31 *Horizontal and Vertical Control:* Unless noted otherwise in the Contract documents, the Contractor shall be responsible for the layout of all Contract work. The Contractor shall employ or retain any/all professional services that are required by the Contract to complete the work. The Contractor shall carefully preserve benchmarks, reference points and stakes, and, in case of willful or careless destruction, be responsible for any mistakes that may be caused by their unnecessary loss or disturbance.

3.1.32 *Lands for Work:* The City shall provide the lands upon which the work under this Contract is to be done, except that the Contractors shall provide land required for the erection of temporary construction facilities and storage of material, together with the right of access to same.

3.1.33 *Cleaning Up:* The Contractor shall, at such times as may be required by the City, remove from the City's property and from all public and private property, at his/her own expense, all temporary structures, used materials and equipment, rubbish and waste materials resulting from his/her operations. All damaged areas will be restored by the Contractor to their original conditions and approved by the City. By submission of a bid, the Contractor assumes full responsibility for the associated expenses. There shall not be an increase in time or price associated with such removal, and payment to Contractor may be withheld until such work is completed.

3.1.34 *Guarantee:* The Contractor shall warrant all equipment furnished and work performed by him/her for a period of one (1) year from the date of written acceptance of the work, final completion by the City or as may be otherwise specified. Any faulty work or equipment will be fully corrected at no cost to the City and restored work will be warranted for one year from the date of acceptance, or as may be otherwise specified. This will not release additional warranties required by other sections or provided by individual suppliers.

The making and acceptance of final payment shall not waive any claim for faulty work appearing after final payment or for failure to adhere strictly to the Contract documents. If any part of the project is guaranteed

for a longer period, such longer period shall prevail. Except as otherwise specified, all work shall be guaranteed by the Contractor against defects resulting from use of inferior materials, equipment or workmanship for one (1) year from the date of completion or written acceptance by the City, whichever is later.

3.1.35 Responsibility Regarding Existing Utilities and Structures: The existence and location of underground utilities indicated on the plans are not guaranteed and shall be investigated and verified in the field by the Contractor before submitting a bid. Excavation in the vicinity of existing structures and utilities shall be done by hand. The Contractor shall be responsible for any damage to, and for maintenance and protection of, existing utilities and structures from any damage resulting from said excavation. The Contractor is to include within his line item bid prices the costs to protect, support, relocate, or move (whether shown or not shown on the proposed project set of plans) all underground utilities, which may be in conflict with the construction of the proposed project.

3.1.36 Accidents: The Contractor shall provide equipment and medical facilities as necessary to supply first aid to anyone who is injured in connection with the work. The Contractor must promptly report in writing to the City accidents arising out of, or in conjunction with the performance of the work, whether in, or adjacent to, the site, which causes death, personal injury, or property damages, giving full details and statements of witnesses. If death or serious injuries or serious damages are caused, the accident shall be reported immediately by telephone or messenger to the City. If a claim is made by anyone against the Contractor or Subcontractor on account of an accident, the Contractor shall promptly report the facts in writing to the City, giving full details of the claim.

3.1.37 Stage Plans: Stage plans of structural alterations, cofferdams, dredging, furnished or approved by the City, shall be adhered to unless objected to in writing by the Contractor, but the submission or approval of stage plans by the City shall not relieve the Contractor of full responsibility for the work.

3.1.38 Measurement of Quantities: The quantities of work performed will be computed by the City on the basis of measurement taken by the City or its assistants, and these measurements shall be final and binding. All work computed under the Contract shall be measured by the City according to the United States Standard Measurement and Weights. The City does not assume any responsibility that the final quantities will remain in accord with estimated quantities, nor shall the Contractor claim misunderstanding or deception because of such estimate of quantities.

The estimated quantities of work to be done and material to be provided may be increased, decreased, or omitted, as provided herein. Any increase in quantities shall be approved by the City prior to any work.

3.1.39 Reference to Other Specifications: Where reference is made to specifications such as ASTM, AWWA or AASHTO, the latest edition shall be used.

3.1.40 Sanitary Facilities: The Contractor shall provide and maintain, in a sanitary condition, facilities for his/her employees as are required by local and state boards of health.

3.1.41 Quality of Equipment and Materials: To establish standards of quality, the City may, in the specifications, refer to products by name and/or catalog number. This procedure is not to be construed as eliminating from competition other products of equal quality by other manufacturers where fully suitable in design.

3.1.41.1 The Contractor shall furnish a complete list of proposed desired substitutions prior to signing of the Contract together with such engineering and catalog data as the City may require.

3.1.41.2 The Contractor shall abide by the City's judgment when proposed substitute items of equipment are judged unacceptable and shall furnish the specified item of equipment in such case. All proposals for substitutions shall be submitted in writing by the General Contractor. The City will approve or disapprove proposed substitutions in writing within a reasonable time.

3.1.42 Codes and Laws: The successful bidder shall comply with all Federal, State, Local Laws and Ordinances that affect the Contract in any way.

3.1.43 Traffic Control: The Contractor shall comply with the "Manual on Uniform Traffic Control and Devices" and maintain safe conditions at all times.

3.1.44 Exploration and Reports: If reference is made to identification of reports of explorations and tests of subsurface, or other project specific, conditions at the site that have been used in preparing the Contract documents, it should be understood that these reports are not part of the Contract documents. The Contractor shall have full responsibility with respect to subsurface, or other project specific, conditions at the site. Technical data, made available only at the Contractor's request, may not be sufficient for construction purposes. Additional investigations may be necessary for the purposes of carrying out the construction project. If the Contractor desires additional subsurface, or other applicable project specific, investigation, it will be done at his/her expense, prior to bidding. Limited Subsurface, or other project specific, reports for this project are available through the Utilities Department.

If the Contractor has elected not to make subsurface, or other project specific, investigation prior to bidding, he/she shall not be entitled to any extra compensation or Contract change orders due to conditions encountered.

3.1.45 Existing Structures: Drawing of physical conditions in or relating to existing surface and subsurface structures which are at or contiguous to the site that have been utilized by the consultant and/or the City in preparation of the Contract documents. The Contractor may rely upon the accuracy of the technical data contained in such drawing but not for the completeness thereof for the purpose of preparing or submitting a bid. Except as previously indicated, the Contractor shall have full responsibility with respect to physical conditions in or relating to such structures.

3.1.46 Report of Differing Conditions: If the Contractor believes that any technical data on which he/she relies is inaccurate, or if any physical conditions uncovered or revealed at the site differ materially from that indicated, reflected, or referred to in the Contract documents, the Contractor shall promptly, after becoming aware and before performing any work in connection therewith (except in emergency situations), notify the City in writing about the inaccuracy of difference. The City will promptly review the pertinent conditions, determine the necessity of obtaining additional explorations or tests with respect thereto and advise the City in writing (with a copy to the Contractor) of the City's findings and conclusion. Contractor's cost of, or the time required for, performance of any part of the work under this contract, whether or not changed as a result of such conditions, an equitable adjustment shall be made and the contract modified in writing accordingly.

No claim of the Contractor under this clause shall be allowed unless the Contractor has given the notice required; provided, however, the time prescribed therefore may be extended by the City.

No claim by the Contractor for an equitable adjustment hereunder shall be allowed if asserted after final payment under this Contract.

3.1.47 Not Shown or Indicated: If an underground facility is uncovered or revealed at or contiguous to the site, which was not shown or indicated and of which the Contractor could not reasonably have been expected

to be aware, the Contractor shall promptly, before performing any work (except in emergencies), identify the owner of such underground facility and give written notice thereof to that owner and to the City. The Contractor will review the underground facility to determine the extent to which the documents should be modified to reflect and substantiate the consequences of the existence of the underground facility. With City approval, the Contract documents will be amended or supplemented to the extent necessary. During such time, the Contractor shall be responsible for the safety and protection of such underground facility. The Contractor shall be allowed an increase or an extension of time, or both, to the extent that they are attributable.

3.1.48 Progress Meeting: Progress meetings will be conducted bi-weekly or as required if requested by Contractor or the City.

3.2 Storage of Materials

3.2.1 Contractor shall, at its expense, receive, unload, store in a secure place, and deliver from storage to the construction site all materials and equipment required for the performance of the Contract.

3.2.2 Contractor is not entitled to payment for same except for those materials which in City's discretion are properly stored and are going to be installed or incorporated into the construction of the Project within thirty (30) days of delivery to the construction site.

3.2.3 The storage facilities and methods of storing shall meet City's approval and shall be in accordance with manufacturer's recommendations, or City will not be obligated to pay for same.

3.2.4 Materials and equipment subject to degradation by outside exposure shall be stored in a weather tight enclosure provided by Contractor at its expense.

3.2.5 City may at its discretion require material to be stored in an air-conditioned location.

3.2.6 Provided the above conditions are met, the stored materials may be included in a subsequent Application for Payment if the Contractor also complies with the following:

3.2.6.1 An applicable purchase order is provided listing the materials in detail and identifying the Contract Documents, by name, with verification that the total value of the purchase order amount reconciles with the corresponding application for payment stored materials line item value.

3.2.6.2 Evidence that proper storage security is provided.

3.2.6.3 The City is provided legal title (free of liens or encumbrances of any kind) to the material that is stored or stockpiled.

3.2.6.4 The Contractor and/or its Subcontractor have provided insurance for the Stored Materials against loss, damage (from whatever source), or disappearance, including loss or theft prior to incorporation into the Work. By execution of the Contract, Contractor releases City from any responsibility for Stored Materials and assumes all liability for and risk of loss or damage, by whatever means, including City's alleged negligence, regardless of whether the City has paid for said Stored Materials.

3.2.7 Once any Stored Material is paid for by City, it shall not be removed from the designated storage area except for incorporation into the Work or upon subsequent written approval by City.

- 3.2.8** No Applications for Payment shall be submitted nor payments made based on the value of materials stored at locations other than the Project, unless otherwise approved in writing by the City.
- 3.2.9** It is further agreed between the parties that the transfer of title and the City's payment for any Stored Material pursuant to the Contract Documents shall in no way relieve the Contractor of the responsibility for providing and installing such material in accordance with the requirements of the Contract Documents.
- 3.2.10** The Contractor warrants that title to all of the Work or Stored Materials covered by the Application for Payment will pass to the City either by incorporation in the Project or upon receipt of payment by the Contractor, whichever occurs first, free and clear of all liens, claims, security, interest or encumbrance; and that none of the Work and none of the Stored Materials covered by the Application for Payments will have been acquired by the Contractor, or by any other person performing the Work at the site or providing materials and equipment to the Project, subject to an agreement under which an interest therein or encumbrance thereon is retained by the seller or otherwise imposed by the Contractor or such person.
- 3.2.11** In the event stored materials which City is paying for in advance of their being installed or incorporated into the Project pursuant to this Paragraph are not installed or incorporated into the Project within thirty (30) days of when they are delivered to the site, Contractor shall not be entitled to payment for any future stored materials on this Project and the amounts previously approved for payment for said materials shall be deducted from the Contractor's next application for payment.

END OF SECTION II

SECTION III. SPECIAL PROVISIONS

SP-01 INTENT: The purpose of this project is to obtain a competent, experienced and responsible Contractor to construct the project in accordance with the plans and specifications, in an expeditious manner that reasonably protects the public and adjacent property from the construction of the project.

The Contract Documents comprise the entire agreement between City and Contractor concerning the work. The Contract Documents are complementary; what is called for by one is as binding as if called for by all. The Contract Documents will be construed in accordance with the law of the place of the project. The work specified herein shall consist of furnishing all supervision, labor, equipment, material and any incidentals required for the successful completion of all work as specified herein. All work shall conform within the limits as specified and shown and be in conformance with the appropriate Technical Specifications contained herein.

The plans, technical specifications, and other documents provided are intended to provide the Contractor with known conditions of the existing site and proposed work area. The Contractor is responsible to conduct any and all investigation, survey, or other activities required to fully understand the existing site and conditions that will be encountered during the project, and on which their bid will be based. Additional investigations may be necessary for the purposes of carrying out the construction project. The City of North Port will not consider or approve any claim for additional time or monetary compensation submitted by the Contractor caused by unknown site conditions or a failure by the Contractor to fully investigate and understand the full extent and nature of the work. This includes, but is not limited to, existing utilities as well as subsurface conditions.

SP-02 EQUIPMENT: The Contractor shall only use equipment, machines, or combination of machines that are in good and safe working condition. The equipment shall produce results that meet or exceed the Technical Specifications stated herein.

Equipment incapable of providing this will not be acceptable for use on this Project. The Contractor shall not use equipment which is unsafe or in need of repair. Work completed with equipment, which is not properly functioning, shall be deemed unacceptable.

SP-03 CONSTRUCTION SCHEDULE: The time for the completion of the Project, shall be **120 calendar days** from date specified in the Notice to Proceed to final completion for the Project.

The Contractor shall furnish copies of the Construction Schedule to the City at each **weekly** Progress Meeting and with each month's Pay Request regardless whether Contractor is proposing significant changes in the Construction Schedule or not.

SP-04 PRE-CONSTRUCTION CONFERENCE: A Pre-Construction Conference will be held, at which time the Contractor shall submit the following for the City's approval or acceptance:

- A telephone list specifying the name, address, phone number and cellular telephone numbers of all subcontractors or suppliers to be used on this project. If the Contractor proposes to subcontract the survey work, the Contractor shall include the registration number of the surveyor. The telephone list shall also include emergency telephone numbers. The Contractor shall include a 24-hour emergency telephone and cellular phone number for the City's use, which the Contractor shall update as necessary throughout the project. The Contractor shall request, in writing, any changes in subcontractors or suppliers. No change in subcontractors or suppliers shall be made without written consent from the City.
- In addition to the telephone and facsimile numbers, the Contractor shall provide an e-mail address where

emails can be sent. The e-mail address must be monitored at least daily and capable of transferring electronic files.

- The Contractor shall submit to the City a list of equipment the Contractor proposes to utilize on this project.
- The Contractor shall submit for City approval a paper copy and electronic copy of a Construction Schedule prepared using City approved software, and a Schedule of Progress Payment Requests.
- The Contractor shall also submit all other materials or mix designs, which will be used by the Contractor for this Contract.

No work shall start until all submittals have been accepted by the City and/or City's Representative. Once approved, no changes will be allowed without the written approval of the City and/or the City's Representative.

The Contractor shall also provide on a monthly basis an update to the Construction Schedule reflecting changes made as a result of such reasons as weather, breakdowns, and unanticipated delays, as a means of better monitoring the project.

SP-05 WEEKLY PROGRESS MEETING: For this project, progress meetings shall be weekly. The Contractor shall designate a representative to attend Progress Meetings held at the North Port Utilities Field Office, 6644 West Price Boulevard, North Port, Florida. The Contractor shall submit, at each meeting, up-to-date schedule information, a written projected schedule for the next two weeks, written claims for additional compensation, written claims for rain days to extend the Contract, results of all testing and Value Engineering Proposals. The City will use the updated schedule information to monitor the Contractor's production rate. Upon written notice from the City, the Contractor shall dedicate additional resources to increase the production rate such that the Contractor will be back on schedule. Failure to comply with the approved Construction Schedule shall result in the Contractor being considered in default and subject to suspension of this Contract. Contractor may request progress meetings be on a bi-weekly (i.e. twice per month schedule) provided the City can confirm work is proceeding expeditiously and a bi-weekly schedule is appropriate. City may require a return to weekly progress meetings at any time.

SP-06 COOPERATION WITH UTILITIES: The Contractor shall notify all utility owner(s) affected by the construction prior to beginning work. Any expense of utility repair or other damage due to Contractor's operations shall be borne by the Contractor. Protection of utilities shall be the responsibility of the Contractor, who shall provide adequate protection to maintain proper service.

NOTE: The Contractor is to include within his bid prices, the costs to protect, and/or support, all above ground, overhead and underground utilities, which may be in conflict with the construction of this proposed project.

Attention is called to the Florida Underground Facility Damage Prevention and Safety Act defined in Florida Statute 240. This act provides for a "One Call Toll Free" telephone number to be used by all parties doing excavation, demolition or other underground construction.

SP-07 CONTRACT TIME: The Contractor specifically agrees that it will commence operations within a mutually agreed upon time following notification by the City to commence work and that all work to be performed under the provisions of this Contract shall be completed not more than **120 calendar days** from the notice to proceed; subject only to delays caused through no fault of the Contractor or acts of God. Time is of the essence in the performance of this Contract. The contract time includes up to fourteen (14) calendar days for City and/or City's Engineer of Record review of each submittal and resubmittal. There shall be no extension of time provided for modification and corrections or re-submittals to address deficiencies therein identified during the review by the City and/or City's Engineer of Record.

The work will be substantially complete within **90 calendar days**; with final completion within **30 calendar days** after attaining Substantial Completion. City shall provide the Contractor with a punch list after Substantial Completion is issued.

The punch list will identify the remaining items that must be addressed to the satisfaction of the City by the Contractor

to meet his/her obligations under the Contract. The Contractor shall complete all items on the punch lists to the satisfaction of the City prior to submittal of the application for final payment.

All extensions to the Contract time for permitted delays shall be by Change Order and signed by the City.

SP-08 PROJECT COMPLETION: Project completion shall be defined as “the stage in the progress of the Work where the Work is complete in accordance with the Contract Documents so that the CITY can begin to utilize the Work for its intended use, all punch list items are complete, and the CONTRACTOR has completely demobilized from the project area.” Project completion shall not be more than **120** calendar days from the date of the notice to proceed.

SP-09 LIQUIDATED DAMAGES: The work shall be completed within the contract time specified. The contract time shall include the preparation, submittal, review and approval of submittals, delivery of materials, and construction, assembly, adjustment and placement into service for beneficial use of all facilities covered under this Contract. The City of North Port shall issue a Notice of Completion when it has determined that the work identified in the contract has been completed per SP-08 “PROJECT COMPLETION.”

The City and the Contractor hereby agree that time is of the essence on this Contract, and the City will suffer damages if the work is not completed within the contract time as required by SP-07 “Contract Time”. It is further recognized and agreed by the City and the Contractor that the determination of the exact value of the damages the City would suffer due to a delay in the Completion of the work would be a difficult, time consuming and costly process. It is therefore hereby agreed by the City and the Contractor that it is in their mutual interest to establish a figure of **ONE THOUSAND SEVEN HUNDRED FORTY-TWO (1,742.00) DOLLARS** as Liquidated Damages (but not as a penalty) to be paid by the Contractor to the City for each calendar day that Completion is delayed beyond the Contract Time. It is mutually agreed by the City and the Contractor that neither shall make any claim to increase or reduce the amount to be paid under Liquidated Damages as the result of any calculation of actual damages suffered by the City as the result of delay in the Completion of the work.

Applicable liquidated damages are the amounts established in the following schedule:

Contract Amount	Daily Charge Per Calendar Day
\$50,000 and under	\$836
Over \$50,000 but less than \$250,000	\$884
\$250,000 but less than \$500,000	\$1074
\$500,000 but less than \$2,500,000	\$1742
\$2,500,000 but less than \$5,000,000	\$2876
\$5,000,000 but less than \$10,000,000	\$3770
\$10,000,000 but less than \$15,000,000	\$4626
\$15,000,000 but less than \$20,000,000	\$5696
\$20,000,000 and over	\$9788 plus
0.00005 of any amount over \$20 million (Round to nearest whole dollar)	

For all contracts, regardless of whether the contract time is stipulated in calendar days or working days, the Engineer will count default days in calendar days. If the Contractor or, in case of his default, the surety fails to complete the work within the time stipulated in the Contract, or within such extra time that the City may have granted the Contractor or, in case of his default, the surety shall pay to the City, not as a penalty, but as liquidated damages, in the amount of **\$1,742.00** per calendar day in which work is not completed.

The City has the right to apply, as payment on such liquidated damages, any money the City owes the Contractor.

The City does not waive its right to liquidated damages due under the Contract by allowing the Contractor to continue and finish the work, or any part of it, after the expiration of the Contract Time including granted time extensions.

In the case of default of the Contract and the completion of the work by the City, the Contractor and his surety are liable for the liquidated damages under the Contract, but the City will not charge liquidated damages for any delay in the final completion of the City's performance of the work due to any unreasonable action or delay on the part of the City.

The City considers the Contract complete when the Contractor has completed all work and the City has accepted the work. The City will then release the Contractor from further obligation except as set forth in his bond.

SP-10 DAMAGES: : Areas adjacent to the construction that are damaged shall be repaired at the Contractor's expense. Restoration of adjoining areas shall be equal to or better than original condition and to the satisfaction of the City. Protection of personal property, utilities, structures, access drives, conduits, pavement, curbs, sidewalks, trees, and shrubs shall be the responsibility of the Contractor, who shall provide adequate protection to maintain proper service.

SP-11 CONTINUOUS PROSECUTION OF WORK: The Contractor shall continuously prosecute the work in accordance with the Contract Documents. Upon written direction from the City, the Contractor shall remove any personnel for the duration of the Contract, who fails to comply with the Contract Documents.

Once commencing the project, the operation must be continuously prosecuted during normal hours to its completion. At no time, shall the Contractor suspended work, for any reason for more than seven (7) calendar days, excluding delays granted for inclement weather. Should the Contractor fail to perform any work on the project for three (3) or more work days, the Contractor shall submit a written request to the City, no less than twenty- four (24) hours in advance of the restart of work, to allow the City to schedule the required inspection personnel. No work may restart, prior to the expiration of the twenty-four (24) hour notice without the City's approval.

Correction of safety concerns will be given priority and shall be corrected as soon as practicable, but not later than 24 hours after discovery by the City and notification to the Contractor. Failure to comply with these Provisions and/or Technical Specifications shall result in the Contractor being considered in default and subject to suspension of this contract.

12 SAFETY AND PROTECTION:

A. Contractor shall 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:

- i. All employees on the work and other persons or organizations who may be affected thereby.
- ii. All the work and materials and equipment to be incorporated therein, whether in storage on or off the site.
- iii. Other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, utilities, and underground facilities not designated for removal, relocation or replacement in the course of construction.

B. Contractor shall comply with all applicable Laws and Regulations of any public body having jurisdiction for the safety of person or property or to protect them from damage, injury or loss; and shall erect and maintain all necessary safeguards for such safety and protection.

C. All personnel working within the City's right-of-way shall at all times wear City approved safety vests, including personnel who may only briefly be out of their vehicle (i.e., supervisors, truck drivers).

D. No open excavations are allowed on the project. Any pipe installation shall be backfilled properly the same day of work on such pipe area to allow safe passing of pedestrians and vehicles. The Contractor shall immediately remove any personnel who fail to conform to this requirement.

E. Contractor shall designate a responsible representative at the site whose duty shall be the prevention of accidents. This person shall be the contractor's superintendent unless otherwise designated in writing by

Contractor to City.

SP-13 CHANGES IN THE WORK: The City, without invalidating the Contract, may order extra work or make changes by altering, adding to or deducting from the work, the Contract sum being adjusted accordingly. Such work will be an **amendment to the contract** and shall require approval by the City Manager prior to prosecution of the additional work. The change and amount of compensation must be agreed upon in writing in a document of equal dignity herewith prior to any deviation from the terms of this Contract. In giving instructions, the City shall have authority to make minor changes in the work, not involving extra cost, and not inconsistent with the purposes of the work. Except in an emergency endangering life or property, no extra work or change shall be made unless in pursuance of a written order by the City; and no claim for an addition to the Contract sum shall be valid, unless ordered.

Contingency: An amount added to an estimate to allow for items, conditions, or events for which the state, occurrence, or effect is uncertain and that experience shows will likely result, in aggregate, in additional costs. All contingency items will require approval from the Purchasing Manager or designee, the Finance Director and City Manager prior to any work being performed.

Value of any such extra work or change shall be determined in one or more of the following ways:

1. By estimate and acceptance in a lumpsum.
2. By unit prices named in the contract or subsequently agreed upon.
3. By cost and percentage or by cost and a fixed fee.
4. By Change order executed by CityManager
5. By Contingency Authorization (executed by City Manager).

If none of the previous methods are agreed upon, the Contractor, provided he receives an order as above, shall proceed with the work. In such case and also under case, he shall keep amendment in such form as the City may direct, a correct amount of the net cost of labor and materials, together with vouchers. The City shall certify to the amount, including reasonable allowance for overhead and profit, due to the Contractor. Pending final determination of value, no payment on changes shall be made.

SP-14 SUBCONTRACTING, SUBLETTING AND/OR ASSIGNMENT: Do not, sell, transfer, assign or otherwise dispose of the Contract or Contracts or any portion thereof, or of the right, title, or interest therein, without written consent of the City. If the Contractor chooses to sublet any portion of the Contract, the Contractor must provide a written request to sublet work to the City for approval. With the City's acceptance of the request, the Contractor may sublet a portion of the work, but shall perform with its own organization work amounting to **not less than 40%** of the total Contract amount. The request will be deemed acceptable by the City, for purposes of the City's consent, unless the City notifies the Contractor within five (5) business days of receipt of the request that the City is not consenting to the requested subletting.

Include in the total Contract amount the cost of materials and manufactured component products, and their transportation to the project site. For the purpose of meeting this requirement the City will not consider off-site commercial production of materials and manufactured component products that the Contractor purchases, or their transportation to the project, as subcontracted work.

If the Contractor sublets a part of a Contract item, the City will use only the sublet proportional cost in determining the percentage of subcontracted normal work. Execute all agreements to sublet work in writing and include all pertinent provisions and requirements of the Contract. All other agreements must be in writing and reference all applicable Contract provisions. Upon request, furnish the City with a copy of the subcontract and agreement. The subletting of work does not relieve the Contractor or the surety of their respective liabilities under the Contract.

The City recognizes a subcontractor only in the capacity of an employee or agent of the Contractor and the Engineer

may require the Contractor to remove the subcontractor as in the case of an employee.

All sublets will be in continued compliance with all Contract provisions and the Contractor will continue to perform the minimum percentage of Contract work with its own organization, as required by said Contract. It is recognized and agreed that the prime contractor remains responsible for the proper performance of all requirements of said contract and use of sublet does not relieve or release the Contractor and his surety or either of them of any liability under the contract bond. A false statement or omission made in connection with subletting is sufficient cause for suspension, revocation, or denial of qualification to bid, and a determination of non-responsibility, and may subject the person and/or entity making the false statement to any and all civil and criminal penalties available pursuant to applicable Federal and State Law.

SP-15 AVAILABILITY OF LANDS: Work is planned to occur within rights of way or existing utility easements. The Contractor will be held responsible to obtain right of way use permit(s) from the City of North Port. The Utilities Department will pay the permit fee directly to the Neighborhood Development Services Department. Any additional or repeat inspection or testing charges shall be paid by the Contractor. See Special Provision SP-17.

SP-16 COORDINATION OF THE SPECIFICATIONS: Where conflicts between the City of North Port General Provisions, Special Provisions, Technical Specifications and Construction Plans, references, should they exist, it is the responsibility of the bidding Contractor to bring those conflicts to the attention of the Purchasing Agent prior to the bid date. After bids, have been received, the contractor will be held to the most stringent requirement.

The Contractor shall take no advantage of any apparent error or omission in the plans or specifications. If the Contractor discovers such an error or omission, he shall immediately notify the City. The City will then make such corrections and interpretations as may be deemed necessary for fulfilling the intent of the plans and specifications.

SP-17 CONSTRUCTION PERMITS: The City has submitted the FDEP Notice of Intent (NOI) to use Environmental Resource General Permit (ERP) for the work of this Contract. The City has received a response from the FDEP, attached, with regulatory review approval of the permit. The permit has been forwarded to the Army Corps of Engineers for Federal Review and we are awaiting the Corps response. Once issued, the Contractor shall be responsible for complying with all permit requirements.

The City will pay for all permit fees determined by the Building Department and the City of North Port Public Works Department. For this project, Right of Way (ROW) permit(s) will be required. The City will make payment directly to the Neighborhood Development Services Department for any miscellaneous fees assessed for the necessary permits and related inspections. Additional or re-inspection fees shall be paid for by the Contractor. Pressure testing the system shall be paid for by the Contractor. Permits and licenses necessary for the prosecution of the work shall be secured by the Contractor.

SP-18 NOTICE-OF-INTENT (NOI): The Contractor for the project shall submit a Notice of Intent to Use Generic Permit for Stormwater Discharge from Large and Small Construction Activities, along with the permit fee with the Florida Department of Environmental Protection.

SP-19 SPECIFICATIONS AND PLANS: Information regarding this project may be viewed and downloaded from DemandStar's website at www.demandstar.com. Links to DemandStar and the City FTP site are also available from the city website at www.cityofnorthport.com. Bid documents are posted on the City FTP site at <http://apps.cityofnorthport.com/ftpinfo/>; however, all addendums are posted on www.demandstar.com.

SP-20 CONTRACTOR'S UNDERSTANDING: It is understood and agreed that the Contractor has, by careful examination, satisfied himself as to the nature and locations of the work, the conformation of the ground, the character, quality, and quantity of materials to be encountered, the character of equipment and facilities needed prior to and during prosecution of the work under this Contract. No verbal agreement or conversation with any officer, agent, or employee of the City, either before or after execution of this Contract, shall affect or modify the

terms or obligations herein contained.

SP-21 ERRORS OR OMISSIONS IN PERMITS, PLANS OR SPECIFICATIONS: The Bidder shall take no advantage of any apparent error or omission, which may be discovered in the Permits, Plans or Specifications but shall forthwith notify the City Representative of such discovery, who will then make such correction and interpretations as deemed necessary for reflecting the actual spirit and intent of the Permits and Specifications.

SP-22 VALUE ENGINEERING PROPOSAL: The Contractor may offer Value Engineering Proposals (VEP) for completing the work using different means, methods, and/or equipment than specified in the contract. The City's Construction Coordinator and City's Engineer of Record will review and provide written comments to the City for each VEP provided by the Contractor. The City reserves the sole right to reject or accept any such VEP. Should the VEP be accepted by the City, the Contractor receives a 50% share of actual cost savings. The Contractor shall not be compensated for the preparation of a VEP.

SP-23 ROAD/LANE CLOSURE: No road closures are allowed. A lane closure request must be submitted in writing five (5) business days in advance of the requested lane closure. The time and length of closure(s) shall be approved by the City of North Port. The Contractor shall provide a Maintenance of Traffic (MOT) Plan for the requested lane closure(s) for review and approval by the City of North Port.

SP-24 MAINTENANCE OF TRAFFIC: The contractor shall be responsible for all maintenance of traffic and obtaining approval of a Maintenance of Traffic (MOT) Plan from the City for work within the ROW of any City Road. The Contractor shall maintain traffic at all times during construction.

SP-25 DEWATERING: The Contractor shall request approval from the City of North Port Project Manager before applying for a permit from the Southwest Florida Water Management District.

SP-26 PROJECT SIGNS: The Contractor shall furnish and erect two (2) project signs, one each to be posted on each end of the project area on Spring Haven Drive for the duration of construction. The signs shall be erected, maintained, relocated as necessary and removed by the Contractor.

The project signs shall be placed:

- At locations designated by the City's Representative
- Within the road right-of-way
- To be highly visible
- At a position, which will not obstruct pedestrian or vehicular traffic
- At a location where they will not be a roadside hazard
- The top of the sign shall be at seven to eight feet above grade
- Signs shall be horizontally and vertically level

Project sign construction

- Constructed of wood or metal
- Size of signs shall be eight feet horizontal and four feet vertical
- Sign posts shall be 6" x 6" Pre-treated wood and shall extend to the top of the sign
- Sign shall be constructed of such material to withstand the effects of weathering throughout the construction of the project

Project sign content

- Project name
- Project cost
- City Commissioners
- Engineer-of-Record

- Contractor
- City logo, which will be provided by the City, and associated color format
- SWFWMD logo, which will be provided by the SWFWMD

The Contractor shall submit a draft of the sign format electronically to the City and SWFWMD. for review and approval prior to sign face fabrication. The signs and their locations shall be reviewed and approved by the City Inspector prior to erection.

SP-27 PRIVATE PROPERTY: The Contractor shall not occupy private land outside of any easements or rights of way unless a written authorization has been signed by the property owner. It shall be the Contractor's responsibility to provide these agreements prior to construction, if required. Prior to the use of private lands, the Contractor shall submit a copy of the agreement(s) to the City. In the event that the Contractor uses private property for any purpose without first having obtained the necessary approvals from the property owner or provided the necessary agreement to the City, the City will direct the Contractor in writing to immediately cease using such property.

Prior to application for final payment, the Contractor shall provide documentation from the owner of each piece of private property for which an agreement for use was provided, or for which the City has issued written notification to the Contractor, that each owner is satisfied with the manner in which the Contractor has restored the property. Final payment or reduction in retainage shall not be paid until such documentation is received by the City.

Any areas, outside of the rights-of-way or easements that are impacted or damaged by the Contractor's activities shall be repaired at the Contractor's expense to the property owner's satisfaction. Restoration of impacted areas shall be equal to or better than original condition and to the satisfaction of the property owner. The Contractor shall be responsible to secure written approval of the restoration of the property from the property owner and submitting a copy to the City prior to requesting Substantial Completion. The City shall not release retainage to the Contractor until such time as the approvals are submitted by the Contractor.

SP-28 RESIDENTS CONCERNS: During the work of this Contract, residents will contact the City to question the progress of the work or express concerns regarding the work. These concerns are responded to by City's Utilities Department, but normally the Contractor will have more detailed information on the actual scheduling of the work or corrective measures required. Therefore, the Contractor will provide a telephone number and email address where City's Utilities Department can fax or email inquiries. The Contractor shall respond to these inquiries within two (2) business days detailing how the inquiry will be addressed and the time frame the Contractor will take in addressing this inquiry. City's Utilities Department will maintain a log of inquiries, which will be reviewed at each progress meeting.

SP-29 TESTING: Any and all testing requirements born out of, but not limited to contract requirements and permits, for the installation of utility piping, including but not limited to, pressure testing, will be included in the Contractor's bid price. Testing shall include all utilities installed as part of the work of these Contract Documents. Testing will be arranged in advance with an independent testing firm (also included in the bid price) for the testing of concrete and compaction. The City requests to be notified three (3) business days in advance of any test in order to have a City representative and the Engineer of Record, if required, present. Where less time for notice is specified in the specifications or plans, this special provision shall prevail.

SP-30 MISCELLANEOUS ITEMS: Miscellaneous items and accessories which are not specifically mentioned, but which are essential to produce a complete and properly operating installation, or usable structure or plant, providing the indicated function, shall be furnished and installed without change in the Contract Price. Such miscellaneous items and accessories shall be of the same quality standards, including material, style, finish, strength, class, weight and other applicable characteristics, as specified for the major component of which the miscellaneous items or accessory is an essential part, and shall be approved by the City's Engineer of Record before installation. The above requirement is not intended to include major components not covered by or inferable from the Drawings and Specifications.

SP-31 SOURCES OF WATER FOR TESTING, CLEANING, AND OTHER CONSTRUCTION PURPOSES: Reclaimed water

pipng pressure and flow testing and flushing may be done with reclaimed water. All Contractors' connection(s) to the City reclaimed water supply shall allow the City to meter the amount of reclaimed water used in testing, flushing, and other miscellaneous purposes during construction, etc. The Contractor is responsible for obtaining meter(s) and associated appurtenances, and paying all appropriate fees/deposits. Contractor shall not use any water until meter is installed. The actual reclaimed water used will be provided at no cost to the Contractor by Utilities. Any fees/deposits due back to the Contractor will be returned after the project is completed and the meter is removed.

If potable water is required for the Work of this Contract, all Contractors' connection(s) to the City potable water supply shall allow the City to meter the amount of water used. All potable water connections shall include a reduced pressure zone backflow preventer. The Contractor is responsible for obtaining meter(s), backflow preventers, and associated appurtenances, and paying all appropriate fees/deposits. Contractor shall not use any potable water until meter and backflow preventer are installed. The Contractor will set- up an account with the City and will be billed at the City's normal rates for actual potable water used. Any fees/deposits due back to the Contractor will be returned after the project is completed and the meter is removed.

SP-32 RECLAIMED WATER MAIN OVER-DEPTH AND PLACEMENT: Reclaimed water mains shall be installed with a minimum of thirty-six (36") inches of cover over the pipe. Any required over-depth, whether shown on the plans or not, will be considered to be incidental to the main installation and no additional compensation will be made therefore.

SP-34 PROJECT NEIGHBOR NOTIFICATION: The Contractor shall inform the City fourteen (14) calendar days and again at seven (7) calendar days prior to the commencement of work where construction will intersect the south entrance to the community center at the intersection of Pan American Boulevard and Appomattox Drive; and, the entrance to the City's Dog Park. Contractor shall provide information to City such that the City can provide notifications informing the project neighbors of the time frame of construction and the name and phone number of the contractor's designated 24 hours 7 days a week contact. If a project neighbor driveway is affected due to construction, the Contractor shall provide information with respect to temporary driveway replacement sequence and final/permanent driveway restoration. The construction limits at each work zone area shall be agreed to by Contractor and City prior to any work progressing. Any damage outside this agreed to work zone shall be the responsibility of the Contractor at no cost to the City.

SP-35 PRE-INSTALLATION VIDEO: No construction shall take place prior to the City's acceptance of the Pre-Installation Video. The video shall thoroughly capture the intended work area as outlined in the Contract Documents. The Pre-Installation Video will be used to protect all parties involved in the project.

SP-36 PERIODIC CLEAN UP AND RESTORATION: During construction, the Contractor shall regularly remove from site and properly dispose of all accumulated debris and surplus material of any kind that result from their operations. The Contractor shall remove unsightly mounds of earth, large stones, boulders, and debris so the site presents a neat appearance. Burial of construction debris is not permitted. Unused tools and equipment shall be stored at the Contractor's yard or base of operations for the project. When the contract work involves ROWs, private property, roadways, private driveways or access roads, easements and sidewalks, and any site work that may impede pedestrian or vehicular traffic while the installation work is in progress, the Contractor shall backfill, grade, compact, and otherwise restore the area to the basic condition which existed prior to work in order to allow vehicular and pedestrian use. All areas should be restored to their original design grade to facilitate drainage.

SP-37 CONNECTION TO EXISTING RECLAIMED WATER MAIN(S): The connections to the existing reclaimed water mains shall be paid at the contract bid price per each which shall include the cost of connection, satisfactory coordination of utility construction, labor, material, equipment and all other associated appurtenances required to complete the project in accordance with the Contract Documents. Tie-ins to existing reclaimed water main(s) shall be coordinated with City Utilities.

It shall be the express responsibility of the Contractor to connect his Work to each part of the existing work or of work previously installed as required by the Drawings and Specifications to provide a complete installation.

Connections/modifications to existing piping requires coordination with City Utilities staff. The Contractor shall not operate any existing valves.

SP-38 MAINTENANCE OF FLOW: It is the Contractor's responsibility to maintain the flow of the existing reclaimed water mains during the construction. Maintenance of flow is considered incidental to the work and shall be done at no additional cost to the City.

SP-39 RIGHT-OF-WAY RESTORATION: The ROW restoration includes all procedures to restore the ROW to a condition equal to or better than the original condition to the satisfaction of the City. The Contractor shall be responsible for restoration of items including but not limited to existing structures, stabilized roads, and ground areas damaged during construction.

During installation of new utilities, the Contractor shall maintain, an undisturbed existing buffer strip of ground cover measuring a minimum of one foot (1') in width from the edge-of- pavement (EOP) in order to minimize potential erosion along the pavement edge. The Contractor shall be responsible for all costs to restore this buffer strip if disturbed during construction.

SP-40 COORDINATION WITH PUBLIC WORKS DEPARTMENT: Future work planned in this area by North Port Public Works Department includes construction of roadway, placement of drainage culverts and miscellaneous work to complete the Spring Haven Drive connection.

SP-41 HORIZONTAL DIRECTIONAL DRILL (HDD) PIPE MATERIALS: For this project, for the HDD elements of this project specified as HDPE, no alternative materials will be considered or accepted.

SP-42 LABOR, MATERIALS AND EQUIPMENT: The Contractor will provide competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. He will at all times maintain good discipline and order at the site.

The Contractor will furnish all materials, equipment, labor, transportation, construction equipment and machinery, necessary for the execution, testing, initial operation and completion of the Work.

All materials and equipment will be new, except as otherwise provided in the Contract Documents. When special makes or grades of material which are normally packaged by the supplier or manufacturer are specified or approved, such materials shall be delivered to the site in their original packages or container with seals unbroken and labels intact.

All materials and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned in accordance with the instructions of the applicable manufacturer, fabricator or processors, except as otherwise provided in the Contract Documents.

SP-43 MATERIALS, EQUIPMENT, PRODUCTS, AND SUBSTITUTIONS: Materials, equipment and products incorporated in the Work must be approved for use before being purchased by the Contractor. The Contractor shall submit to the City a list of proposed materials, equipment or products, together with such samples as may be necessary of him to determine their acceptability and obtain his approval. No request for payment for "or equal" equipment will be approved until this list has been received and approved by the City.

Whenever a material, article or piece of equipment is identified on the Drawings or Specifications by reference to brand name or catalog number, it shall be understood that this is referenced for the purpose of defining the performance or other salient requirements and that other products of equal capacities, quality and function shall be considered per 40

CFR 33.255(c) as referenced in Chapter 62-552, FAC. The Contractor may recommend the substitution of a material, article, or piece of equipment of equal substance and function for those referred to in the Contract Documents be reference to brand name or catalog number, and if, in the opinion of the City, such material, article, or piece of equipment is of equal substance and function to that specified, the City may approve its substitution and use by the Contractor. Incidental changes or extra component parts required to accommodate the substitute will be made by the Contractor without a change in the Contract Price or Contract Time.

No substitute shall be ordered or installed without the written approval of the City who shall be the judge of equality. Delay caused by obtaining approvals for substitute materials will not be considered justifiable grounds for an extension of construction time.

Should any work or materials, equipment or products not conform with requirements of the Drawings and Specifications or become damaged during the progress of the Work, such Work or materials shall be removed and replaced, together with any work disarranged by such alteration, at any time before completion and acceptance of the Project. All such work shall be done at the expense of the Contractor.

No materials or supplies for the Work shall be purchased by the Contractor or by any Subcontractor subject to any chattel mortgage or under a conditional sale or other agreement by which an interest is retained by the Seller. The Contractor warrants that he has good title to all materials and supplies used by him in the Work.

SP-44 USE OF PREMISES: The Contractor shall confine his apparatus, storage of materials, and operations of his workmen to limits indicated by law, ordinances, permits, and directions of City, and shall not unnecessarily encumber any part of the site.

Contractor shall not overload or permit any part of any structure to be loaded with such weight as will endanger its safety, nor shall he subject any part of the Work to stresses or pressures that will endanger it.

Contractor shall enforce City's instructions in connection with signs, advertisements, fires and smoking.

Contractor shall arrange and cooperate with City in routing and parking of automobiles of his employees, Subcontractors and other personnel, and in routing material delivery truck and other vehicles to the Project site.

SP-45 SURVEY: All survey monuments and benchmarks that may be disturbed during construction shall be referenced and replaced by the Contractor. All monuments and benchmarks disturbed or destroyed by the Contractor or any of his forces through accident or negligence shall be replaced by a Florida Licensed Professional Land Surveyor at the Contractor's expense.

SP-46 MANUFACTURER'S LITERATURE: Manufacturer's literature, when referenced, shall be dated and numbered and is intended to establish the minimum requirements acceptable. Whenever reference is given to codes, or standard specifications or other data published by regulating agencies or accepted organizations, including but not limited to National Electrical Code, applicable State Building Code, Federal Specifications, ASTM Specifications, various institute specifications, and the like, it shall be understood that such reference is to the latest edition including addenda in effect on the date of Bid.

SP-47 BRAND NAMES: Brand names where used in the technical specifications, are intended to denote the standard of quality and performance required of the particular material or product. The term "equal" or "equivalent", when used in connection with brand names, shall be interpreted to mean a material or product that is similar and equal in type, quality, size, capacity, composition, finish, color and other applicable characteristics to the material or product specified by trade name, and that is suitable for the same use and capable of performing the same function, in the opinion of the City's Engineer of Record, as the material or product so specified. The City's Engineer of Record must approve proposed equal items before they are purchased or incorporated in the Work.

SP-48 RECORD DRAWINGS: The Contractor will keep one record copy of all Specifications, Drawings, Addenda, Modifications, and Shop Drawings at the site in good order and annotated to show all changes made during the construction process. Record Drawings shall list all equipment removed from existing facilities. These shall be available to the City, City's Representative, City's Engineer of Record, and to the State of Florida Department of Environmental Protection (FDEP), and shall be delivered by him to the City upon completion of the Project. It shall be used for this purpose only. Final payment will not be made until receipt and approval by the City of Record Drawings.

SP-49 RECORD DRAWINGS CERTIFICATION: The certification statement shall be as follows:

"I hereby certify that the as-built location information of the water facilities shown on these drawings conforms to the Minimum Technical Standards for Land Surveying in the State of Florida, chapter 5J-17.052 (Florida Administrative Code), as adopted by the Department of Agriculture and Consumer Services, Division of Consumer Services, Board of Professional Surveyors and Mappers in 2010, and that said as-builts are true and correct to the best of my knowledge and belief as surveyed under my direction."

SP-50 COMPLETION OF THE PROJECT: The Completion of the project shall be accomplished and finalized prior to submittal of the application for final payment by the Contractor. The City shall determine the date of completion for the project when at the minimum, the following are met as well as all other conditions defined in the Contract Documents:

- All punch list items have been addressed to the satisfaction of the City;
- All testing has been completed and results are satisfactory (including but not limited to Pipe Pressure Test, Concrete, and Compaction Tests);
- Record Drawing requirements have been accepted and approved by the City and all other governmental agencies, if applicable;
- All associated equipment and facilities necessary for the reliable operation of the project are complete in accordance with contract requirements; and,
- All release of liens have been submitted and are satisfactory to the City, certifying that all payrolls, material bills, and other indebtedness incurred by the Contractor in connection with this project have been paid in full.

SP-51 STORED MATERIALS: Payment for stored materials will made in accordance with Section 3.2 of the General Provisions.

SP-52 PAYMENT ADJUSTMENT: The following will apply: This Contract will *not* provide for fuel or other payment adjustments due to increase in material costs during the life of the contract.

SP-53 TERMINOLOGY: Throughout the Contract Documents, references to City or Owner shall, where appropriate, refer to the City of North Port, a municipal corporation of the State of Florida. References to Engineer or "Resident Project Representative" may, where appropriate, refer to either the City's Engineer of Record for the Project, which is Stantec, or to the City's Utilities Engineering Manager.

The terms General Conditions and General Provisions are used interchangeably in the Contract Documents. The terms Special Conditions and Special Provisions are used interchangeably in the Contract Documents.

The term "Contract Documents" is used interchangeably with "Agreement."

SP-54 WORK HOURS: The Contractor shall conduct work between 7 A.M. and 5 P.M. Monday through Friday, which is defined as regular work hours. The Contractor shall not conduct work on Saturdays, Sundays, legal holidays or holidays observed by the City. Work conducted outside of the regular work hours and days shall be permitted only with written permission from the City. Any additional cost incurred by North Port Utilities and/or the Engineer of Record for work outside these hours will be paid by the Contractor.

SP-55 NOTIFICATIONS OF 48 HOURS: Wherever the technical specifications or plans indicate a minimum of 48 hours' notice to Owner/City or Engineer, this special provision shall prevail dictating a minimum of three (3) business days' notice to Owner/City or Engineer.

SP-56 QUALIFICATIONS/REFERENCES: Contractor shall submit a minimum of four (4) recent (within the past five (5) years) references of projects of similar size and scope. Two of the four references shall be directly applicable to the horizontal directional drill (HDD) work of this Project. Each reference shall include a project description, project location, name and phone number of a contact person, total project amount, and completion date. The City reserves the right to contact references. Bidder is referred to MINIMUM QUALIFICATIONS AND REFERENCE FORM included later herein.

The Contractor/Subcontractor qualification requirements include the following criteria:

Successful completion of three (3) or more HDDs for the construction of water mains utilizing 12-inch or larger HDPE for a length of 800 linear feet or greater. Documentation for each HDD shall include the following:

- Project name and description. Include dates and location.
- Client name and current contact information.
- HDD description, including size, length, and material for HDD. Also, describe vertical and horizontal curves, including figures as necessary.
- List of equipment used, including directional drilling equipment, guidance system, and drilling fluid system.
- List of personnel, including qualifications and experience.

SP-57 LICENSE(S) REQUIREMENT: Certified General Contractor OR Certified Underground Utilities Contractor.

SP-58 CITY'S STATUS: The City shall examine and inspect the work to assure compliance with the requirements of these Contract Documents. The City shall determine the quality and acceptability of materials and workmanship relative to the requirements of the Plans and Technical Specifications. The City has the authority as follows:

1. To stop the work whenever such stoppage may be necessary to insure the proper execution of the Contract.
2. To reject all work which does not conform to the Contract.
3. To resolve questions which arise in the execution of the work.
4. To stop work whenever materials or shop drawings have not been approved prior to placement.

SP-59 MINORITY/WOMEN-OWNED AND SMALL BUSINESSES: The work of this Contract is partially funded by the Southwest Florida Water Management District (SWFWMD). As such, the SWFWMD requires the City to make good faith efforts to encourage the participation of minority owned and woman owned and small business enterprises, both as prime contractors and subcontractors, in accordance with applicable laws. The Contractor shall make good faith efforts to afford opportunity to minority owned and woman owned and small business enterprises to participate as subcontractors, in accordance with applicable laws.

If requested, the SWFWMD may provide assistance by sharing information to help the City, and thereby the Contractor, in ensuring that minority owned and woman owned and small businesses are afforded an opportunity to participate in the performance of this Agreement.

The City is required to provide the SWFWMD with a report indicating all contractors and subcontractors who performed work in association with the Contract, the amount spent with each contractor or subcontractor, and to the extent such information is known, whether each contractor or subcontractor was a minority owned or woman owned or small business enterprise. The Contractor is required to provide this information to the City so that the City may meet its requirement with SWFWMD. Contractor is referred to the Subcontractor Form – Part B, included in these Contract Documents, to be submitted with final invoice.

SP-60 CRITERIA FOR AWARD: The award of this bid shall be to the lowest responsive, responsible bidder who meets or exceeds the minimum requirements of these specifications. Other consideration(s) of award shall be references, and equipment list. Any unfavorable references may be cause to deem bidder non-responsive.

The City reserves the right to reject the bid proposal of any bidder who has previously failed to perform properly, or on time, contracts of similar nature; or who is not in a position to satisfactorily perform the contract.

END OF SECTION III

SECTION IV. INSURANCE

Before performing any Contract work, the Contractor shall procure and maintain, during the life of this Contract, the following types of insurance coverage and shall furnish certificates representing such insurance to the City. The policies of insurance shall be primary and written on forms acceptable to the City and placed with insurance carriers approved and licensed by the Insurance Department in the State of Florida and meet a minimum financial AM Best and Company rating of no less than "A- Excellent: FSC VII." No changes are to be made to these specifications without prior written approval by the City Manager or designee. The City Manager or designee may alter the amounts or types of insurance policies required by this Contract upon agreement with Contractor.

WORKERS COMPENSATION: Coverage to apply for all employees for Statutory Limits in compliance with the applicable state and federal laws. The policy must include Employers' Liability with a limit of \$1,000,000 each accident; \$1,000,000 each employee; and \$1,000,000 policy limit for disease.

COMPREHENSIVE GENERAL LIABILITY: Occurrence form required. Aggregate must apply separately to this Contract/job. Minimum \$1,000,000 each occurrence; \$1,000,000 general aggregate; \$1,000,000 products and completed ops; and \$100,000 fire damage. The city is to be name additionally insured.

BUSINESS AUTOMOBILE LIABILITY: To include all vehicles owned, leased, hired and non-owned vehicles with limits of not less than \$1,000,000 per each accident and for property damage and bodily injury, with Contractual liability coverage for all work performed under this agreement. The city is to be named additionally insured.

All insurance policies must be issued by companies of recognized responsibility licensed to do business in Florida and must contain a provision that prohibits cancellation unless the CITY is provided notice as stated within the policy. It is the Contractor's responsibility to provide notice to the CITY.

A. Special Requirements:

1. **Occurrence Basis:** All policies required by this Contract, with the exception of Workers' Compensation, or unless specific approval is given by Risk Management through the City's Purchasing Office, are to be written on an occurrence basis. Claims Made Policies will be accepted for professional and hazardous materials and such other risks only as authorized by the City's Purchasing Office. All Claims Made Policies contributing to the satisfaction of the insurance requirements herein shall have an extended reporting period option or automatic coverage of not less than two (2) years. If provided as an option, the Contractor agrees to purchase the extended reporting period on cancellation or termination unless a new policy is affected with a retroactive date, including at least the last policy year.

2. **Additional Insured:** All policies required by this Contract, with the exception of Workers' Compensation, or unless specific approval is given by Risk Management through the City's Purchasing Office, shall name the City of North Port, its Commissioners, officers, agents, employees and volunteers as additional insureds as their interest may appear under this Contract. This MUST be written in the description of operations section of the insurance certificate, even if there is check-off-box on the insurance certificate. Any costs for adding the City as "additional insured" shall be at the Contractor's expense.

3. **Certificates of Insurance:** All certificates of insurance must be on file with and approved by the City before commencement of any work activities under this Contract. All certificate(s) of insurance required herein must be accompanied by a copy of the additionally insured documents/endorsements (CG 20101185 or combination of CG 2010370704 and CG 20370704). Certificates of Insurance evidencing claims made or occurrences form coverage and conditions to this Contract, as well as the contract number and description of work, are to be furnished to the City's Purchasing Office (4970 City Hall Boulevard, Suite 337, North Port, FL 34286) prior to commencement of work AND a

minimum of thirty (30) calendar days prior to expiration of the insurance contract when applicable. The Certificate of Insurance issued by the underwriting department of the insurance carrier shall certify compliance with the insurance requirements provided herein.

4. Premiums and Deductibles: The Contractor shall be solely responsible for payment of all premiums for insurance contributing to the satisfaction of this Contract and shall be solely responsible for the payment of all deductibles and retention to which such policies are subject, whether or not the City is an insured under the policy. The Contractor's insurance is considered primary for any loss regardless of any insurance maintained by the City. The Contractor is responsible for all insurance policy premiums, deductibles, SIR (self-insured retentions) or any loss or portion of any loss that is not covered by any available insurance policy.

5. Waiver of Subrogation: All required insurance policies are to be endorsed with a waiver of subrogation. The insurance companies, by proper endorsement or thru other means, agree to waive all rights of subrogation against the City, its officers, officials, agents, employees, affiliates and volunteers, and the City's insurance carriers, for losses paid under the terms of these policies that arises from the contractual relationship or work performed by the Contractor for the City. It is the Contractor's responsibility to notify each insurance company of the Waiver of Subrogation and request written authorization or the proper endorsement. Additionally, the Contractor, its officers, officials, agents, employees, volunteers, and any subcontractors, agree to waive all rights of subrogation against the City, its officers, officials, agents, employees, affiliates and volunteers, and the City's insurance carriers for any losses paid, sustained or incurred, but not covered by insurance, that arise from the contractual relationship or work performed. This waiver also applies to any deductibles or self-insured retentions for which the Contractor or its agents may be responsible for.

A. POLICY FORM

1. All policies, required by this Agreement, with the exception of Professional Liability and Workers Compensation, or unless specific approval is given by Risk Management through the City's Purchasing Office, are to be written on an occurrence basis, shall name the City of North Port, its Commissioners, officers, agents, employees and volunteers as additional insured as their interest may appear under this Agreement. Insurer(s), with the exception of Professional Liability and Workers Compensation, shall agree to waive all rights of subrogation against the City of North Port, its Commissioners, officers, agents, employees or volunteers.
2. Insurance requirements itemized in this Agreement, and required of the Contractor, shall be provided by or in behalf of all Subcontractors to cover their operations performed under this Agreement. The Contractor shall be held responsible for any modifications, deviations, or omissions in these insurance requirements as they apply to Subcontractors.
3. Each insurance policy required by this Agreement shall:
 - a. Apply separately to each insured against whom claim is made and suit is brought, except with respect to limits of the insurer's liability.
 - b. Be endorsed to state that coverage shall not be suspended, voided or cancelled by either party except after notice is delivered in accordance with the policy provisions. The Contractor is to notify the City Purchasing Office by written notice via certified mail, return receipt requested.
4. The CITY shall retain the right to review, at any time, coverage, form, and amount of insurance.
5. The procuring of required policies of insurance shall not be construed to limit Contractor's liability nor to fulfill the indemnification provisions and requirements of this Agreement.
6. The Contractor shall be solely responsible for payment of all premiums for insurance contributing to the satisfaction of this Agreement and shall be solely responsible for the payment of all

deductibles and retentions to which such policies are subject, whether or not the City is an insured under the policy.

7. Claims Made Policies will be accepted for professional and hazardous materials and such other risks as are authorized by the City's Purchasing Office. All Claims Made Policies contributing to the satisfaction of the insurance requirements herein shall have an extended reporting period option or automatic coverage of not less than two (2) years. If provided as an option, the Contractor agrees to purchase the extended reporting period on cancellation or termination unless a new policy is affected with a retroactive date, including at least the last policy year.

Certificates of Insurance evidencing Claims Made or Occurrences form coverage and conditions to this Agreement, as well as the agreement number and description of work, are to be furnished to the City's Purchasing Office (4970 City Hall Boulevard, Suite 337, North Port, FL 34286) prior to commencement of work AND a minimum of thirty (30) calendar days prior to expiration of the insurance contract when applicable. All insurance certificates shall be received by the City's Purchasing Office before the Contractor will be allowed to commence or continue work.

Applicants / bidders should carefully review their existing insurances and consider their ability to meet these requirements prior to submission. The requirements should be forwarded to their agent, broker, and insurance providers for review

END OF SECTION IV

BIDDER CHECKLIST

This checklist is provided to assist each Bidder in the preparation of their bid response. Included in this checklist are important requirements, which is the responsibility of each Bidder to submit with their response in order to make their response fully compliant. This checklist is only a guideline it is the responsibility of each Bidder to read and comply with the Invitation to Bid in its entirety.

ITEM #	SUBMITTAL	BIDDERS RESPONSE		
		INCLUDED		
		YES	NO	N/A or
1	Bidder has completed, signed and/or notarized all required and included this checklist with bid submittal			
2	State of Florida Registration: Proposer shall be registered with the State of Florida to perform the professional services required for this proposal. A copy of Registration <u>must</u> be included with submission. If Other, explain on a separate sheet.			
3	Bid Form: Totals provided and signed by Binding authority			
	Acknowledge addenda signed by Binding authority			
	Bid Schedule: Completed (entered an amount in every line item) signed by Binding authority			
4	Statement of Organization: completed, signed and notarized			
5	References: Completed and signed			
6	Conflict of Interest: Completed and signed			
7	Equipment and Source of Supply/Subcontractors: Completed			
8	Drug-Free Workplace (If Applicable): Completed and signed			
	Florida Trench and Safety Affidavit (If Applicable): Completed and signed			
9	Public Entity Crime Information: Completed, signed and notarized			
10	Non-Collusive Affidavit: Completed, signed and notarized			
11	No Lobbying Affidavit: Completed, signed and notarized			
12	Bid Bond (Attached)			
13	Number of Originals: 1 (signed)			
14	Number of copies: 1 (signed)			
15	USB Flash Drive: One (1) electronic version in Portable Document Format (PDF)			
16	Insurance Certificate Bidder has reviewed all the insurance requirements and is able to provide a certificate			
17	Credit Cards Does your company accept Credit Card Payments			
18	LABEL FOR SEALED BID: RFB NO. 2018—02 SPRING HAVEN DRIVE RECLAIMED WATER MAIN EXTENSION City of North Port Purchasing Division Alla V. Skipper, CPPB, Contract Specialist 4970 City Hall, Suite 337 North Port, Florida 34286			

Date: _____

Signed (Person authorized to bind the company): _____

Name (printed): _____ Title: _____

This page must be completed and submitted

BID FORM

Name of Bidder: _____

Business Address: _____

Telephone Number: _____ Fax Number: _____

E-mail Address: _____

Contractor License #: _____

FEID #: _____

To the City Commission of the City of North Port pursuant to and in compliance with your notice inviting sealed bids (Invitation to Bid), Instructions to Bidders, and the other documents relating thereto, the undersigned bidder, having familiarized himself/herself with the terms of the Contract documents, local conditions affecting the performance of the Contract, and the cost of the work at the place where the work is to be done, hereby proposes and agrees to perform within the time stipulated in the Contract, including all of its component parts and everything required to be performed, and to provide and furnish any and all of the labor, material, tools, expendable equipment, and all utility and transportation services and design of certain items necessary to perform the Contract and complete in a workmanlike manner, all of the work required in connection with the construction of said work all in strict conformity with the plans and specifications and other Contract documents for the prices hereinafter set forth.

The undersigned, as bidder, does hereby declare that he has read the Request for Bids, Instructions to Bidders, General Provisions, Special Provisions, Technical Specifications & Conditions, Insurance Requirements, Bid Form, Permit Fees, Plan Revisions, Plans, grants, geotechnical reports and any other documentation for: **SPRING HAVEN DRIVE RECLAIMED WATER MAIN EXTENSION** and further agrees to furnish all items listed on the attached Bid Form in accordance with the Lump Sum line items as indicated on the bid schedule form submitted. The above specified documents are herein incorporated into the Bid Form.

The undersigned as bidder, declares that the only persons or parties interested in this submittal as principals are those named herein; that this submittal is made without collusion with any person, firm, or corporation; and he/she proposes and agrees, if the proposal is accepted, that he/she will execute a Contract with the CITY in the form set forth in the Contract documents and that he/she will accept in full payment thereof the following prices, to wit:

TOTAL BID PRICE:

_____ \$ _____
 (TYPE/PRINT) (NUMERIC)

Date: _____

Signed (Person authorized to bind the company): _____

Name (printed): _____ Title: _____

THIS PAGE MUST BE COMPLETED AND SUBMITTED

Through the signing of this Bid Form, Bidder attests his/her bid is guaranteed for a period of not less than **NINETY (90) DAYS** from the date of the official bid opening.

Enclosed is a cashier's check or bid bond in the amount of \$ _____ (insert the word(s) "Bidder's Bond", or "Cashier's Check", as the case may be) in an amount equal and not less than 5% of the total amount of the bid, payable to the City of North Port. Cashier's checks will be returned to all bidders after award of bid. **Note: Failure to submit a bid bond will be cause for rejection of bid.**

The undersigned deposits the above-named security as a bid guarantee and agrees that it shall be forfeited to the CITY as liquidated damages in case this proposal is accepted by the CITY and the undersigned fails to execute a contract with the CITY as specified in the contract documents accompanied by the required labor and material and faithful performance bonds with sureties satisfactory to the CITY, and accompanied by the required certificates of insurance coverage. Should the CITY be required to engage the services of an attorney in connection with the enforcement of this bid, bidder promises to pay CITY'S reasonable attorneys' fees incurred with or without suit.

PERFORMANCE AND PAYMENT BOND: The undersigned agrees, if awarded this bid, to furnish a **Performance and Payment Bond** in the amount of 100% of the total project price within ten (10) calendar days after notification of award to the Purchasing Department. The undersigned shall be responsible and bear all costs associated to record Performance and Payment Bond with Sarasota County Clerk's Office. Receipt of said recording and a certified copy of the Bond shall be furnished to the Purchasing Department at the time of the pre-construction meeting.

All contract documents (i.e.; performance and payment bond, cashier's check, bid bond) shall be in the name of "City of North Port".

The successful bidder shall be responsible for furnishing all equipment, labor, materials and tools required for the Neighborhood Expansion Pilot Program in accordance with the plans and specifications so entitled, prepared by the Utilities Department.

The undersigned acknowledges receipt of the following addenda, and the cost, if any, of such revisions has been included in the bid price.

Addendum No. _____ Dated _____
Addendum No. _____ Dated _____
Addendum No. _____ Dated _____

Addendum No. _____ Dated _____
Addendum No. _____ Dated _____
Addendum No. _____ Dated _____

Date: _____

Signed (Person authorized to bind the company): _____

Name (printed): _____ Title: _____

THIS PAGE MUST BE COMPLETED AND SUBMITTED

BID SCHEDULE - SUMMARY OF PAYITEMS

It is understood that the estimated summary of pay item quantities are approximate only and are solely for the purpose of facilitating the comparison of bids, and that the Contractor's compensation shall be computed upon the basis of the actual quantities in the completed work, whether they be more or less than those shown.

Preparation of Bid Schedules: Contractor MUST use the bid schedule below (DO NOT RECREATE THIS FORM). All blank spaces in the schedule below must be legibly. *Bidder should not reference the words "No Charge, N/A, included, dash, etc." in any of the blocks. If vendor is not providing a bid price for an item, zero (0) must be designated on that line item. Failure to identify a monetary amount properly may cause bidder's to be deemed non-responsive and bid response be rejected.*

BID ITEM	DESCRIPTION	UOM	EST. QTY	UNIT COST	TOTAL
2A	12-INCH PVC C-900, DR-18 PIPE AND FITTINGS	LF	260		\$
2B	12-INCH PVC C-900, DR-18 R.J. PIPE AND FITTINGS	LF	320		\$
2C	12-INCH PVC C-900, DR-14 PIPE AND FITTINGS	LF	2800		\$
2D	12-INCH PVC C-900, DR-14 R.J. PIPE AND FITTINGS	LF	380		\$
3A	12-INCH HDPE DR-11 DIRECTIONAL BORE UNDER DRIVEWAY AT STA 32+60	LF	104		\$
3B	12-INCH HDPE DR-11 DIRECTIONAL BORE UNDER DRIVEWAY AT STA 38+20	LF	800		\$
4	6-INCH STUB-OUT WITH GATE VALVE	EA	2		\$
5	AIR RELEASE ASSEMBLY	EA	2		\$
6A	CONNECTION TO EXISTING 16-INCH STUB-OUT AT PAN AMERICAN BOULEVARD	LS	1	XXXXXXXXXXXXXXXX	\$
6B	CONNECTION TO EXISTING 6-INCH MAIN AT DRIVEWAY AT STA 38+20	LS	1	XXXXXXXXXXXXXXXX	
6C	CONNECTION TO EXISTING 6-INCH AND 12-INCH MAINS AT WEST PRICE BOULEVARD	LS	1	XXXXXXXXXXXXXXXX	\$
7	DEFLECTION AT FUTURE STORM CULVERT OR UTILITY MAINS [BID ALTERNATE ITEM]	EA	6		\$
SUBTOTAL					\$
1	Mobilization/Demobilization (shall not exceed five percent (5%) of the sub-total of bid of Items 2-7)	1	LS	XXXXXXXXXXXXXXXX	\$
GRAND TOTAL BID					\$

Date: _____

Signed (Person authorized to bind the company): _____

Name (printed): _____ Title: _____

EQUIPMENT LIST

Equipment is located at: _____

The following is a listing of your equipment, inclusive of manufacturer, year and condition. Condition shall be listed in accordance with the following scale:

1-Excellent; 2-Good; 3-Fair; 4-Poor. (Attach additional sheets, if required.)

Equipment	Manufacturer	Year	Condition	Leased/Owned (If leased, date of expiration)

SOURCE OF SUPPLY FORM

The following sources of supply shall be used for the **SPRING HAVEN DRIVE WATER MAIN EXTENSION**. If bidder does not have a source of supply, insert "to be determined". When a source or subcontractor is determined, selection will be subject to City approval. (If not applicable, state N/A).

SUPPLIER(S)

1. _____
2. _____
3. _____
4. _____

Date: _____

Signed (*Person authorized to bind the company*): _____

Name (printed): _____ Title: _____

THIS PAGE MUST BE COMPLETED AND SUBMITTED

SUBCONTRACTOR FORM – PART A

The following subcontractors shall be used for the **SPRING HAVEN DRIVE WATER MAIN EXTENSION**. If bidder does not have a subcontractor, insert “to be determined.” When determined, selection will be subject to City approval. All subcontractors are subject to City approval. (If not applicable, state N/A).

Subcontractor Name	Tier	Subcontract to Whom	Work Description	Total Amount Sublet	Percent of total contract

Subcontractor Name	Address	Contact Name	Contact Number	Contact email

Date: _____

Signed (*Person authorized to bind the company*): _____

Name (printed): _____ Title: _____

THIS PAGE MUST BE COMPLETED AND SUBMITTED

SUBCONTRACTOR FORM – PART B

The following subcontractors were used for the **SPRING HAVEN DRIVE WATER MAIN EXTENSION** . This form MUST be submitted with final invoice.

ASR TEMPORARY FACILITIES FOR CYCLE TEST 5PROJECT	Total Amount Paid	INDICATE THE ONE CATEGORY THAT BEST DESCRIBES EACH ORGANIZATION LISTED*												
		Business Classification		Certified MBE				Non-Certified MBE				UNKNOWN		
Names of Subcontractors Utilitized		NON-MINORITY	SMALL BUSINESS Section 288.703(1) F.S.	AFRICAN AMERICAN	HISPANIC AMERICAN	ASIAN/HAWAIIAN AMERICAN	NATIVE AMERICAN	AMERICAN WOMAN	AFRICAN AMERICAN	HISPANIC AMERICAN	ASIAN/HAWAIIAN AMERICAN	NATIVE AMERICAN	AMERICAN WOMAN	

Date: _____

Signed (Person authorized to bind the company): _____

Name (printed): _____ Title: _____

This page must be completed and submitted WITH FINAL INVOICE

QUALIFICATIONS AND REFERENCES

The Bidder (Company) **shall** have been in **COMMERCIAL CONSTRUCTION BUSINESS WITH EXPERIENCE** in projects involving water distribution infrastructure or other similar structures. **Bidder shall demonstrate successful completion of a minimum of four (4) projects completed within the past five (5) years of similar size and scope to the SPRING HAVEN DRIVE RECLAIMED WATER MAIN EXTENSION.** Three of the six references shall be directly applicable to the horizontal directional drill (HDD) work of this Project. See Special Provision 56.

1. Business/Customer Name: _____

Name of Contact Person/Title: _____

Telephone# _____ Fax _____ E-mail _____

Address _____

Phone Number _____

Duration of Contract or business relationship _____

Type of Services Provided _____

Contract Period: FROM _____ TO _____

Contract Price \$ _____ Contract Price at Completion of the Project \$ _____

2. Business/Customer Name: _____

Name of Contact Person/Title: _____

Telephone# _____ Fax _____ E-mail _____

Address _____

Phone Number _____

Duration of Contract or business relationship _____

Type of Services Provided _____

3. Business/Customer Name: _____

Name of Contact Person/Title: _____

Date: _____

Signed (*Person authorized to bind the company*): _____

Name (printed): _____ Title: _____

Telephone# _____ Fax _____ E-mail _____

Address _____

Contract Period: FROM _____ TO _____

Contract Price \$ _____ Contract Price at Completion of the Project \$ _____

Phone Number _____

Duration of Contract or business relationship _____

Type of Services Provided _____

Contract Period: FROM _____ TO _____

Contract Price \$ _____ Contract Price at Completion of the Project \$ _____

4. Business/Customer Name: _____

Name of Contact Person/Title: _____

Telephone# _____ Fax _____ E-mail _____

Address _____

Phone Number _____

Duration of Contract or business relationship _____

Type of Services Provided _____

Contract Period: FROM _____ TO _____

Contract Price \$ _____ Contract Price at Completion of the Project \$ _____

Date: _____

Signed (*Person authorized to bind the company*): _____

Name (printed): _____ Title: _____

THIS PAGE MUST BE COMPLETED AND SUBMITTED

Is it in good standing: Yes or No
Authorized to transact business in Florida: Yes or No

State of Florida Department of State Certificate of Authority Document No.: _____

Does it use a registered fictitious name: Yes or No

Names of Officers:
President: _____ Secretary: _____
Vice President: _____ Treasurer: _____
Director: _____ Director: _____
Other: _____ Other: _____

Name of Corporation (As used in Florida): _____
(Spelled exactly as it is registered with the state or federal government)

Corporate Address:
Post Office Box: _____
City, State Zip: _____
Street Address: _____
City, State, Zip: _____

STATE OF _____

COUNTY OF _____

Sworn to and subscribed before me this ___ day of _____, 20___, by _____ who is personally known to me or has produced his/her driver's license as identification.

Notary Public - State of Florida
Print Name: _____
Commission No: _____

Date: _____

Signed (Person authorized to bind the company): _____

Name (printed): _____ Title: _____

This page must be completed and submitted

CONFLICT OF INTEREST FORM

F.S. §112.313 places limitations on public officers (including advisory board members) and employees' ability to contract with the City either directly or indirectly. Therefore, please indicate if the following applies:

PART I.

- I am an employee, public officer or advisory board member of the City
_____ **(List Position Or Board)**

- I am the spouse or child of an employee, public officer or advisory board member of the City
Name: _____

- An employee, public officer or advisory board member of the City, or their spouse or child, is an officer, partner, director, or proprietor of Respondent or has a material interest in Respondent. "Material interest" means direct or indirect ownership of more than 5 percent of the total assets or capital stock of any business entity. For the purposes of [§112.313], indirect ownership does not include ownership by a spouse or minor child.
Name: _____

- Respondent employs or contracts with an employee, public officer or advisory board member of the City
Name: _____

- None of The Above

PART II:

Are you going to request an advisory board member waiver?

- I will request an advisory board member waiver under §112.313(12)
- I will NOT request an advisory board member waiver under §112.313(12)
- N/A

The City shall review any relationships which may be prohibited under the Florida Ethics Code and will disqualify any bidders whose conflicts are not waived or exempt.

Date: _____

Signed (Person authorized to bind the company): _____

Name (printed): _____ **Title:** _____

This page to be returned only if Contractor is claiming a North Port Local Business Status.

PUBLIC ENTITY CRIME INFORMATION

As provided by F.S. §287.133, 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 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 in excess of the threshold amount provided in Section 287, for CATEGORY TWO for a period of 36 months from the date of being placed on the convicted vendor list.

I, _____, being an authorized representative of the Respondent _____,

Located at: _____

City: _____ State: _____ Zip Code: _____, have read and understand the contents above. I further certify that Respondent is not disqualified from replying to this solicitation because of F.S. §287.133.

Signature: _____ Date: _____

Telephone #: _____ Fax #: _____

Federal ID #: _____ E-mail: _____

State of _____

County of _____

Sworn to and subscribed before me this _____ day of _____, 20____, by _____ who is personally known to me or has produced his driver's license as identification.

NOTARY SEAL:

Notary Public - State of Florida
Print Name: _____
Commission No: _____

Date: _____

Signed (Person authorized to bind the company): _____

Name (printed): _____ Title: _____

DRUG FREE WORKPLACE FORM

The undersigned Respondent in accordance with Florida Statute §287.087 hereby certifies that _____ does:

(Company Name)

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 violations.
3. Give each employee engaged 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) days after such conviction.
5. Impose a sanction 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.

As the person authorized to sign the statement, I certify that Respondent complies fully with the above requirements.

Check one:

- As the person authorized to sign this statement, I certify that this firm complies fully with above requirements.
- As the person authorized to sign this statement, this firm **does not** comply fully with the above requirements.

Signature

Print Name

Date

This page must be completed and submitted

SWORN STATEMENT: THE FLORIDA TRENCH SAFETY ACT

(Complete if applicable)

THIS FORM MUST BE SIGNED IN THE PRESENCE OF A NOTARY PUBLIC BY AN OFFICER AUTHORIZED TO ADMINISTER OATHS.

1. This Sworn Statement is submitted with Bid No. 2018-02 for the construction of _____.
2. This Sworn Statement is submitted by _____ whose business address is _____ and (if applicable) its Federal Employer Identification Number (FEIN) is _____.
3. My name is _____ (PRINTED OR TYPED NAME OF INDIVIDUAL SIGNING) and hold the position of _____ with the above entity.
4. The Trench Safety Standards that will be in effect during the construction of this Project are Florida Statute Section 553.60-55.64, Trench Safety Act, and OSHA Standard.
5. The undersigned assures that the entity will comply with the applicable Trench Safety Standards and agrees to indemnify and hold harmless the City, and any of their agents or employees from any claims arising from the failure to comply with said standard.
6. The undersigned has appropriated \$ _____ per linear foot of trench to be excavated over 5' deep for compliance with the applicable standards and intends to comply by instituting the following procedures: _____
7. The undersigned has appropriated \$ _____ per square foot for compliance with shoring safety requirements and intends to comply by instituting the following procedures: _____
8. The undersigned, in submitting this Bid, represents that he or she has reviewed and considered all available geotechnical information and made such other investigations and tests as he or she may deem necessary to adequately design the trench safety system(s) he or she will utilize on this Project.

Authorized Signature/Title

Sworn to and subscribed before me

this _____
(date)

Notary Public Signature

(Notary Seal)

My Commission Expires: _____

LOBBYING CERTIFICATION

“The undersigned hereby certifies, to the best of his or her knowledge and belief, that”:

STATE OF _____

COUNTY OF _____

This _____ day _____ of 2015 _____, being first duly sworn, deposes and says that he or she is the authorized representative of _____ (Name of the contractor, firm or individual), and that the vendor and any of its agents agree to have no contact or communication with, or discuss any matter related in any way to any active City of North Port solicitation, with any City of North Port elected officials, officers, their appointees or their agents or any other staff or outside individuals working with the city in respect to this request other than the designated Procurement Official Contact and to abide by the restrictions outlined in the General Terms and Conditions of the Solicitation. Technical questions directed to the project manager, is prohibited. These persons shall not be lobbied, either individually or collectively, regarding any questions for bid, proposal, qualification and/or any other solicitations released by the city. To do so is grounds for immediate disqualification from the selection process. The selection process is not considered final until such a time as the Commission has made a final and conclusive determination.

- (a) No City appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence either directly or indirectly an officer or employee of the City, City Commission in connection with the awarding of any City Contract.
- (b) If any funds other than City appropriated funds have been paid or will be paid to any person for influencing or attempting to influence a member of City Commission or an officer or employee of the City in connection with this contract, the undersigned shall complete and submit Standard Form-L “Disclosure Form to Report Lobbying”, in accordance with its instructions.

STATE OF _____

COUNTY OF _____

Sworn to and subscribed before me this ___ day of _____, 20___, by _____ who is personally known to me or has produced his/her driver's license as identification.

Notary Public - State of Florida
Print Name: _____

Commission No: _____

NON-COLLUSIVE AFFIDAVIT

State of _____

County of _____

} SS.

Before me, the undersigned authority, personally appeared:

who, being first duly sworn, deposes and says that:

1. He/She is the _____ (Owner, Partner, Officer, Representative or Agent) of _____, the Respondent that has submitted the attached reply;
2. He/She is fully informed respecting the preparation and contents of the attached reply and of all pertinent circumstances respecting such reply;
3. Such reply is genuine and is not a collusive or sham reply;
4. Neither the said Respondent nor any of its officers, partners, owners, agents, representatives, employees or parties in interest, including this affiant, have in any way colluded, conspired, connived or agreed, directly or indirectly, with any other Respondent, firm, or person to submit a collusive or sham reply in connection with the work for which the attached reply has been submitted; or have in any manner, directly or indirectly sought by agreement or collusion, or communication or conference with any Respondent, firm, or person to fix the price or prices in the attached reply or of any other Respondent, or to fix any overhead, profit, or cost elements of the reply price or the reply price of any other Respondent, or to secure through any collusion, conspiracy, connivance, or unlawful agreement any advantage against (Recipient), or any person interested in the reply work.

Signed, sealed and delivered this _____ day of _____, 20____.

By: _____

(Printed Name)

(Title)

State of Florida

County of _____

Sworn to and subscribed before me this _____ day of _____, 20____, by _____ who is personally known to me or has produced his driver's license as identification.

NOTARY SEAL:

Notary Public - State of Florida

Print Name: _____

Commission No: _____

Date: _____

Signed (Person authorized to bind the company): _____

Name (printed): _____ Title: _____

ACKNOWLEDGEMENT OF TERMS, CONDITIONS, AND GRANT CLAUSES

The Terms and Conditions from the Grant Agreement

Subcontracts: If the Bidder subcontracts any portion of the work under this Agreement, a copy of the signed subcontract must be available to the City of North Port for review and approval. The bidder agrees to include in the subcontract that:

- (1) the subcontractor is bound by the terms of this Agreement;
- (2) the subcontractor is bound by all applicable state and federal laws and regulations; and
- (3) the subcontractor shall hold the City of North Port, grant recipient and granting agency harmless against all claims of whatever nature arising out of the subcontractor's performance of work under this Agreement, to the extent allowed and required by law.

Federal Provisions

On behalf of the Bidder, I acknowledge, and agree to perform all of the specifications and grant requirements identified in this solicitation document(s).

SIGNATURE: _____

COMPANY NAME: _____

DATE: _____

**“SAMPLE” SUBJECT TO CHANGE
TITLE**

XXXXXXXXXXXXXXXXXXXXXXXXXXXX

This **Contract** (“Contract”) is made this _____ day of _____, 2017, by and between the **CITY OF NORTH PORT**, a municipal corporation of the State of Florida, hereinafter referred to as the "City" and **CORPORATION**, a Florida corporation, , FL 3xxxx hereinafter referred to as the "Contractor."

WITNESSETH

That the parties to this Contract, in consideration of their mutual agreements and promises hereinafter contained, bind themselves, their partners, successors, assigns and legal representatives to all covenants, agreements and obligations contained in the agreements and bid documents executed between the parties, and do hereby further agree as follows:

1. RESPONSIBILITIES OF THE CONTRACTOR:

A. Responsibility for and Supervision: The Contractor shall supervise and direct the work to the best of the Contractor’s ability, give it all the attention necessary for such proper supervision and direction and not employ for work on the project any person without sufficient skill to perform the job for which the person was employed.

The Contractor assumes full responsibility for acts, negligence, or omissions of all the Contractor’s employees on the project, for those subcontractors and their employees, and for those of all other persons doing work under a contract with the Contractor. All contracts between the Contractor and any such subcontractor the Contractor hires, shall conform to the provisions of the Contract and bid documents and shall incorporate in them the relevant portions of this Contract.

B. Furnishing of Labor and Materials: The Contractor shall provide and pay for all labor, materials, and equipment, including tools, construction equipment and machinery, and all transportation and all other facilities and services necessary for the proper completion of the work in strict conformity with the provisions herein contained, and with the Request For Bid No. 2017-29, including the plans and specifications, addendums and with the proposal submitted by the Contractor and on file with the City. The foregoing Request For Bid (“RFB”), specifications, and proposal submitted by the Contractor, are hereby specifically made a part of this Contract and are incorporated herein.

The Contractor represents and warrants to the City that all equipment and materials used in the work, and made a part of the structures thereon, or placed permanently in connection therewith, will be new unless otherwise specified in the Contract and bid documents, of good quality, free of defects, and in conformity with the Contract and bid documents. The parties understand that all equipment and materials not in conformity are defective.

C. Incorporation of Bid Documents: The **Request For Bid No. 2018-02**, including the plans, specifications, and addenda, and the Contractor’s response to RFB, are specifically made a part of this Contract and are incorporated herein. In the event of a conflict between or among the documents or any ambiguity or missing specifications or instruction, the following priority is established:

1. First, this Contract (Contract No. 2018-02) approved by the City Commission on _____, 2017, and any attachments;
2. Second, Request for Bid, including any and all attachments and addenda;

3. Third, the Contractor's response to this solicitation; and
4. Fourth, specific direction from the City Manager.

- D. Public Records Law:** In accordance with Florida Statutes 119.0701, the Contractor shall comply with all public records laws, and shall specifically:
1. Keep and maintain public records required by the City to perform the service.
 - a. The timeframes and classifications for records retention requirements must be in accordance with the General Records Schedule GS1-SL for State and Local Government Agencies. (See <http://dos.dos.state.fl.us/library-archives/records-management/general-records-schedules/>).
 - b. "Public records" means and includes those items specified in Florida Statutes Section 119.011(12), as amended from time to time, and currently defined as: All documents, papers, letters, maps, books, tapes, photographs, films, sound recordings, data processing software, or other material, regardless of the physical form, characteristics, or means of transmission, made or received pursuant to law or ordinance or in connection with the transaction of official business with the City. The Contractor's records under this Contract include but are not limited to, supplier/subcontractor invoices and contracts, project documents, meeting notes, e-mails and all other documentation generated during this Contract.
 2. Upon request from the City's custodian of public records, provide the City, at no cost, 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 for by law. All records kept electronically must be provided to the City, upon request from the City's custodian of public records, in a format compatible with the information technology systems of the City.
 3. Ensure that project 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, if the Contractor does not transfer the records to the City following completion of the contract, for the time period specified in General Records Schedule GS1-SL for State and Local Government Agencies.
 4. Upon completion of the contract, transfer, at no cost, to the City all public records in the Contractor's possession 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.
 5. **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 CUSTODIAN OF PUBLIC RECORDS, 4970 CITY HALL BOULEVARD, NORTH PORT, FLORIDA 34286, 941.429.7063 OR HOTLINE 941.429.7270; E-MAIL: padkins@cityofnorthport.com.**
 6. Failure of the Contractor to comply with these requirements shall be a material breach of this Contract. Further, the Contractor may be subject to penalties under Florida Statutes Section 119.10.

2. CONTRACT PRICE:

In consideration of the foregoing services, work, labor and materials to be furnished by the Contractor as per said plans, specifications and addendums, the City agrees to pay and the Contractor \$xxxxxxx. The **CONTRACT PRICE** \$xxxxxxx. The **CONTRACT PRICE** is xxxxx Dollars and xxxx Cents.

3. PAYMENT:

Two (2) original requests for payment must be submitted to the City of North Port on a City-approved form. Each pay request must be accompanied by an updated work schedule to reflect progress of work. Payment shall be accompanied by either written approval and direction of the surety, or receipt of updated affidavits of payment by subcontractors and/or suppliers, in accordance with Florida Statutes Section 255.05(11). Price shall be net and all invoices payable according to the Florida Local Government Prompt Payment Act (Florida Statutes chapter 218). Upon certification and approval by the City or its duly authorized agent, progress payments may be made to the Contractor upon its application for all services or work completed or materials furnished in accordance with the Contract. Prior to fifty percent (50%) completion, the Contractor will be paid monthly the total value of the work completed and accepted during the preceding month, less ten percent (10%) retainage. After fifty percent (50%) completion of the construction services purchased pursuant to the Contract, the City must reduce to five percent (5%) the amount of retainage withheld from each subsequent progress payment made to the Contractor upon request of the Contractor. For purposes of this subsection, the term "fifty percent (50%) completion" is the point at which the City has expended fifty percent (50%) of the total cost of the construction services purchased as identified in the Contract together with all costs associated with existing change orders and other additions or modifications to the construction services provided for in the Contract. The City shall inform the Contractor's Surety of any reduction in retainage. The Contractor must update each new pay request in accordance with any changes made to the previous submittal. The City or its duly authorized administrative agent, shall approve final payment for all work, materials or services furnished under this Contract retainage may be reduced upon issuance of the Certificate of Substantial Completion by the City if, in the sole opinion of the City, sufficient progress on the schedule has been accomplished, all required affidavits have been provided, and the City has retained adequate coverage for the project through the achievement of Final Completion.

4. CONTRACT TIME:

CONTRACT TIME: The Contractor specifically agrees that it will commence operations within a mutually agreed upon time following notification by the City to commence work and that all work to be performed under the provisions of this Contract shall be completed not more than **240 calendar days** from the notice to proceed; subject only to delays caused through no fault of the Contractor or acts of God. Time is of the essence in the performance of this Contract. The contract time includes up to fourteen (14) calendar days for City and/or City's Engineer of Record review of each submittal and resubmittal. There shall be no extension of time provided for modification and corrections or re- submittals to address deficiencies therein identified during the review by the City and/or City's Engineer of Record.

The work of Part 1 will be substantially complete within **120 calendar days**. The work of Part 2 will be substantially complete within **210 calendar days**. Final completion of the project as a whole shall be within **30 calendar days** after attaining Substantial Completion of Part 2. City shall provide the Contractor with a punch list for each area after Substantial Completion is issued. The punch list will identify the remaining items that must be addressed to the satisfaction of the City by the Contractor to meet his/her obligations under the Contract. The Contractor shall complete all items on the punch lists to the satisfaction of the City prior to submittal of the application for final payment.

All extensions to the Contract time for permitted delays shall be by Change Order and signed by the City.

5. LIQUIDATED DAMAGES:

The work shall be completed within the Contract time specified. The Contract time shall include the preparation, submittal, review and approval of submittals, delivery of materials, and construction, assembly, adjustment and placement into service for beneficial use of all facilities covered under this Contract.

The City shall issue a Notice of Substantial Completion when it has determined that the work identified in the Contract has been substantially completed; record drawings have been submitted and approved by the City and that the facility is operating satisfactorily. The Contract time also includes up to fourteen (14) calendar days for the review of submittals, excluding pay requests, by the City. The City shall provide the Contractor a punch list within two (2) calendar days after the Notice of Substantial Completion is issued. The punch list will identify the remaining items that must be addressed to the satisfaction of the City by the Contractor to meet Contractor's obligations under the Contract. The Contractor shall complete the items on the punch list to the satisfaction of the City within twenty-eight (28) additional calendar days of the issuance of the Final Punch List or Notice of Substantial Completion, whichever is later, and prior to submittal of the application for reduction of retainage or final payment. Any cost incurred by the City (i.e. inspection time) after the twenty-eight (28) calendar day period shall be charged to the Contractor.

The City and the Contractor hereby agree that time is of the essence on this Contract and the City will suffer damages if the work is not substantially completed within the Contract time, plus any extensions thereof allowed by Change Order. It is further recognized and agreed by the City and the Contractor that the determination of the exact value of the damages the City would suffer due to a delay in the Substantial Completion of the work would be a difficult, time consuming and costly process. It is therefore hereby agreed by the City and the Contractor that it is in their mutual interest to establish a figure of **One Thousand Ninety-Nine Dollars and No Cents (\$1,742.00)** as Liquidated Damages (but not as a penalty) to be paid by the Contractor to the City for each calendar day that Substantial Completion is delayed beyond the Contract Time.

It is mutually agreed by the City and the Contractor that neither shall make any claim to increase or reduce the amount to be paid under Liquidated Damages as the result of any calculation of actual damages suffered by the City as the result of delay in the Substantial Completion of the work.

6. BONDS:

A. Bond Requirements: The successful bidder shall provide the required performance and payment bond or other acceptable security to the City within **ten (10) business days of being awarded the bid. Failure by the successful bidder to provide the bond within ten (10) business days shall be considered a default under Sec. 2-404 of the City of North Port Administrative Code.** Upon such default the City may immediately award the bid to the next lowest responsive and responsible bidder, and recover from the original successful bidder the difference in cost between the original winning bid and the next lowest responsive and responsible bidder. Such default shall only be curable at the option of the City.

In addition, the Contractor shall be responsible and bear all costs associated to record the Performance and Payment Bond with Sarasota County Clerk's Office. The Contractor shall furnish the receipt of said recording and certified copy of the bond to the Purchasing Department at the time of the pre-construction meeting. Such default shall only be curable at the option of the City.

B. Performance and Payment Bond: The Contractor shall provide a Performance and Payment Bond, in the form prescribed in Florida Statutes Section 255.05 in the amount of one hundred percent (100%) of the Contract amount, the costs of which are to be paid by the Contractor. The bond will be acceptable to the City only if the Surety Company:

1. Is licensed to do business in the State of Florida;

2. Holds a certificate of authority authorizing it to write surety bonds in this state;
3. Has twice the minimum surplus and capital required by the Florida Insurance Code at the time the invitation to bid is issued;
4. Is otherwise in compliance with the provisions of the Florida Insurance Code;
5. Holds a currently valid certificate of authority issued by the United States Department of Treasury under 31 U.S.C. §§ 9304-9308;
6. A current rating of at least Excellent (A or A-) as reported in the most current Best Key Rating Guide, published by A.M. Best Company, Inc., of 75 Fulton Street, New York, New York 10038; and
7. With an underwriting limitation of at least two times the dollar amount of the contract.

If the Surety Company for any bond furnished by the Contractor files for bankruptcy, has a receiver appointed, is declared bankrupt, becomes insolvent, has an assignment made for the benefit of creditors, has its right to do business terminated in the State of Florida, or ceases to meet the requirements imposed by the Contract Documents, the Contractor shall, within five (5) calendar days thereafter, substitute another Bond and Surety Company, both of which shall be subject to the City's approval.

By execution of this bond, the Surety Company acknowledges that it has read the surety qualifications and surety obligations imposed by the Contract documents and hereby satisfies those conditions.

7. INSURANCE:

Before performing any Contract work, the Contractor shall procure and maintain, during the life of this Contract, the following types of insurance coverage and shall furnish certificates representing such insurance to the City. The policies of insurance shall be primary and written on forms acceptable to the City and placed with insurance carriers approved and licensed by the Insurance Department in the State of Florida and meet a minimum financial AM Best and Company rating of no less than "A- Excellent: FSC VII." No changes are to be made to these specifications without the City Manager or designee's prior written approval. The City Manager or designee may alter the amounts or types of insurance policies required by this Contract upon agreement with the Contractor.

A. Required Policies:

1. Workers' Compensation and Employers' Liability Insurance (per Florida Statutes chapter 440): The Contractor shall procure and maintain during the life of this Contract Workers' Compensation insurance for all the Contractor's employees to be engaged in work on the project under this Contract and, in case any such work is sublet, the Contractor shall require the subcontractor similarly to provide Workers' Compensation insurance for all of the latter's employees to be engaged in such work unless such employees are covered by protection afforded by the Contractor's Workers' Compensation insurance. For additional information contact the Department of Financial Services, Workers' Compensation Division at 850.413.1601 or on the web at www.fldfs.com. In case any class of employees engaged in hazardous work on the project under this Contract is not protected under the Workers' Compensation Statute, the Contractor shall provide, and shall cause each subcontractor to provide, Employer's Liability Insurance for the protection of the Contractor's employees not otherwise protected under such provisions. The minimum liability limits of such insurance shall not be less than herein specified or in that amount specified by law for that type of damage claim.

The Contractor shall file proof of such insurance with the City within ten (10) days after the execution of this Contract. Coverage is to apply for all employees in the statutory limits in compliance with the applicable state and federal laws. The policy must include Employers' Liability with a limit of \$1,000,000 for each accident; \$1,000,000 each employee; and \$1,000,000 policy limit for disease.

2. Comprehensive General Liability: The Contractor shall procure and maintain, and require all subcontractors to procure and maintain during the life of this Contract, a comprehensive general liability policy, including, but not limited to: 1) Independent Contractor's liability; 2) products and completed operations liability; 3) contractual liability; 4) broad form property damage liability; and 5) personal injury liability. The minimum limits shall be no less than \$500,000 each occurrence; \$1,000,000 general aggregate; \$1,000,000 products and completed operations; and \$100,000 damage to rented premises.
3. Business Automobile Liability: The Contractor shall procure and maintain, and require all subcontractors to procure and maintain, during the life of this Contract, automobile liability insurance including all owned, hired, and non-owned automobiles. The minimum combined single limit per occurrence shall be no less than \$1,000,000 for bodily injury and property damage liability. This shall include owned vehicles, hired, and non-owned vehicles, as well as employee's non-ownership.

Occurrence Basis: All policies required by this Contract, with the exception of Workers' Compensation, or unless Risk Management through the City's Purchasing Office gives specific approval, are to be written on an occurrence basis. Claims Made Policies will be accepted for professional and hazardous materials and such other risks only as the City's Purchasing Office authorizes. All Claims Made Policies contributing to the satisfaction of the insurance requirements herein shall have an extended reporting period option or automatic coverage of not less than two (2) years. If provided as an option, the Contractor agrees to purchase the extended reporting period on cancellation or termination unless a new policy is affected with a retroactive date, including at least the last policy year.

Additional Insured: All policies required by this Contract, with the exception of Workers' Compensation, or unless Risk Management through the City's Purchasing Office gives specific approval, shall name the City of North Port, its Commissioners, officers, agents, employees and volunteers as additional insureds as their interest may appear under this Contract. This MUST be written in the description of operations section of the insurance certificate, even if there is a check-off-box on the insurance certificate. Any costs for adding the City as "additional insured" shall be at the Contractor's expense.

Certificates of Insurance: All certificates of insurance must be on file with and approved by the City before commencement of any work activities under this Contract. All certificate(s) of insurance required herein must be accompanied by a copy of the additionally insured documents/endorsements (CG 20101185 or combination of CG 2010370704 and CG 20370704). Certificates of Insurance evidencing claims made or occurrences form coverage and conditions to this Contract, as well as the contract number and description of work, are to be furnished to the City's Purchasing Office (4970 City Hall Boulevard, Suite 337, North Port, FL 34286) prior to commencement of work AND a minimum of thirty (30) calendar days prior to expiration of the insurance contract when applicable. The Certificate of Insurance issued by the underwriting department of the insurance carrier shall certify compliance with the insurance requirements provided herein.

Premiums and Deductibles: The Contractor shall be solely responsible for payment of all premiums for insurance contributing to the satisfaction of this Contract and shall be solely responsible for the payment of all deductibles and retention to which such policies are subject, whether or not the City is an insured under the policy. The Contractor's insurance is considered primary for any loss regardless of any insurance maintained by the City. The Contractor is responsible for all insurance policy premiums, deductibles, SIR

(self-insured retentions) or any loss or portion of any loss that is not covered by any available insurance policy.

Waiver of Subrogation: All required insurance policies are to be endorsed with a waiver of subrogation. The insurance companies, by proper endorsement or thru other means, agree to waive all rights of subrogation against the City, its officers, officials, agents, employees, affiliates and volunteers, and the City's insurance carriers, for losses paid under the terms of these policies that arises from the contractual relationship or work performed by the Contractor for the City. It is the Contractor's responsibility to notify each insurance company of the Waiver of Subrogation and request written authorization or the proper endorsement. Additionally, the Contractor, its officers, officials, agents, employees, volunteers, and any subcontractors, agree to waive all rights of subrogation against the City, its officers, officials, agents, employees, affiliates and volunteers, and the City's insurance carriers for any losses paid, sustained or incurred, but not covered by insurance, that arise from the contractual relationship or work performed. This waiver also applies to any deductibles or self-insured retentions for which the Contractor or its agents may be responsible.

B. Other Policy Requirements:

1. All insurance policies must be issued by companies of recognized responsibility licensed to do business in Florida and must contain a provision that prohibits cancellation unless the City is provided notice as stated within the policy. It is the Contractor's responsibility to provide notice to the City.
2. Insurance requirements itemized in this Contract, and required of the Contractor, shall be provided by or on behalf of all subcontractors to cover their operations performed under this Contract. The Contractor shall be held responsible for any modifications, deviations, or omissions in these insurance requirements as they apply to subcontractors.
3. Each insurance policy required by this Contract shall apply separately to each insured against whom claim is made and suit is brought, except with respect to limits of the insurer's liability.
4. Each insurance policy required by this Contract shall be endorsed to state that coverage shall not be suspended, voided or cancelled by either party except after notice is delivered in accordance with the policy provisions. The Contractor shall notify the City Purchasing Office by written notice via certified mail, return receipt requested.
5. The City shall retain the right to review, at any time, coverage, form, and amount of insurance.
6. The procuring of required policies of insurance shall not be construed to limit the Contractor's liability nor to fulfill the indemnification provisions and requirements of this Contract. The extent of the Contractor's liability for indemnity of the City shall not be limited by insurance coverage or lack thereof, or unreasonably delayed for any reason, including but not limited to, insurance coverage disputes between the Contractor and its carrier.

8. INDEMNITY:

The Contractor shall indemnify and hold harmless the City, its Commissioners, officers, and employees, from and against any and all liabilities, damages, losses and costs (including attorneys' fees and court costs, whether such fees and costs are incurred in negotiations, collection of attorneys' fees or at the trial level or on appeal), which may arise out of any negligence, recklessness, or intentional wrongful misconduct of the Contractor (or the Contractor's Officers, subcontractors, sub-subcontractors, materialmen, or the employees, or agents of any one of them, if any) in

the performance or the failure to perform under the terms of the Contract. In the event of a claim, the City shall promptly notify the Contractor in writing by prepaid certified mail (return receipt requested), or by delivery through any nationally recognized courier service (such as Federal Express or UPS) which provides evidence of delivery, at the address provided in Section 18. Notification may also be provided by fax transmission to the number provided in Section 18, if provided.

The City shall provide all available information and assistance that the Contractor may reasonably require regarding any claim. This agreement for indemnification shall survive termination or completion of this Contract. The insurance coverage and limits required in this Contract may or may not be adequate to protect the City and such insurance coverage shall not be deemed a limitation on the Contractor's liability under the indemnity provided in this section. In any proceedings between the parties arising out of or related to this Indemnity provision, the prevailing party shall be reimbursed all costs, expenses and reasonable attorney fees through all proceedings (at both trial and appellate levels).

9. CONTRACTOR'S AFFIDAVIT:

When all work contemplated by this Contract has been completed and has been inspected and approved by the City or its duly authorized agent, the Contractor shall furnish to the City a Contractor's Affidavit in a form acceptable to the City. The City also requires that signed affidavits of payment be provided to the City from any and all subcontractors hired by the Contractor, unless payment is approved by the surety in accordance with Florida Statutes Section 255.05(11). The affidavits shall state whether the subcontractor(s) has been paid in full or whether there are payments remaining. The Contractor shall furnish a list of all subcontractors to the City prior to any payments against the Contract.

10. TERMINATION AND DEFAULT:

The City Manager or designee shall have the right at any time upon thirty (30) calendar days' written notice to the Contractor to terminate the services of the Contractor and, in that event, the Contractor shall cease work and shall deliver to the City all documents (including but not limited to reports, designs, specifications, and all other data) prepared or obtained by the Contractor in connection with its services. Upon delivery of the documents, the City shall pay the Contractor in full settlement of all claims by it hereunder as the work actually completed bears to the entire work under the Contract, as determined by the City, less payments already made to the Contractor, and any amounts the City withheld to settle claims against or to pay indebtedness of the Contractor in accordance with the provisions of the Contract.

- A. **Funding in Subsequent Fiscal Years:** The City and the Contractor expressly understand that funding for any subsequent fiscal year of the Contract is contingent upon appropriation of monies by the City Commission. In the event that funds are not available or appropriated, the City reserves the right to terminate the Contract. The City will be responsible for payment of any outstanding invoices and work completed by the Contractor prior to such termination.
- B. In the event that the Contractor has abandoned performance under this Contract, then the City Manager or designee may terminate this Contract upon three (3) calendar days' written notice to the Contractor indicating its intention to do so. The written notice shall state the evidence indicating the Contractor's abandonment.
- C. The Contractor shall have the right to terminate the Contract only in the event of the City failing to pay the Contractor's properly documented and submitted invoice within ninety (90) calendar days of the approval by the City's Administrative Agent, or if the City suspends the project for a period greater than ninety (90) calendar days.

- D. The City Manager or designee reserves the right to terminate and cancel this Contract in the event the Contractor shall be placed in either voluntary or involuntary bankruptcy, a receiver is appointed for the Contractor or an assignment is made for the benefit of creditors.
- E. In the event the Contractor breaches this Contract; the City shall provide written notice of the breach and the Contractor shall have ten (10) days from the date the notice is received to cure. If the Contractor fails to cure within the ten (10) days, the City Manager or designee shall have the right to immediately terminate the Contract and/or refuse to make any additional payment, in whole or in part, and, if necessary, may demand the return of a portion or the entire amount previously paid to Contractor due to:
1. The quality of a portion or all of the Contractor's work not being in accordance with the requirements of this Contract;
 2. The quantity of the Contractor's work not being as represented in the Contractor's Payment Request, or otherwise;
 3. The Contractor's rate of progress being such that, in the City's opinion, substantial or final completion, or both, may be inexcusably delayed;
 4. The Contractor's failure to use Contract funds, previously paid the Contractor by the City, to pay the Contractor's project related obligations including, but not limited to, subcontractors, laborers and material and equipment suppliers;
 5. Claims made, or likely to be made, against the City or its property;
 6. Loss caused by the Contractor; and/or
 7. The Contractor's failure or refusal to perform any of the obligations to the City.

Violation of any local, state or federal law in the performance of this Contract shall constitute a material breach of this Contract.

In the event that the City makes written demand upon the Contractor for amounts the City previously paid as contemplated in the clause, the Contractor shall promptly comply with such demand. The City's rights hereunder survive the term of this Contract, and are not waived by final payment and/or acceptance.

11. INDEPENDENT CONTRACTOR:

The Contractor is, and shall be, in the performance of all work, services and activities under this Contract, an independent contractor, and not an employee, agent or servant of the City. All persons engaged in any of the work or services performed pursuant to this Contract shall at all times, and in all places, be subject to the Contractor's sole direction, supervision, and control. The Contractor shall exercise control over the means and manner in which it and its employees perform the work, and in all respects the Contractor's relationship and the relationship of its employees to the City shall be that of an independent contractor and not as employees or agents of the City. The Contractor does not have the power or authority to bind the City in any promise, agreement or representation other than as specifically provided for in this Contract. The Contractor shall not pledge the City's credit or make it a guarantor of payment of surety for any contract, debt, obligation, judgment, lien or any form of indebtedness. The Contractor further warrants and represents that it has no obligation or indebtedness that would impair its ability to fulfill the terms of this Contract.

12. SUBCONTRACTORS:

The Contractor shall furnish to the City a list of all subcontractors prior to any payments against the Contract. All subcontractors are subject to the City's approval.

13. LICENSES AND PERMITS/LAWS AND REGULATIONS:

The Contractor shall pay all taxes required by law in connection with the activity in accordance with this Contract including sales, use, and similar taxes, and unless mutually agreed to in writing to the contrary, shall secure all licenses and permits necessary for proper completion of the work, paying any fees therefore. Violation of any local, state or federal law in the performance of this Contract shall constitute a material breach of this contract. The Contractor shall comply with all laws and ordinances, and the rules, regulations, and orders of all public authorities relating to the performance of the work herein. If any of the Contract documents are at variance therewith, the Contractor shall notify the City promptly upon the discovery of such variance.

14. AMENDMENT:

This Contract constitutes the sole and complete understanding between the parties and supersedes all agreements between them, whether oral or written with respect to the subject matter. No amendment, change or addendum to this Contract is enforceable unless agreed to in writing by both parties and incorporated into this Contract. The City Manager or designee may agree to amendments that do not increase compensation to the Contractor. The City Commission shall approve all increases in compensation under this Contract.

15. EQUAL EMPLOYMENT OPPORTUNITY:

The City of North Port, Florida, in accordance with the provisions of Title VII of the Civil Rights Act of 1964 (78 Stat. 252) and the Regulations of the Department of Commerce (15 CFR, Part 8) issued pursuant to such Act, hereby notifies all bidders that it will ensure that in any Contract entered into pursuant to this advertisement, minority business enterprises will be afforded full opportunity to submit replies in response to this advertisement and will not be discriminated against on the ground of race, color or national origin in consideration for an award.

16. NON-DISCRIMINATION:

The City of North Port does not discriminate on the basis of race, color, national origin, sex, age, disability, family or religious status in administration of its programs, activities or services. Pursuant to Florida Statutes Section 287.134(2)(a), an entity or affiliate who has been placed on the discriminatory vendor list may not submit a bid, proposal, or reply on a contract to provide any goods or services to a public entity; may not submit a bid, proposal, or reply on a contract with a public entity for the construction or repair of a public building or public work; may not submit bids, proposals, or replies 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.

17. ASSIGNMENT:

The Contractor shall not assign any interest in this Contract and shall not transfer any interest in same (whether by assignment or novation) without prior written consent of the City Manager or designee, except that claims for the money due or to become due to the Contractor from the City under this Contract may be assigned to a financial institution or to a trustee in bankruptcy. Notice shall be promptly given to the City.

18. NOTICES:

Any notice, demand, communication, or request required or permitted hereunder shall be sent by certified mail, return receipt requested, and shall be mailed to:

As to the City: Michael Acosta, Project Manager
City of North Port Utilities Department
6644 W Price Blvd.
North Port, Florida 34291
Tel: 941.240. 8001
Fax: 941.240.8022
E-Mail: mvuolo@cityofnorthport.com

As to the Contractor:

E-Mail:

Notices shall be effective when received at the addresses specified above. Changes to the addresses may be made from time to time by either party by written notice to the other party. Facsimile transmission is acceptable notice effective when received, however, facsimile transmissions received after 5:00 pm or on weekends or holidays will be deemed received on the next business day. The original of the notice must additionally be mailed. Nothing in this Article shall be construed to restrict the transmission of routine communications between representatives of the Contractor and the City.

19. WAIVER:

No delay or failure to enforce any breach of this Contract by either the City or the Contractor shall be binding upon the waiving party unless such waiver is in writing. In the event of a written waiver, such a waiver shall not affect the waiving party's rights with respect to any other or further breach. The making or acceptance of a payment by either party with knowledge of the existence of a default or breach shall not operate or be construed to operate as a waiver of any subsequent default or breach.

20. ATTORNEY'S FEES:

In any proceedings between the parties arising out of or related to this Contract, the prevailing party shall be reimbursed all costs, expenses and reasonable attorney fees through all proceedings, at both trial and appellate levels.

21. GOVERNING LAW, VENUE AND SEVERABILITY:

The rights, obligations and remedies of the parties under this Contract shall be governed by the laws of the State of Florida and the exclusive venue for any legal or judicial proceedings in connection with the enforcement or interpretation of this Contract shall be in Sarasota County, Florida. The invalidity, illegality, or unenforceability of any provision of this Contract shall in no way affect the validity or enforceability of any other portion or provision of the contract. Any void provision shall be deemed severed from the Contract and the balance of the Contract shall be construed and enforced as if the Contract did not contain the particular portion or provision held to be void.

22. PARAGRAPH HEADINGS:

Paragraph headings are for the convenience of the parties and for the reference purposes only and shall be given no legal effect.

23. ENTIRE AGREEMENT:

This Contract (with all referenced plans, attachments, addenda and provisions incorporated by reference) embodies the entire agreement of both parties, superseding all oral or written previous and contemporary agreements between the parties relating to matters set forth in this Contract. In the event of any conflict between the provisions of this Contract and the RFB or the Contractor's bid, this signed Contract (excluding the RFB and the Contractor's bid) shall take precedence, followed by the provisions of the RFB, and then by the terms of the Contractor's bid.

IN WITNESS WHEREOF, the parties have hereto caused the execution of these documents, the year and date first above written.

Attest: _____
Patsy C. Adkins, City Clerk, MMC

CITY OF NORTH PORT, FL
By: _____
Peter D. Lear, CPA, CGMA, City Manager

APPROVED AS TO FORM AND CORRECTNESS:
By: _____
Amber Slayton, Interim City attorney

CONTRACTOR
By: _____

Witness: _____

**City of North Port
Phase 3 Reclaimed Water
Main Extensions
Spring Haven Drive**

Technical Specifications

100% Submittal



Prepared for:
City of North Port Utilities

Prepared by:
Stantec Consulting Services Inc.
5172 Station Way
Sarasota, FL 34233
941-365-5500

Stephen C. MacEachern, PE
Florida License # 76020

Stantec Consulting Services Inc.
Florida Certification No. 27013

May 2017

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Appendix

SECTION	TITLE
Appendix	Geotechnical Report

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SECTION 01010
SUMMARY OF WORK

PART 1 - GENERAL

10.1 THE REQUIREMENT

- A. The Work to be performed under this Contract shall consist of furnishing tools, equipment, materials, supplies, manufactured articles, and all labor, transportation, and services, including fuel, power, water, and essential communications, and performing all Work or other operations required for the fulfillment of the Contract in strict accordance with the Contract Documents which may be necessary for the complete and proper construction of the work in good faith shall be provided by the Contractor as though originally so indicated, at no increase in cost to the City.

1.02 PURPOSE

- A. The purpose of this project is to install new 12-inch reclaimed water main along the existing and the proposed sections of Spring Haven Drive between Price Boulevard and Pan American Boulevard. The intent of the project is to extend the reclaimed water system and allow for increased delivery of reclaimed water to customers.

1.03 DESCRIPTION

- A. The Work will include installation of a new 12-inch reclaimed water main along the existing and the proposed sections of Spring Haven Drive between Price Boulevard and Pan American Boulevard. At the western limit of the project, the new 12-inch reclaimed water main will connect to an existing 16-inch reclaimed water main stub-out at the intersection of Spring Haven Drive and Pan American Boulevard. At the eastern limit of the project, the new 12-inch reclaimed water main will connect to an existing 12-inch gate valve. Horizontal directional drilling methods will be used to install the new reclaimed water main under two existing driveways. Reclaimed water will be installed by direct bury methods in all other areas.

The unimproved portion of Spring Haven is scheduled to be constructed in the near future. The proposed roadway and sidewalk is shown only for reference and is subject to change. Should final roadway plans come available prior to start of construction of the RWM, the Contractor shall coordinate with the City construct the reclaimed water main with deflections or changes to the vertical or horizontal alignment if necessary.

The improved portion of Spring Haven will have the new reclaimed water main located on City of North Port property running parallel to the Spring Haven Drive right-of-way.

1.04 SUBSURFACE INFORMATION

- A. Boring logs have been provided in Appendix A of these Specifications.

1.05 GENERAL WORK SEQUENCE

-
- A. The Contractor shall submit a working schedule detailing the order in which the Contractor proposes to perform the Work. The working schedule shall be submitted at the preconstruction meeting and comply with the requirements of Section II – General Provisions.
1. The Contractor’s schedule shall allow sufficient time for the City to review necessary submittals. The schedule shall allow a minimum of two (2) weeks for the City to review and comment on any submittal.
 2. The Contractor’s schedule shall take into consideration the performance of construction efforts to include the periods between 7:00 AM and 5:00 PM on weekdays. No work shall occur on weekends, legal holidays, or on weekdays between the hours of 5:00 PM and 7:00 AM without prior authorization from City.
 3. The general sequence of work is listed below.
 - a. Maintenance of Traffic (MOT) plan submittal.
 - b. Shop drawing submittal and review.
 - c. Mobilization of equipment and personnel to the site.
 - d. Construction of HDPE reclaimed water main using horizontal directional drilling methods.
 - e. Construction of PVC water main using direct bury methods.
 - f. Filling, flushing, and pigging.
 - g. Reclaimed water main pressure testing.
 - h. Completion of final connections to existing reclaimed water mains.
 - i. Submittal of final record survey and redline drawings.
 - j. Complete site restoration.
 4. The Contractor’s schedule shall be reviewed and approved by the City prior to beginning construction. Any subsequent changes in the sequencing of work shall be made only after a revised schedule is submitted by the Contractor and approved by the City.

1.05 NOISE ABATEMENT

- A. This Project shall be executed in accordance with all Noise Ordinances of the City of North Port. All equipment and machinery shall be equipped with exhaust mufflers maintained in good working order so as to reduce operation noise to minimum levels. Operation of equipment and machinery will be limited to the hours between 7:00 AM and 5:00 PM during regular work days, unless permission is granted in advance by the City based on a critical need for the operation.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

SECTION 01025
MEASUREMENT AND PAYMENT

PART 1 - GENERAL

1.01 EXPLANATION AND DEFINITIONS

- A. The following explanation of Measurement and Payment for the bid form items is made for information and guidance. The omission of reference to any item in this description shall not, however, alter the intent of the bid form or relieve the Contractor of the necessity of furnishing such as a part of the contract at no additional cost.

1.02 MEASUREMENT

- A. The quantities set forth in the bid form are approximate and are given to establish a uniform basis for the comparison of bids. The City reserves the right to increase or decrease the quantity of any class or portion of the work during the progress of construction in accord with the terms of the contract.
- B. The lump sum price for mobilization/demobilization shall not exceed five percent (5%) of the total of all other items bid (excluding this item). The Contractor shall provide a breakdown of the lump sum bid for mobilization. The breakdown shall identify items of preparatory work and operations with the corresponding cost per item.

1.03 PAYMENT

- A. Payment shall be made for the items listed on the Bid Form on the basis of the work actually performed and completed, such Work including but not limited to, the furnishing of all necessary labor, materials, equipment, transportation, cleanup, restoration of disturbed areas, and all other appurtenances to complete the construction and installation of the Work as shown on the Construction Plans and described in these Technical Specifications.
- B. Unit prices are used as a means of computing the final figures for bid and contract purposes, for periodic payments for Work performed, for determining value of additions or deletions, and wherever else reasonable.

1.04 MEASUREMENTS FOR PAYMENT

- A. Methods for Measurement: Units for measurement shall be:
 - 1. Each (EA).
 - 2. Linear Feet (LF).
 - 3. Lump Sum (LS).
 - 4. Square Yards (SY).

B. Unit Price Contracts/Items:

1. Linear Feet (LF) shall be measured along the horizontal length of the centerline of the installed material, unless otherwise specified. Pipe shall be measured along the centerline of the length of the completed pipeline, regardless of the type of joint required, without deduction for the length of valves or fittings. Pipe included within the limits of lump sum items will not be measured.
2. Square Yards (SY) shall be measured as the amount of the material installed within the limits shown and specified in the Construction Plans and these Specifications. Slope angles and elevations shall be measured using land surveying equipment. The Contractor shall provide supporting documentation (i.e., drawings, delivery tickets, invoices, survey calculations, etc.) to verify the actual quantity installed.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.01 GENERAL

- A. Payment shall be made on the basis of Work actually performed completing each item in the Bid Form, such Work including, but not limited to, the furnishing of all necessary labor, materials, equipment, transportation, cleanup, and all other appurtenances to complete the construction and installation of the work to the configuration and extent as shown on the Construction Plans and described in these Technical Specifications. Payment for each item includes compensation for project photographs or videos, project layout, as built survey, cleanup, and restorations. Restoration is included but not limited to any sidewalk, curb, asphalt, mailboxes, sod, decorative landscape materials, etc.
- B. Water used for flushing, pressure testing, and other activities shall be provided through a metered jumper. The cost of the City meter, fee for water used, and the necessary piping and appurtenances shall be included in the unit price for the Item in which the water is being used for.
- C. No work outside the scope of work to be performed prior to a change order approval.

3.02 BID ITEMS

- A. Mobilization/Demobilization (Item 1): Payment for mobilization and demobilization will be made at the Contract lump sum price for mobilization/demobilization as one bid item for execution of the entire project. This price shall be full compensation for all costs incurred for preparatory work and operations including but not limited to:
 - Movement of personnel, equipment, supplies, and incidentals to and from the project site(s);

- The establishment and removal of facilities necessary for work on the project, including but not limited to safety and sanitary facilities;
- Fees for bonds and insurance;
- Maintenance of traffic;
- Subcontractor coordination; and
- For all other work and operations, including submittals and obtaining construction permits, which must be performed prior to beginning work on the various items.

Payment for mobilization/demobilization will be payable in the first partial payment at seventy-five percent (75%) of the contract lump sum price for mobilization/demobilization and the balance payable in the final payment.

BID ITEM	DESCRIPTION	UNITS
1	MOBILIZATION/DEMobilIZATION	LS

B. PVC Reclaimed Water Main Pipe and Fittings (Item 2): Payment for PVC reclaimed water main pipe and fittings will be made at the contract unit price per linear foot of each size and dimension ratio (DR) of a fully functional reclaimed water main (either with or without restrained joints) furnished and installed in place and ready for service. The price shall include all necessary labor, equipment, fittings, and materials for furnishing, laying, and testing of the reclaimed water main and shall include but not be limited to:

- Project layout;
- Coordinating with utility owners for locating buried cables and other utilities during construction;
- Restraining utility poles;
- Protection of existing facilities;
- Clearing and grubbing;
- Exploratory excavations;
- Excavation of all material encountered including rock;
- Undercutting;
- Sheeting and bracing;
- Dewatering;
- PVC pipe and ductile iron fittings;
- Construction of concrete thrust blocks and/or restrained joints as required and/or as shown on the Construction Plans or City of North Port Standard Details;
- Detectable tape and locator wire;
- Clamps;
- Harnessing;
- Adapters;
- Fill materials, including temporary fill;
- Removal and replacement of unsuitable subgrade;
- Compaction and compaction testing;
- Grading;

- Replacement of grass, sod, unpaved roadway, and all other surface materials disturbed but not specifically designated as a separate bid item;
- Cleanup;
- Repair of existing utilities that are disturbed during construction;
- Temporary and permanent connections and appurtenances for filling and/or testing as required and/or as shown on the Construction Plans;
- Flushing;
- Pigging;
- Pressure testing;
- Placing into service;
- Furnishing, installation and maintenance of erosion control measures such as but not limited to silt fence and floating turbidity barriers;
- As-built record data, including but not limited to surveying and recording as-built information; and
- All other work incidental to the installation of the pipe complete in place.

Price shall also include the removal and replacement of all obstructions located in the path of the work including but not limited to signs, fences, trees, ornamental vegetation, landscaping structures, sidewalk, curbing, culverts, storm sewers, etc., unless paid for under a separate bid item.

BID ITEM	DESCRIPTION	UNITS
2A	12-INCH PVC C-900, DR-18 PIPE AND FITTINGS	LF
2B	12-INCH PVC C-900, DR-18 R.J. PIPE AND FITTINGS	LF
2C	12-INCH PVC C-900, DR-14 PIPE AND FITTINGS	LF
2D	12-INCH PVC C-900, DR-14 R.J. PIPE AND FITTINGS	LF

C. HDPE Directional Bores (Item 3): Payment for HDPE directional bores will be made at the contract unit price per linear foot of each size and dimension ration (DR) of a fully functional reclaimed water main furnished and installed in place and ready for service. The price shall include all necessary labor, equipment, fittings, and materials for furnishing, installing, and testing of the reclaimed water main and shall include but not be limited to:

- Project layout;
- Staging;
- Coordinating with utility owners for locating buried cables and other utilities during construction;
- Restraining utility poles;
- Protecting of existing facilities;
- Clearing and grubbing;
- Exploratory excavations;
- Excavation of all material encountered including rock encountered during the drilling/boring process.
- Sheeting and bracing;
- Dewatering;

- HDPE pipe with welded joints;
- Connections to adjacent pipe, including but not limited to welded connections/adapters, ductile iron fittings, gaskets, and mechanical joint restraints;
- Locator wire;
- Sub-aqueous crossing signs;
- Removal of drillers bentonite mud;
- Compaction and compaction testing;
- Grading;
- Replacement of grass, sod, unpaved roadway, and all other surface materials disturbed but not specifically designated as a separate bid item;
- Cleanup;
- Repair of existing utilities that are disturbed during construction;
- Temporary and permanent connections and appurtenances for filling and/or testing as required and/or as shown on the Construction Plans;
- Flushing;
- Pigging;
- Pressure testing;
- Placing into service;
- Furnishing, installation and maintenance of erosion control measures such as but not limited to silt fence and floating turbidity barriers;
- As-built record data, including but not limited to surveying and recording as-built information; and
- All other work incidental to the installation of the pipe complete in place.

Price shall also include the removal and replacement of all obstructions located in the path of the work including but not limited to signs, fences, trees, ornamental vegetation, landscaping structures, sidewalk, curbing, culverts, storm sewers, etc., unless paid for under a separate bid item.

Measurement of the pipe shall be to the nearest foot along the centerline of the pipe as measured in the horizontal plane between the limits shown on the Construction Plans. If the City agrees that field conditions (e.g., minimum radius, installation conditions) require the beginning and/or end of directional drills be extended, the extension will be paid for at the unit price bid for Item 2B – 12-INCH PVC C-900, DR-18 RJ PIPE AND FITTINGS.

BID ITEM	DESCRIPTION	UNITS
3A	12-INCH HDPE DR-11 DIRECTIONAL BORE UNDER DRIVEWAY AT STA 32+60	LF
3B	12-INCH HDPE DR-11 DIRECTIONAL BORE UNDER DRIVEWAY AT STA 38+20	LF

- D. 6-Inch Stub-out with Gate Valve (Item 4): Payment for 6-inch stub-outs with gate valve will be made at the contract unit price for each fully functional 6-inch stub-out with gate valve furnished and installed in place and ready for service. The price shall include all necessary labor, equipment, fittings, and materials for furnishing, installing, and testing the 6-inch stub-out with gate valve and shall include but not be limited to:

- Project layout;
- Coordinating with utility owners for locating buried cables and other utilities during construction;
- Restraining utility poles;
- Protection of existing facilities;
- Clearing and grubbing;
- Exploratory excavations;
- Excavation of all material encountered including rock;
- Undercutting;
- Sheeting and bracing;
- Dewatering;
- PVC pipe (6-inch PVC C-900, DR-18) and ductile iron fittings (including but not limited to 6-inch mechanical joint cap and 12-inch x 12-inch x 6-inch tee);
- 6-inch gate valve and concrete valve collar including but not limited to bedding, adjustable cast iron valve box, operator extensions; tracer wire access box; reinforced concrete pad(s), brass ID tag, and reflective delineator;
- Construction of concrete thrust blocks and/or restrained joints as required and/or as shown on the Construction Plans or City of North Port Standard Details;
- Detectable tape and locator wire;
- Clamps;
- Harnessing;
- Adapters;
- Fill materials, including temporary fill;
- Removal and replacement of unsuitable subgrade;
- Compaction and compaction testing;
- Grading;
- Replacement of grass, sod, unpaved roadway, and all other surface materials disturbed but not specifically designated as a separate bid item;
- Cleanup;
- Repair of existing utilities that are disturbed during construction;
- Temporary and permanent connections and appurtenances for filling and/or testing as required and/or as shown on the Construction Plans;
- Flushing;
- Pigging;
- Pressure testing;
- Placing into service;
- Furnishing, installation and maintenance of erosion control measures such as but not limited to silt fence and floating turbidity barriers;
- As-built record data, including but not limited to surveying and recording as-built information; and
- All other work incidental to the installation of the stub-out complete in place.

Price shall also include the removal and replacement of all obstructions located in the path of the work including but not limited to signs, fences, trees, ornamental vegetation, landscaping structures, curbing, culverts, storm sewers, etc., unless paid for under a separate bid item.

BID ITEM	DESCRIPTION	UNITS
4	6-INCH STUB-OUT WITH GATE VALVE	EA

E. Air Release Assembly (Item 5): Payment for air release assemblies will be paid for at the contract unit price each full functional air release assembly furnished and installed in place and ready for service. The price shall include all necessary labor, equipment, fittings, and materials for furnishing and installing the air release assembly and shall include but not be limited to:

- Double strap service saddle and connection to water main;
- Corporation stop;
- Curb stop;
- CTS tubing;
- Brass fittings;
- Locator wire;
- Meter box and cover;
- Crushed rock or shell;
- As-built record data, including but not limited to surveying and recording as-built information; and
- All other work incidental to the installation of the air release assembly complete in place.

BID ITEM	DESCRIPTION	UNITS
5	AIR RELEASE ASSEMBLY	EA

F. Connections to Existing Reclaimed Water Mains (Item 6): Payment for connections to existing reclaimed water mains will be made at the lump sum contract unit price for each connection complete in place and ready for service. The price shall include all necessary labor, equipment, fittings, and materials for connecting new PVC water mains paid for under Item 2 to existing reclaimed water mains and shall include but not be limited to:

- All necessary coordination with the City for connections to existing reclaimed water mains;
- Coordinating with utility owners for locating buried cables and other utilities during construction;
- Restraining utility poles;
- Protection of existing facilities;
- Clearing and grubbing;
- Exploratory excavations;
- Excavation of all material encountered including rock;
- Undercutting;
- Sheeting and bracing;

- Dewatering;
- Necessary demolition including but not limited to saw-cutting and removal of existing pipe and removal of existing fittings;
- PVC pipe and ductile iron fittings;
- Construction of concrete thrust blocks and/or restrained joints as required and/or as shown on the Construction Plans or City of North Port Standard Details;
- Detectable tape and locator wire;
- Fill materials, including temporary fill;
- Removal and replacement of unsuitable subgrade;
- Compaction and compaction testing;
- Grading;
- Replacement of grass, sod, unpaved roadway, and all other surface materials disturbed but not specifically designated as a separate bid item;
- Cleanup;
- Repair of existing utilities that are disturbed during construction;
- Temporary and permanent connections and appurtenances for filling and/or testing as required and/or as shown on the Construction Plans;
- Testing;
- Placing into service;
- Furnishing, installation and maintenance of erosion control measures such as but not limited to silt fence and floating turbidity barriers;
- As-built record data, including but not limited to surveying and recording as-built information; and
- All other work incidental to the installation of the connection complete in place.

Price shall also include the removal and replacement of all obstructions located in the path of the work including but not limited to signs, fences, trees, ornamental vegetation, landscaping structures, sidewalk, curbing, culverts, storm sewers, etc., unless paid for under a separate bid item.

Relocation of the existing 2-inch service tap at the driveway at STA 38+20 shall be included in Item 6B – CONNECTION TO EXISTING 6-INCH MAIN AT DRIVEWAY AT STA 38+20. This shall include but not be limited to removal of the existing 6-inch cap with a 2-inch tap for reclaimed water service at STA 37+49.2; installation of a new 2-inch service tap at STA 37+22.0; and connection of the new 2-inch service line to the existing irrigation system.

BID ITEM	DESCRIPTION	UNITS
6A	CONNECTION TO EXISTING 16-INCH STUB-OUT AT PAN AMERICAN BOULEVARD	LS
6B	CONNECTION TO EXISTING 6-INCH MAIN AT DRIVEWAY AT STA 38+20	LS
6C	CONNECTION TO EXISTING 6-INCH AND 12-INCH MAINS AT WEST PRICE BOULEVARD	LS

- G. Deflection at Future Storm Culvert (Bid Alternate Item 7): Payment for deflecting reclaimed water mains at future storm culverts will be made at the contract unit price for each deflection

requested by the City and made by the Contractor at the location of a future storm culverts or other utilities. Payment will be made for this item when the City directs the Contractor to construct a vertical deflection to avoid a storm culvert or utility main proposed to be installed as part of future roadway improvement project that are currently in design for the unimproved section of Spring Haven Drive between approximately STA 1+30 and STA 31+80.

The price for this item will be in addition to the unit cost paid for PVC pipe for the items under Item 2 – PVC Reclaimed Water Main Pipe and Fittings. The price shall include all additional necessary labor, equipment, fittings, and materials for deflecting reclaimed water mains at future storm culverts or utility mains in excess of the work included for the bid items under Item 2 – PVC Reclaimed Water Main Pipe and Fittings. The additional labor, equipment, fittings, and materials paid for under this item shall include but not be limited to:

- Four 12-inch 45-degree ductile iron bends with mechanical joint restraints (or lesser degree bends);
- Additional coordination with utility owners for locating buried cables and other utilities during construction;
- Additional exploratory excavations;
- Additional excavation of all material encountered including rock;
- Additional sheeting and bracing;
- Additional dewatering;
- Additional fill materials, including temporary fill;
- Additional compaction and compaction testing;
- As-built record data, including but not limited to surveying and recording as-built information; and
- All other work incidental to the deflection of reclaimed water main at a future storm culvert complete in place that is not paid for under a separate bid item.

BID ITEM	DESCRIPTION	UNITS
7	DEFLECTION AT FUTURE STORM CULVERT OR UTILITY MAINS	EA

END OF SECTION

SECTION 01040
CONTRACT COORDINATION PROCEDURES

PART 1 - GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Coordination of Work required by the Contract Documents.

1.02 GENERAL REQUIREMENTS

- A. The Contractor shall coordinate scheduling, submittals, and Work of the various sections of these Technical Specifications to assure efficient and orderly sequence of installation of construction elements, with provisions for accommodating items to be installed later.

1.03 MEETINGS

- A. The Contractor shall hold frequent coordination meetings and pre-installation conferences with personnel and subcontractors to assure coordination of Work.

1.04 COORDINATION OF SUBMITTALS

- A. The Contractor shall schedule and coordinate submittals as specified in Section 01340.
- B. The Contractor shall coordinate work of various sections having interdependent responsibilities for installing, connecting to, and placing improvements in service.
- C. The Contractor shall coordinate requests for substitutions from all subcontractors to assure compatibility of space, of operating elements, and effect on work of other sections.

1.05 COORDINATION OF CONTRACT CLOSEOUT

- A. The Contractor shall coordinate completion and cleanup of work in preparation for Substantial Completion.
- B. After City occupancy of premises, the Contractor shall coordinate access to the site for correction of defective Work and Work not in accordance with Contract Documents, in a manner that minimizes disruption of the City's activities.
- C. The Contractor shall assemble and submit the following (if not previously submitted):
 - 1. Project Record Documents: In accordance with Section 01720.
 - 2. Warranties and Bonds: In accordance with Section 01740.

3. Evidence of payment and release of liens in accordance with the conditions of the Contract Documents.
4. Consent of Surety to final payment.

1.06 COORDINATION WITH OTHER CONTRACTORS

- A. The Contractor shall cooperate with other contractors working within the same site or on adjacent sites.
- B. The Contractor shall coordinate the Work of this Contract with other contractors so as not to interfere with or hinder the progress or completion of the work being performed by other contractors.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

SECTION 01060
EXCAVATION – SUNSHINE 811

PART 1 - GENERAL

1.01 REQUIREMENTS INCLUDED

- A. The Contractor shall comply with all regulations and laws concerning excavation, demolition, and use of explosives in any public way, public utility company right-of-way or easement, or privately owned land under which any public utility company maintains facilities.

1.02 REQUIREMENTS

- A. Utility Underground Plant Damage Prevention Authority: Sunshine State One Call (Sunshine 811) is the Utility Underground Plant Damage Prevention Authority in Florida.
 - 1. Not all utilities are members of Sunshine State One Call.
- B. The telephone number for Sunshine State One Call is 811.
 - 1. Dialing 811 will not work to contact Sunshine State One Call if the call is made from a phone network that requires dialing 9 or another number before connecting to an outside network.
- C. The Contractor shall notify Sunshine State One Call of contemplated excavation, demolition, and use of explosives in public or private ways and in any utility company right of way or easement.
- D. The Contractor shall also notify all non-members of Sunshine State One Call of contemplated excavation, demolition, and use of explosives in public or private ways and in any utility company right of way or easement.
- E. Notification of Sunshine State One Call and non-members of Sunshine State One Call shall be made at least forty-eight (48) hours (two business days) prior to the work, but not more than five (5) days before the contemplated work. Such notice shall include the name of the street or the route number of said way and an accurate description of the location and nature of the proposed work. Utilities contacted are required to respond to the notice within forty-eight (48) hours (two business days) from the time said notice is received by designating at the specified site the location of pipes, mains, wires, or conduits.
- F. The Contractor shall not commence Work until all utilities have responded as noted above. The Work shall then be performed in such a manner and with reasonable precautions taken to avoid damage to utilities under the surface in said areas of Work.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

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SECTION 01201
PROJECT MEETINGS

PART 1 - GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Requirements for conducting conferences and meetings for the purposes of addressing issues related to the Work, reviewing and coordinating progress of the Work, and other matters of common interest.

1.02 QUALIFICATIONS OF MEETING PARTICIPANTS

- A. Representatives of entities participating in meetings shall be qualified and authorized to act on behalf of entity each represents.

1.03 PROGRESS MEETINGS

A. General:

- 1. Progress meetings shall be conducted in accordance with the requirements of Section III – Special Provisions. The frequency and location of these meetings may be altered upon the agreement of the City and Contractor.
- 2. The purpose of Progress Meetings shall be to expedite work of subcontractors or other organizations that are not meeting scheduled progress, resolve conflicts, and coordinate and expedite execution of the Work.

- B. The City shall make physical arrangements for the meetings, prepare agendas, notify each anticipated participant, preside at the meetings, record minutes, and distribute copies of the minutes within seven (7) days of meeting to participants and interested parties.

- C. Attendance: Contractor's superintendent; representatives of the City; subcontractors who are or are proximate to be actively involved in the Work; and others who are necessary to agenda are required. Representatives of utilities when the Work affects their interests shall be invited.

D. The Contractor shall submit at each meeting:

- 1. Construction schedule, regardless whether revisions have been made.
- 2. A written projected schedule for the next two weeks.
- 3. Written claims for additional compensation.
- 4. Written claims for rain days to extend the Contract

5. Results of all testing and Value Engineering Proposals.
- E. The Contractor shall submit at each progress meeting:
1. Construction Schedule.
 2. Pay Request.
- F. Tentative Agenda:
1. Review of Work progress and schedule.
 - a. Actual start and finish dates of completed activities since last progress meeting.
 - b. Durations and progress of activities not completed.
 - c. Subcontractors' progress.
 - d. Percentage of completion of items on Pay Request.
 - e. Delivery schedules.
 - f. Revisions to Schedule: Shall include reasons for required revisions and their effect on Contract Time and Contract Price.
 2. Potential problems which may impede scheduled progress and corrective measures
 3. Change Orders: Reason, time, and cost data.
 4. Submittals.
 5. Other items affecting progress of the Work.
- 1.04 PRE-INSTALLATION MEETINGS
- A. General: The Contractor shall meet with manufacturers and installers of major units of construction which require coordination between the Contractor, the City, subcontractors, or others. Major units of construction which require pre-installation meetings include:
1. Piping tie-ins.
 2. Horizontal directional drills.
 3. Any work requiring a shutdown or other interruptions.

- B. Meetings shall be conducted at the North Port Utilities Office located at 6644 West Price Blvd., North Port, FL 34291, or other mutually agreed upon place.
- C. The Contractor shall schedule meetings at least seven (7) days in advance of installation. The Contractor shall prepare and distribute to each anticipated participant a written notice and agenda at least four (4) days before the meeting. The Contractor shall preside at the meetings, record minutes, and distribute copies of the minute within seven (7) days of meeting to participants and interested parties.
- D. Attendance: Contractor's superintendent, appropriate manufacturers and installers of major units of constructions, affected subcontractors, and others affected. The City shall be invited.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

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SECTION 01310
PROGRESS SCHEDULES

PART 1 - GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Procedures for preparation and submittal of construction Progress Schedules and periodic updating using a Critical Path Method Schedule.

1.02 FORMAT

- A. Prepare schedules as a horizontal bar chart or network with separate bar or node for each major portion of Work or operation, identifying first work day of each week and identifying each portion of the Work that is critical to timely project completion.
- B. Sequence of Listings: The chronological order of the start of each item of Work.
- C. Scale and Spacing: Provide space for notations and revisions.
- D. Sheet Size: Multiple of 11 inches x 17 inches.

1.03 CONTENT

- A. Show complete sequence of construction by activity, with dates for beginning and completion of each element of construction. Activities shall, as a minimum, include the bid items from the Bid Form or an explanation why a bid item is not included as an activity.
- B. Identify each item by major Technical Specification Section number.
- C. Identify Work of separate stages and other logically grouped activities.
- D. Show accumulated percentage of completion of each item, and total percentage of Work completed, as of the last day of each month.
- E. A separate schedule of submittal dates for shop drawings, product data and samples, and dates reviewed submittals will be required by the City.
- F. Coordinate content with requests for payment of completed work.
- G. The Contractor shall not manipulate float time which results in a schedule that varies substantially from the contract time allowed in these Contract Documents.

1.04 REVISIONS TO SCHEDULES

- A. Indicate progress of each activity to date of submittal, and indicate projected completion date of each activity.
- B. Identify activities modified since previous submittal, major changes in scope, and other identifiable changes.
- C. Provide narrative report to define problem areas, anticipated delays, and impacts on schedule. Report corrective action taken or proposed and its effect.

1.05 SUBMITTALS

- A. Submit initial schedules at the preconstruction meeting. After review, resubmit required revised data within ten (10) days.
- B. Submit revised progress schedules for review with each pay request.
- C. Submit six (6) copies: Three (3) copies will be retained by the City and three (3) copies will be returned to the Contractor.
 - 1. With prior approval from the City, schedules may be submitted electronically as PDF files in lieu of hard copies.

1.06 DISTRIBUTION

- A. Distribute copies of reviewed schedules to job site file, subcontractors, suppliers, and other concerned entities.
- B. Instruct recipients to promptly report, in writing, problems anticipated by projections shown in schedules.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

SECTION 01340
SUBMITTALS

PART 1 - GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Procedures for submittals.
- B. Schedule of submittals.

1.02 SHOP DRAWINGS

- A. Present in a clear and thorough manner. Title each drawing with Project name and number; identify each element of drawings by reference to Technical Specification Section and Paragraph, sheet number, detail, and schedule of Contract Documents. The Contractor shall use and complete the transmittal form included at the end of this Section.
- B. Identify field dimensions. Show relation to adjacent or critical features, Work, or products.
- C. Minimum Sheet Size: 8-1/2 inches x 11 inches.
- D. Maximum Sheet Size: 24 inches x 36 inches.

1.03 PRODUCT DATA

- A. Submit only pages which are pertinent. Mark each copy of standard printed data to identify pertinent products, referenced to Technical Specification Section number. Show reference standards, performance characteristics, and capacities; component parts; finishes; dimensions; required clearances; etc.; to show compliance with the Construction Plans and Technical Specifications. Provide Material Safety Data Sheets required by OSHA for all chemicals to be supplied under this Contract. Submittals made without the required transmittal form that clearly identifies the respective Technical Specification Section number for which the submittal is being made will be returned without review. It is the Contractor's responsibility to make clearly identified submittals.
- B. Modify manufacturer's standard schematic drawings and diagrams to supplement standard information and to provide information specifically applicable to the Work. Delete information not applicable.
- C. Provide manufacturer's preparation, assembly, delivery, storage, installation, startup, adjusting, and finishing instructions.
- D. If similar or identical submittal material can be submitted under more than one Technical Specification Section, the Contractor shall make separate, clearly identified submittals for each

Technical Specification Section. Submittal materials for any Technical Specification Section shall be complete for that Section; partial submittals are unacceptable.

1.04 SAMPLES

- A. Submit full range of manufacturer's standard finishes, except when more restrictive requirements are specified, indicating colors, textures, and patterns, for the City's selection.
- B. Submit samples to illustrate functional characteristics of products, including parts and attachments.
- C. Acceptable samples which may be used in the Work are indicated in the Technical Specification Section.
- D. Label each sample with identification required for transmittal letter.
- E. Provide field samples of finishes for Project, at location acceptable to the City, as required by individual Technical Specification Sections. Install each sample complete and finished. Acceptable finishes in place may be retained in completed work.
- F. Those provisions of Paragraph 1.03 of this Section that relate to submittal identification and completeness are applicable for sample submittal.

1.05 CONTRACTOR REVIEW

- A. Review submittals prior to transmittal. Determine and verify field measurements, field construction criteria, manufacturer's catalog numbers, and conformance of submittal with requirements of the Contract Documents.
- B. Coordinate submittals with requirements of the Work and Contract Documents.
- C. Sign and date each sheet of shop drawings and product data, and each sample label to certify compliance with requirements of the Contract Documents. Notify the City in writing at time of submittal of any deviations from requirements of the Contract Documents.
- D. Do not purchase, fabricate, or ship products or begin work that requires submittals until return of submittal that the City has reviewed.
- E. The Contractor shall check and verify all field measurements and shall be responsible for prompt submission of all shop and working drawings so there are be no delay in the Work.
- F. The Contractor shall be responsible for the delays and/or additional expenses that result from the Contractor's failure to submit a complete submittal and/or to identify portions of the submittal that do not conform to the Technical Specifications.

1.06 SUBMITTAL REQUIREMENTS

- A. At the preconstruction meeting, it will be decided whether electronic submittals will be the selected submittal method for the project.
- B. Transmit submittals with required submittal form included herewith in accordance with the Progress Schedule and in such sequence to avoid delay in the Work.
- C. Apply Contractor's stamp, signed certifying to review, verification of products, field dimensions and field construction criteria, and coordination of information with requirements of the Work and Contract Documents.
- D. Coordinate submittals into logical groupings to facilitate interrelation of the several items:
 - 1. Finishes that involve the City's selection of colors, textures, or patterns.
 - 2. Associated items that require correlation for efficient function or for installation.
- E. Submit six (6) copies of shop drawings with each page or sheet assembled in separate sets: Three (3) copies will be retained by the City upon review and three (3) copies will be returned to the Contractor.
 - 1. With prior approval from the City, shop drawings may be submitted electronically as PDF files in lieu of hard copies.
- F. Submit six (6) copies of product data: Three (3) copies will be retained by the City upon review and three (3) copies will be returned to the Contractor.
 - 1. With prior approval from the City, product data may be submitted electronically as PDF files in lieu of hard copies.
- G. Submit number of samples required by individual Technical Specification Sections.
- H. Use transmittal form provided in this Technical Specification Section for submittals to the City. Identify Project by title and number. Identify work and product by Technical Specification Section and Paragraph number. The City will designate a submittal number upon receipt.
 - 1. With prior approval, submittals may also be made electronically with PDF files in lieu of hard copies.

1.07 RESUBMITTALS

- A. Contractor shall make resubmittals under procedures specified for initial submittals. Changes made since previous submittal shall be identified.

1.08 CITY REVIEW

- A. The City will respond to thorough, clear, complete submittals with reasonable promptness (approximately two (2) weeks).
- B. Submittals reviewed will be returned stamped.
- C. Incomplete, vague, non-stamped, and otherwise unacceptable submittals will be returned un-reviewed.

1.09 DISTRIBUTION

- A. The Contractor shall duplicate and distribute reproductions of shop drawings, copies of product data, and samples that bear the City's stamp to the job site file, the Record Documents file, subcontractors, suppliers, other affected contractors, and other entities requiring information.

1.10 SCHEDULE OF SUBMITTALS

- A. Shop drawings, product data, and sample submittals shall be made in a timely and logical fashion taking into account work scheduling and job progress.
- B. It is the Contractor's responsibility to prepare, coordinate, and review all submittals prior to delivery to the City. The City will review each complete and thorough submittal and one resubmittal at no cost to the Contractor. The Contractor shall reimburse the City for all reasonable costs associated with the City's and/or the City's designated representative review of each subsequent resubmittal.

1.11 REVIEW QUALIFICATION

- A. Regardless of corrections made or acceptance of such drawings by the City, the Contractor shall nevertheless be responsible for the accuracy of such drawings, their conformity to the Contract Documents, and suitability for the Work.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

SUBMITTAL FORM

Submittal No. (to be assigned by City): _____

Submittal Date: _____

1. The attached submittal covers materials or equipment specified under:

Specification Section _____, titled _____

and/or Drawing No. _____, titled _____

2. This submittal covers material or equipment that is: (circle one):

a. in full compliance with that specified

b. in compliance with that specified except for the attached minor deviations:

(Identify the minor deviations with particularity. If the City determines these deviations to be other than minor, the submittal will be rejected and the Contractor must submit a request for substitute materials or equipment. THE CITY'S REVIEW AND ACCEPTANCE OF SHOP DRAWINGS OR SAMPLES SHALL NOT RELIEVE CONTRACTOR FROM RESPONSIBILITY FOR ANY VARIATION FROM THE REQUIREMENTS OF THE CONTRACT DOCUMENTS UNLESS CONTRACTOR EXPRESSLY BRINGS EACH VARIATION TO THE CITY'S ATTENTION AND THE CITY HAS GIVEN WRITTEN ACCEPTANCE OF EACH SUCH VARIATION BY A SPECIFIC WRITING).

3. Certification

Signed _____

Title _____

Company _____

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SECTION 01400
QUALITY CONTROL

PART 1 - GENERAL

1.01 REQUIREMENTS INCLUDED

- A. General quality control.
- B. Manufacturers' field services.

1.02 QUALITY CONTROL

- A. Maintain quality control over suppliers, Manufacturers, products, services, site conditions, and workmanship to produce work of specified quality.

1.03 WORKMANSHIP

- A. Comply with industry standards except when more restrictive tolerances, more rigid standards, or more precise workmanship are specified.
- B. Perform work using persons fully qualified to produce workmanship of specified quality.
- C. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, and racking.

1.04 MANUFACTURER INSTRUCTIONS

- A. Comply with Manufacturers' printed instructions for delivery, storage, assembly, installation, startup, adjusting, and finishing, as appropriate.
- B. Comply with instructions in full detail, including each step in sequence. Should instructions conflict with Contract Documents, the Contractor shall request clarification from the City before proceeding.

1.05 MANUFACTURERS' CERTIFICATES

- A. As required by individual Technical Specification Sections, submit Manufacturers' certifications, in duplicate, that products meet or exceed specified requirements.

1.06 MANUFACTURERS' FIELD SERVICES

- A. As directed by the City and individual Technical Specification Sections, Manufacturers shall provide qualified personnel to observe field conditions; conditions of surfaces and installation; quality of workmanship; start-up of equipment; and testing, adjusting, and balancing of equipment as applicable.

- B. Manufacturers' representatives shall submit written reports to the City listing observations, tests, and corrective measures.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

SECTION 01620
STORAGE AND PROTECTION

PART 1 - GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Providing secure storage and protection for products to be incorporated into the Work.
- B. Maintaining and protecting products after installation and until completion of the Work.

1.02 STORAGE

- A. Store and protect products immediately on delivery. Store products in accordance with Manufacturers' instructions, with seals and labels intact and legible.
- B. Store products subject to damage by elements in substantial weather tight enclosures.
 - 1. Maintain temperatures within ranges required by Manufacturers' instructions.
 - 2. Provide humidity control for sensitive products as required by Manufacturers' instructions.
 - 3. Store unpacked products on shelves, in bins, or in neat piles accessible for inspection.
- C. Exterior Storage:
 - 1. Provide substantial platforms, blocking, or skids to support fabricated products above ground and to prevent soiling or staining. Cover products subject to discoloration or deterioration from exposure to the elements with impervious sheet coverings. Provide adequate ventilation to avoid condensation.
 - 2. Store loose granular materials on solid surfaces such as paved areas, or provide plywood or sheet materials to prevent mixing with foreign matter.
 - a. Provide surface drainage to prevent flow or ponding of rainwater.
 - b. Prevent mixing of refuse or chemically injurious materials or liquids.
- D. Arrange storage in a manner to provide easy access for inspection.

1.03 MAINTENANCE OF STORAGE

- A. Maintain periodic system of inspection of stored products on a scheduled basis to assure that:
 - 1. State of storage facilities is adequate to provide required conditions.

2. Required environmental conditions are maintained on continuing basis.
 3. Surfaces of products exposed to elements are not adversely affected.
- B. Any weathering of products, coatings, and finishes is unacceptable under requirements of the Contract Documents. Any product damaged because of improper storage or protection shall be unacceptable for installation and shall be removed from the site. Damaged products shall be replaced by the Contractor at no cost to the City.

1.04 PROTECTION AFTER INSTALLATION

- A. Provide protection of installed products to prevent damage from subsequent operations. Remove protection when no longer needed, prior to completion of Work.
- B. Control traffic to prevent damage to equipment and surfaces.

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. Maintaining and submitting project record documents and samples.

1.02 MAINTENANCE OF DOCUMENTS AND SAMPLES

- A. Maintain at the site for the City one (1) record copy of:
 - 1. Construction Plans.
 - 2. Technical Specifications.
 - 3. Addenda.
 - 4. Change Orders and other modifications to the Contract.
 - 5. Accepted shop drawings, product data, and samples.
 - 6. Field test records.
 - 7. Inspection certificates.
 - 8. Manufacturers' certificates.
 - 9. Manufacturers' operating and maintenance manuals
 - 10. Up to date project as-built red-lines.
- B. Label and file record documents and samples in accordance with Section number listings in Table of Contents of these Technical Specification. Label each document "PROJECT RECORD" in neat, large, printed letters.
- C. Store record documents and samples in field office apart from documents used for construction. Provide files, racks, and secure storage for record documents and samples. Maintain record documents in a clean, dry, and legible condition. Do not use record documents for construction purposes.
- D. Keep record documents and samples available for inspection by the City.

1.03 RECORDING

- A. Record information on a full-size set of Construction Plans.
- B. Use separate colors for each major system for recording information.
- C. Record information concurrently with construction progress. Do not conceal any work until required information is recorded.
- D. Measured locations shall be referenced to horizontal and vertical datums of the original Construction Plans
- E. Utility Record Drawings: The utility record drawings shall correctly and accurately show all utilities found during construction and shall reflect all new construction as it was built. These drawings shall be neat and legible, showing only the actual position of the utilities and not the proposed. The drawings shall show all elevations and horizontal control for all utilities encountered. They shall include but not limited to, the material used to construct the utilities and all structures, pipes, and fittings. At a minimum, comply with the following:
 - 1. Identify all utility conflicts and crossings. Provide horizontal locations and elevations of each utility at conflicts and crossing. Identify the material, size, usage, etc., for each utility line.
 - 2. Provide horizontal locations and elevations at top of pipe elevations at an interval not exceeding 100 LF. Horizontal locations and elevations shall also be provided at each pipe joint where a deflection (horizontal or vertical) occurs. Finished grade elevations shall be recorded at each location.
 - 3. Provide horizontal locations and elevations on all underground appurtenances including but not limited to fittings, couplings, valves, service saddles, meters, air release assemblies, and the end points of casings. For each underground appurtenance, provide three-point swing-ties (maximum distance of 200 feet).
 - a. Swing ties shall be measured from permanent reference points, i.e., edge of power or telephone poles, center of manholes and storm inlet structures, building comers, fire hydrant bonnets, and other objects not likely to be relocated at a later time. Unacceptable reference points shall include fence posts, street curbs, driveway comers, trees, signs, valve boxes, nails, survey marks, etc. Swing ties shall be entered into a swing tie table that shall be provided to the City in AutoCAD format.
 - b. Horizontal locations and elevations and swing ties shall also be provided for the end points pipe installed by horizontal directional drilling methods.
 - c. Provide top of nut elevations for valves.
 - 4. Identify limits of restrained joint pipe.

5. Identify locations for changes in pipe material.
 6. Identify limits of utilities abandoned in place, if applicable.
 7. Identify changes made by addenda or modifications.
 8. Provide details not on original Construction Plans.
 9. Record drawing information shall be provided to the City in AutoCAD format.
- F. Specifications: Legibly mark each item to record actual construction, including:
1. Manufacturer, trade name, and catalog number of each product actually installed, particularly optional items and substitute items.
 2. Changes made by addenda or modifications.
- G. Other Required Record Documents:
1. Maintain Manufacturers' certifications, inspection certifications, and field test records, required by individual Technical Specification Sections.
 2. Provide bore logs for underground utilities installed using horizontal directional drilling (HDD) methods in accordance with Section 02300.
- 1.04 STORMWATER POLLUTION PREVENTION PLANS
- A. In accordance with EPA Guidelines, maintain records on stormwater management controls and inspections. Prepare an inspection and maintenance plan that corresponds to the sequencing of major activities.
1. Reference Document: U.S. EPA Stormwater Management for Construction Activities; Developing Pollution Prevention Plans and Best Management Practices, EPA 832-R-92-005, September, 1992.
- B. Provide for inspection of silt fencing and erosion control measures once every seven (7) days or after each rainfall event.
- C. Keep a record of these inspections in the field office. Note any changes to best management practices shown in the Contract Documents.
1. Record the amount of rainfall on a daily basis.
 2. Dates when major grading activities occur.
 3. Dates when construction activities temporarily cease.

4. Dates when construction activities permanently cease.
 5. Report any release of reportable quantities of oil or hazardous materials.
- D. Update and change the Stormwater Pollution Prevention Plan as necessary to address any change in design or construction operation.
- E. Submit a sample of the report format to be used.

1.05 SUBMITTALS

- A. At Contract closeout, the Contractor shall deliver all project record documents and samples specified herein to the City for use in the preparation of Project Record Drawings. Final as-built drawings shall be submitted to the City electronically in both PDF and AutoCAD formats, as well as four (4) hard copies signed and sealed by a Registered Surveyor.
1. AutoCAD Format: Utilize the existing AutoCAD design as a base and add new information. New items shall be included on new, clearly identified layers. All applicable items listed in Paragraph 1.03 shall be included.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

SECTION 01740
WARRANTIES AND BONDS

PART 1 - GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Preparing and submitting of warranties and bonds.

1.02 FORM OF SUBMITTALS

- A. Bind in new, commercial-quality, 8-1/2 inches X 11 inches, three-ring side binders with hardback, cleanable, plastic covers.
- B. Label cover of each binder with typed or printed title "WARRANTIES AND BONDS," with title of Project; name, address and telephone number of Contractor; and name of responsible principal.
- C. Table of Contents: Neatly typed, in the sequence of the Table of Contents of the Contract Documents, with each item identified with the number and title of the specification section in which specified, and the name of product or work item.
- D. Separate each warranty or bond with index tab sheets keyed to the Table of Contents listing. Provide full information, using separate typed sheets as necessary. List subcontractor, supplier, and Manufacturer, with name, address, and telephone number of responsible principal.

1.03 PREPARATION OF SUBMITTALS

- A. Obtain warranties and bonds, executed in duplicate by responsible subcontractors, suppliers, and Manufacturers within ten (10) days after completion of the applicable item of Work. Except for items put into use with the City's permission, leave date of beginning of time of warranty open until the date of substantial completion is determined. All warranty coverage shall be extended directly to the benefit of the City.
- B. Verify that documents are in proper form, contain full information, and are notarized.
- C. Co-execute submittals when required.
- D. Retain warranties and bonds until time specified for submittal.

1.04 TIME OF SUBMITTAL

- A. For equipment or component parts of equipment put into service during construction with the City's permission, submit documents within ten (10) days after acceptance.
- B. Make other submittals within ten (10) days after date of project completion, prior to the final application for payment.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

SECTION 01850
COLOR AUDIO-VIDEO PRECONSTRUCTION RECORD

PART 1 - GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Prior to commencing work, the Contractor shall have a detailed, continuous, color digital audio-video recording taken along the entire length of the Project to serve as a record of preconstruction conditions. All recordings and written video log records shall become property of the City.

1.02 CONSTRUCTION SCHEDULE

- A. Electronic Site recordings shall not be made more than fifteen (15) calendar days prior to construction.
- B. The Contractor shall notify the City two (2) weeks prior to conducting electronic site recordings so the City can notify residents and/or prepare a press-release if necessary. This notification to the City shall include the name of the company performing recordings and a description of identification used (i.e., vehicle logo).
- C. No construction shall begin prior to review and approval of the site recordings covering the construction area by the City.

1.03 VIDEOGRAPHERS

- A. The Contractor shall employ a competent party or commercial firm known to be skilled and regularly engaged in the business of preconstruction color digital audio-video site documentation.
 - 1. The City shall have the authority to reject all or any portion of a site recording not conforming to this Section and order that it be redone at no additional charge. The Contractor shall reschedule unacceptable coverage within five (5) calendar days after being notified. The City shall designate those areas, if any, to be omitted from or added to the audio-video coverage.

PART 2 - PRODUCTS

2.01 GENERAL

- A. Each audio-video recording shall be saved on DVD media viewable on standard DVD players and computers. The DVD video recording shall produce bright, sharp, clear pictures with accurate colors and shall be free from distortion or any other form of picture imperfection. All DVD video recordings shall display on the screen the time of day, the month, day, and year of the recording. This time and date information must be continuously and simultaneously generated

with the actual recording. The audio portion of the recording shall produce the commentary of the camera operator with proper clarity and be free from distortion.

2.02 EQUIPMENT

- A. Camera and Recorder: The video camera and recorder used in the electronic media site recordings shall be of industrial grade, consistent with current standards, and approved by the City. The camera shall be a high-resolution, color digital recorder with optical stabilization and 20X minimum optical magnification. The camera shall also have a minimum NTSC 525 lines resolution/60 fields/30 frames per second.
- B. Electronic Media: The DVD shall be original, previously unrecorded, blank media. If duplicate copies are required by the City, all copies shall be direct copies of the original DVD and marked as such.
- C. Wheeled Vehicles: Clearly mark any vehicles used for recording purposes with company's name and telephone number. Vehicles shall incorporate signs, flaggers, and lights as needed for safety purposes.

PART 3 - EXECUTION

3.01 COVERAGE

- A. The recordings shall contain coverage of all surface features within and directly adjacent to the construction zone. These features shall include, but not be limited to, all roadways, pavement, retention ponds, railroad tracks, curbs, bridges, bridge abutments, driveways, sidewalks, culverts, headwalls, retaining walls, landscaping, signs, mailboxes, trees, and fences. Of particular concern shall be the existence, or non-existence, of any faults, fractures, or defects. Electronic media coverage shall be limited to one side of the street at one time and shall include all surface conditions located within the zone of influence supported by appropriate audio description. Panning, zoom-in, and zoom-out rates shall be sufficiently controlled to maintain a clear view of the object.

3.02 AUDIO RECORDING

- A. Accompanying the video recording of each electronic media presentation shall be a corresponding and simultaneously recorded audio recording. This audio recording, exclusively containing the commentary of the camera operator shall assist in viewer orientation and in any needed identification, differentiation, clarification, or objective description of the features being shown in the video portion of the recording. The audio recording shall also be free from any conversation between the Contractor, camera operator, and any other production technicians.

3.03 ELECTRONIC MEDIA INDEXING

- A. All electronic media site recordings shall be permanently labeled and shall be properly identified by electronic media site recording number and project title.

- B. Electronic Media Site Recordings Log: Each electronic media site recording shall have a log of that recording's contents. The log shall describe the various segments of coverage contained on that recording (e.g., the names of the streets, waterways, or easements; coverage beginning and end times; directions of coverage; video unit counter numbers; engineering stationing numbers, when possible; and the date of recording).

3.04 TIME OF EXECUTION

- A. Visibility: All recording shall be performed during time of good visibility; no recording shall be done during periods of significant precipitation, mist, or fog. The recording shall only be done when sufficient sunlight is present to properly illuminate the subject and to produce sharp, bright video recordings of those subjects.

3.05 CONTINUITY OF COVERAGE

- A. In order to insure the continuity of coverage, the coverage shall consist of a single continuous unedited recording which begins at one end of a particular construction area. However, where coverage is required in areas not accessible by conventional wheeled vehicles and smooth transport of the recording system is not possible, such coverage shall consist of an organized interrelated sequence of recordings at various positions along that proposed construction area (e.g., a wooded easement area). Such coverage shall be obtained by walking or by a special conveyance approved by the City.

3.06 COVERAGE RATES

- A. Rate of speed in the general direction of travel of the vehicle used during videoing shall not exceed 75 feet per minute. Panning, zoom-in, and zoom-out rates shall be sufficiently controlled to maintain a clear view of the object.

3.07 CAMERA OPERATION

- A. Camera Height and Stability: When conventional wheeled vehicles are used as conveyances for the recording system, the vertical distance between the camera lens and the ground shall not exceed ten (10) feet. The camera shall be firmly mounted such that transport of the camera during the recording process will not cause an unsteady picture.
- B. Camera Control: Camera pan, tilt, zoom-in, and zoom-out rate shall be sufficiently controlled such that recorded objects shall be clearly viewed during audio-video playback. In addition, all other camera and recording system controls, such as lens focus and aperture, video level, pedestal, chroma, white balance, and electrical focus shall be properly controlled or adjusted to maximize picture quality.
- C. Viewer Orientation Techniques: The audio and video portions of the recording shall maintain viewer orientation. To this end, overall establishing views of all visible house and business addresses shall be utilized. In areas where the proposed construction location will not be readily

apparent to the electronic media viewer, highly visible yellow flags shall be placed, by the Contractor, in such a fashion as to clearly indicate the proposed center line of construction.

END OF SECTION

SECTION 02050
ENVIRONMENTAL PROTECTION

PART 1 - GENERAL

1.01 WORK INCLUDED

- A. Furnishing all labor, materials, equipment, and incidentals required to ensure adequate erosion and sediment control measures are in place throughout prosecution of the Work.

1.02 REFERENCE STANDARDS

- A. Current rules and regulations relating to erosion control of Southwest Florida Water Management District and Florida Department of Environmental Protection.
- B. Current rules and regulations relating to erosion control of the Environmental Protection Agency

1.03 REQUIREMENTS

- A. All Work shall comply with the measures shown in the Construction Documents and all conditions of the construction permit from Southwest Florida Water Management District, Florida Department of Environmental Protection, and the Environmental Protection Agency.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. All materials shall be in accordance with the descriptions herein and/or as shown in the Contract Documents.
 - 1. Silt Barrier: Filter fabric shall be in accordance with Florida Department of Transportation Standard Specifications for Road & Bridge Construction, Section 985. Posts shall be 2 inches x 4 inches wood, 2 inches minimum diameter wood, or 1.33 lbs/ft steel.
 - 2. Silt Curtain: Shall be sufficient size and constructed of material to control siltation of waters. Silt curtain shall be Mark II or Mark III manufactured by American Boom & Barrier Corp. of Port Canaveral, Florida, or approved equal.
 - 3. Temporary Seeding: Mixture of seed for temporary use shall be supplied to City for approval.

PART 3 - EXECUTION

3.01 EARTH MOVING ACTIVITIES

- A. The Contractor shall exercise care to preserve the natural landscape and shall conduct his/her construction operations so as to prevent any unnecessary destruction, scarring, or defacing of the natural surroundings in the vicinity of the work area. Except where clearing is required for permanent work, for approved construction roads, or for excavation operations, all trees, native shrubbery, and vegetation shall be preserved and shall be protected from damage which may be caused by the Contractor's construction operations and equipment.
- B. Topsoil shall be taken from the construction areas and stockpiled for reuse in finished grading. Stockpiles shall be located so as not to add any additional sediment to the construction. Stockpiles shall be protected at all times by on-side drainage control measures and shall be mulched and/or seeded when exposed beyond 30 days.
- C. Exposed soil and fill materials shall be permanently stabilized at the earliest practicable date. Graded areas shall be seeded and/or sodded within 30 days following earth moving procedures. If the time of year is not conducive for permanent seeding, a temporary mulch and/or seeding shall be used.
- D. Temporary diversion berms and/or barriers shall be removed only after the construction of those areas directed to the berms and/or barriers have been completed.

3.02 FILLS

- A. Land to be cut or filled shall be cleared of trees, stumps, roots, brush, boulders, sod, and debris. Refer to the Construction Plans for trees to be removed.
- B. Fill areas shall be scarified, keyed, and drained.
- C. Fill material shall be free of sod, roots, or other decomposable material.
- D. The placing and spreading of fill material shall be started at the lowest point.
- E. Generally, a 6 : 1 (V) slope should be used unless specific engineering data shows a steeper slope is stable. Slopes of 4 (H) : 1 (V) or flatter are desirable for erosion control and maintenance.
- F. Fills shall be seeded and/or mulches immediately upon completion of earth placement.
- G. Water management systems shall be provided to prevent water concentration and eroding the face of slope. Keep surface water off the face of the slope.

3.03 CUTS

- A. Diversions shall be constructed at top of slopes prior to cutting operations to convey water from face of slope.
- B. Steepness of cuts will depend on soil type and design; however, cut slopes of 4 (H) : 1 (V) or flatter are desirable for erosion control and stability.
- C. Cut slopes should be benched to provide access for seeding and mulching equipment.
- D. Cut slopes should be seeded and/or mulches immediately after removal of earth.

3.04 PERMANENT STORMWATER BASINS (IF REQUIRED)

- A. Site Preparation: Areas under the embankment and any structural works shall be cleared, grubbed, and stripped of topsoil to remove trees, vegetation, roots, or other objectionable materials.
- B. Embankment: The fill material shall be taken from approved borrow areas. It shall be clean mineral soil free of roots, woody vegetation, oversized stones, rocks, or other objectionable material. Areas on which fill is to be placed shall be scarified prior to placement of fill. Fill material shall be placed in continuous layers six (6) to eight (8) inches thick over the entire length of the fill. Compaction shall be obtained by routing hauling equipment over the fill so that the entire surface of each layer of the fill is traversed by at least one wheel of tread truck of the equipment or by the use of a compactor. The embankment shall be constructed to an elevation 10 percent higher than the design height to allow for settlement if compaction is obtained with hauling equipment. If compactors are used for compaction, the overbuild may be reduced to not less than 5 percent.
- C. Pipe Spillways: The riser shall be securely attached to the barrel of the outfall pipe. The barrel and riser shall be placed on a firm, smooth soil foundation. The connection between the riser and the riser base shall be watertight. The fill material around the pipe spillway shall be placed in layers four (4) inch thick and compacted under the shoulders and around the pipe to at least the same density as the adjacent embankment. Hand compacted backfill shall be placed over the pipe spillway before crossing it with construction equipment.
- D. Erosion Pollution Control: Construction operations shall be carried out in such a manner that erosion and water pollution will be minimized. State and local laws concerning pollution abatement shall be complied with.
- E. Sodding/Seeding: All exposed soil and fill areas shall be sodded or seeded unless otherwise directed by the City.

3.05 MAINTENANCE

- A. Repair all damages caused by soil erosion or construction equipment at or before the end of each working day.
- B. After grading is completed and areas are seeded and/or sodded, visual inspections should be made on a routine basis. Any damage to the berm shall be repaired at once and re sodded and/or re seeded. If the level of water is being maintained over the expected withdraw down time, the outfall system shall be cleaned and repaired. Areas shall be mowed and maintained by the Contractor until the project is closed out and accepted by the City.

3.06 HAZARDOUS MATERIALS

- A. The Contractor shall be responsible for the independent inspection and certification of the removal, transportation, and disposal of all identified and unidentified hazardous materials located within the project Site.

3.07 CLEANUP OF SPILLS

- A. The Contractor shall be responsible for cleanup of spills of bentonite drilling fluids, wastewater, or any other material encountered during construction efforts by the Contractor, his/her sub-contractors, and/or suppliers. Cleanup shall be completed to the satisfaction of the City at no additional cost to the City.

END OF SECTION

SECTION 02100
SITE PREPARATION

PART 1 - GENERAL

1.01 WORK INCLUDED

- A. Clearing of plant life and grass within limits of construction.
- B. Removing root systems of trees and shrubs in areas cleared.
- C. Pruning trees to remain where branches or roots will interfere with construction operations.
- D. Removal and disposal of material and debris off-site.

1.02 REGULATORY REQUIREMENTS

- A. Conform to applicable local, state, and federal regulations for disposal of debris.
- B. Disposing of material and debris on site is prohibited.
- C. Disposal by burning is prohibited.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.01 PROTECTION

- A. Protect plant growth and features to remain. Protect existing trees and other vegetation to remain in place against unnecessary cutting, breaking, skinning of roots, skinning or bruising of bark, smothering of trees by stockpiling construction materials or excavated materials within drip line, and excess vehicular or pedestrian traffic or parking of vehicles within the drip line.
- B. Protect all benchmarks, land monuments, and property markers from disturbance, displacement, and damage.
- C. Maintain designated site access for vehicular and pedestrian traffic.

3.02 CLEARING AND GRUBBING

- A. For areas to be cleared and grubbed, the surface of the ground shall be completely cleared of all timber, brush, stumps, roots, grass, weeds, rubbish, and all other objectionable obstructions resting on, or protruding through the surface of the ground.

B. Grubbing shall consist of the complete removal of all stumps, roots larger than 1-1/2 inches in diameter, matted roots, brush, timber, logs, and any other organic or metallic debris not suitable for foundation purposes resting on, under, or protruding through the surface of the ground to a depth of 18 inches below the subgrade. All depressions excavated below the original ground surface for, or by the removal of, such objects, shall be refilled with suitable materials and compacted to a density conforming to the surrounding ground surface.

1. Use only hand methods for grubbing inside drip lines of trees that are to remain in place.

C. Clearing for structures shall consist of topsoil and vegetation removal.

D. Clearing and grubbing operations shall be conducted so that the contractor shall not damage the existing structures, installations, and plant growth to remain or structures and installations under construction.

E. Clearing and grubbing shall be conducted in a manner that provides for the safety of employees and others.

3.03 STRIPPING

A. Topsoil shall be in areas designated or approved by the City.

B. Stockpiled topsoil shall be protected in accordance with the requirements of Section 02050.

C. Any topsoil remaining after all work is in place shall be disposed of by the Contractor on site as directed by the City.

3.04 DISPOSAL

A. The Contractor shall dispose of all material and debris from the clearing and grubbing operation by hauling such material and debris away to an approved facility.

B. The cost of hauling and disposal of cleared and grubbed material and debris shall be considered a subsidiary obligation of the Contractor and the cost shall be included in the Contract prices.

END OF SECTION

SECTION 02140
DEWATERING

PART 1 - GENERAL

1.01 SYSTEM PERFORMANCE REQUIREMENTS

- A. Dewatering shall include all necessary control and disposal of groundwater on a continual basis during construction.
- B. Dewatering shall include the lowering of the groundwater table to relieve any hydrostatic head that could cause a decrease in the stability of the excavated subgrade. It shall also include the intercepting of seepage which could otherwise emerge from the slope or sides of excavations which could cause a decrease in the stability of the excavated subgrade or the slopes or sides of the excavations.

1.02 ADDITIONAL PROVISIONS

- A. Provide, operate, and maintain any dewatering system required to lower and control groundwater levels and groundwater hydrostatic pressure during the construction of the Work as required by this Section and the Contract Documents. The Contractor shall assume full responsibility and expense for the adequacy of the dewatering system with no additional time for performance.
- B. The development, drilling, operation, and abandonment of all wells used in the dewatering system shall comply with regulations of the Florida Department of Environmental Protection and the governing Water Management District.
- C. Remove and dispose of water resulting from activities described in this Section. Provide siltation settling basins for all discharges from dewatering systems. Submit plan of settling basins and discharge facilities for review by the City prior to dewatering system installation.
- D. Remove dewatering systems and equipment when no longer required.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.01 EXECUTION

- A. The dewatering system shall be capable of developing an excavated subgrade relieved of any hydrostatic pressure that could cause a decrease in the stability of the excavated subgrade and which will provide the necessary groundwater control for the proper performance required for completion of the Work.
- B. The dewatering system shall not cause damage to newly constructed or existing properties,

buildings, utilities, and other work due to the loss of support from incompletely drained soils or from removal of soil particles resulting from the dewatering system operation.

- C. Dewatering facilities shall be located where they will not cause interference with work performed by others.
- D. If the dewatering system utilized by the Contractor causes or threatens to cause damage to new or existing facilities, the dewatering system shall be modified at no additional cost to the City. The Contractor shall be responsible for and shall repair all damage caused by the dewatering system operation at no additional cost to the City and at no additional time for performance.
- E. Dispose of subsurface water collected in a manner which conforms to all applicable local and state ordinances, statutes, and laws.
- F. Maintain continual and complete effectiveness of the dewatering system operation to provide a firm, stable, excavated subgrade at all times as required for proper performance of the Work.
- G. Provide dewatering necessary to maintain the groundwater table below the level of backfill as it is being placed.

3.02 JOB CONDITIONS

- A. Erosion Control: Provide adequate protection from erosion from any of the dewatering operations utilized during the course of the construction. Any damage, disruption or interference to newly constructed work or existing properties, buildings, structures, utilities and/or other work resulting directly or indirectly from dewatering operations conducted under this Contract shall be remedied by the Contractor, at no cost to the City.
- B. Treatment of Dewatering Operations Discharges: Provide such additional treatment devices as may be required to meet the provisions of the Contract. This may include the construction of sumps and/or settling basins, stone rip-rap, silt fences or other requirements. The treatment devices shall be later removed and/or filled in with acceptable backfill material, and restored to original conditions once they are no longer needed, at no additional cost to the City.
- C. Noise Control: All Work under this Section shall be executed in accordance with all Noise Ordinances of the City of North Port.

END OF SECTION

SECTION 02222
EXPLORATORY EXCAVATION

PART 1 - GENERAL

1.01 WORK INCLUDED

- A. Furnishing all labor, materials, equipment, and incidentals to necessary perform exploratory excavation, backfill exploratory excavations, and surface restoration.

1.02 DESCRIPTION

- A. Exploratory excavation shall be performed for the purpose of determining the location, size, material, etc., of underground structures and utilities.
- B. Exploratory excavation shall conform to the requirements of Section 01060.
- C. Damage to existing structures and utilities shall be avoided during exploratory excavation. Any such structures or utilities damaged by the Contractor shall be replaced or repaired at no additional cost to the City.

1.03 CONTROL OF WORK

- A. The locations at which exploratory excavations are to be made shall be determined by the Contractor for facilitating safe and thorough execution of the Work. All exploratory excavations shall be reviewed and approved by the City prior to beginning excavation.
- B. Exploratory excavations may be indicated in the Construction Plans or designated by the City.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.01 SCHEDULING

- A. The Contractor shall consult with the City as to location of the exploratory excavations so that this Work may be scheduled sufficiently in advance of installation of other items of the Work.
- B. The Contractor shall obtain all available information on the location of existing underground structures and utilities prior to starting this type of excavation.
- C. The Contractor shall notify the utility owners of the structures and/or utilities to be affected in sufficient time to allow their representatives to observe the exploratory excavations.

3.02 EXCAVATION

- A. The Contractor shall conduct all excavations with extreme care using tight control machinery supplemented by hand labor so as not to damage any existing structure or utility. If damage occurs, the Contractor shall notify immediately the City and the respective utility owner. The Contractor shall make repairs promptly if authorized by the utility owner or coordinate with the utility owner to facilitate prompt repair and compensation for damages.
- B. The Contractor shall perform exploratory excavations as necessary to investigate and verify the location of existing utilities and any other subsurface facilities. At a minimum, exploratory excavations shall be performed at each connection to an existing main and at each utility main crossing.
- C. The Contractor shall permit the City to observe all exploratory excavations.

3.03 BACKFILL AND RESTORATION

- A. Exploratory excavations shall be backfilled and the surface restored according with the Specifications unless otherwise directed by the City in writing.

END OF SECTION

SECTION 02231
TRENCHING, BEDDING, AND BACKFILL FOR PIPE

PART 1 - GENERAL

1.01 WORK INCLUDED

- A. Furnishing all labor, materials, equipment, and incidentals necessary to perform all excavation (unclassified), backfill, fill, grading, and slope protection required completing the piping work shown in the Construction Plans.
- B. The Work shall include, but not necessarily be limited to: manholes, vaults, duct conduit, pipe, and roadways and paving; all backfilling, fill, and required borrow; grading; disposal of surplus and unsuitable materials; and all related work such as sheeting, bracing, and water handling.

1.02 JOB CONDITIONS

- A. The Contractor shall examine the site and review the available test borings or undertake his own soil borings prior to submitting his bid, taking into consideration all conditions that may affect his work. The City will not assume responsibility for variations of sub-soil quality or conditions at locations other than places shown and at the time the investigation was made. Boring log data and soil samples are available for examination after signing a release at the office of the City.

1.03 TESTING

- A. The Contractor shall furnish facilities for making all density tests and make such restorations as may be necessary due to test operations. All density tests on backfill or base replacement shall be made by a certified commercial testing laboratory employed by the Contractor and at such locations as may be recommended by the Engineer.
- B. If the densities as determined by the specified tests fall below the required minimums, the Contractor shall pay for all retests.

1.04 SUBMITTALS

- A. Furnish the City, for approval, a representative sample of fill material obtained from onsite sources weighing approximately 100 pounds, at least seven (7) calendar days prior to the date of anticipated use of such material. Each sample shall be accompanied by soil testing results by the certified commercial testing laboratory employed by the Contractor
- B. For each material obtained from other than onsite sources, the Contractor shall notify the City of the source of the material and shall furnish the City, for approval, a representative sample weighing approximately 100 pounds, at least seven (7) calendar days prior to the date of anticipated use of such material. Each sample shall be accompanied by soil testing results by the certified commercial testing laboratory employed by the Contractor.

- C. The Contractor shall submit two (2) copies of certified test results to the City on a weekly basis.

PART 2 - PRODUCTS

2.01 MATERIALS

A. General:

1. All fill material shall be subject to the approval of the Engineer.
2. All fill material shall be free of organic material, trash, deleterious debris, roots, clay balls, rubble, or other objectionable material.
3. Unsuitable material shall be removed from the job site by the Contractor.

B. Base, Fill, and Backfill:

1. Satisfactory soil materials are defined as those complying with American Association of State Highway and Transportation Officials (AASHTO) M 145, soil classification Groups A 1, A 2 4, A 2 5, and A 3.
2. Unsatisfactory soil materials are those defined in AASHTO M 145 soil classification Groups A 2 6, A 2 7, A 4, A 5, A 6, and A 7 along with peat and other highly organic soils.

C. Structural Fill:

1. Well graded soil material consisting of coarse aggregate to medium to fine grain sized sand, free of organic, deleterious and/or compressible material.
 - a. Shall not contain rock or stones exceeding 3-1/2 inches in diameter, hardpan, cobbles, or other similar materials.

D. Select Common Fill:

1. Soil material containing no more than 15 percent by weight finer than No. 200 mesh sieve.
 - a. Shall be free from organic matter, muck, marl, rock exceeding 3-1/2 inches in diameter, broken concrete, masonry, rubble, or other similar materials.
2. Material falling within the above specification, encountered during the excavation, may be stored in segregated stockpiles for reuse. All material which, in the opinion of the City, is not suitable for reuse shall be spoiled as specified herein for disposal of unsuitable materials.

E. Bedding Rock:

1. Bedding rock shall be FDOT No. 57, gradation washed and graded limerock or shell.

PART 3 - EXECUTION

3.01 EXCAVATION

A. General:

1. In no case shall excavations remain open outside of working hours.
2. The Contractor shall perform excavation described of whatever substance encountered to the dimensions and depths specified or shown on the Construction Plans. Undercutting shall not be permitted, except when ordered by the City in writing. Material suitable for backfill shall be stockpiled near the site. Rock or other material undesirable for backfill shall be spoiled outside the area in a neat manner, as directed by the City. Where it is necessary to cut roots projecting into an excavation or where it is necessary to trim branches for equipment clearance, all severed root ends or cuts to branches over two inches (2") diameter shall be treated with an asphalt base pruning paint. Backfill over exposed roots as soon as possible.
3. All excavation, trenching, and related sheeting, bracing, etc., shall conform to the requirements of the Florida Trench Safety Act (c5/5B 2626) which incorporates by reference OSHA's excavation safety standards (29 CFR 1926.650 subpart P).

- B. Rock: Where encountered in the trench bed, rock shall be excavated to a depth of three (3) pipe diameters below the bottom of the pipe bell but in no case less than four inches (4"). All undercut trench excavation shall be backfilled and tamped with materials as specified in the following paragraphs under Unsuitable Subgrade.

C. Unsuitable Subgrade:

1. In the event that unsuitable material is encountered at or below the excavation depth specified or shown on the Construction Drawings, the City shall be notified. Such material shall be removed and replaced with suitable material. Methods and materials used for replacement shall be one of the following as directed by the Engineer in writing.
 - a. Suitable earth or sand, compacted in the trench.
 - b. Gravel or crushed limerock, compacted in the trench.
 - c. Existing materials, stabilized after removal, and then replaced and compacted in the trench.
2. The City shall determine the methods and materials to be used, based upon the condition of the excavation, the pipe structure to be supported, and the availability and character of stabilizing materials.

- D. Protection: The Contractor shall protect his work at all times by flagging, marking, lighting, and barricading. It shall also be the Contractor's responsibility to preserve and protect all above and underground structures, pipe lines, conduits, cables, drains or utilities which are existing at the time he encounters them. Failure of the Construction Plans to show the existence of these obstructions shall not relieve the Contractor from this responsibility. The cost of repair of any damage which occurs to these obstructions during or as a result of construction shall be borne by the Contractor without additional cost to the City.
1. Should uncharted or incorrectly charted piping or other utilities be encountered during excavation, the Contractor shall notify the City of such piping or utility immediately for directions.
 2. The Contractor shall cooperate with the City and utility companies in keeping respective services and facilities in operation. Repair damaged utilities to satisfaction of utility owner.
 3. The Contractor shall demolish and completely remove from site existing underground utilities indicated in the Construction Plans to be removed.
- E. Sheeting and Bracing in Excavations:
1. In connection with construction of below grade structures, the Contractor shall construct, brace, and maintain cofferdams consisting of sheeting and bracing as required to support the sides of excavations, to prevent any movement which could in any way diminish the width of the excavation below that necessary for proper construction, and to protect adjacent structures, existing piping, and/or foundation material from disturbance, undermining, or other damage. Care shall be taken to prevent voids outside of the sheeting, but if voids are formed they shall be immediately filled and rammed.
 2. For trench sheeting for pipes, no sheeting is to be withdrawn if driven below mid diameter of any pipe, and no wood sheeting shall be cut off at a level lower than one foot (1') above the top of any pipe unless otherwise directed by the City. If during the progress of the Work the City decides that additional wood sheeting should be left in place, the City may instruct the Contractor in writing. If steel sheeting is used for trench sheeting, removal shall be as specified above, unless written approval is given for an alternate method of removal.
 3. All sheeting and bracing not left in place shall be carefully removed in such a manner as not to endanger the construction or other structures, utilities, existing piping, or property. Unless otherwise approved or indicated in the Construction Plans, all sheeting and bracing shall be removed after completion of the substructure, care being taken not to disturb or otherwise injure the finished masonry. All voids left or caused by withdrawal of sheeting shall be immediately refilled with sand by ramming with tools especially adapted to that purpose, by watering or otherwise as may be required.
 4. The right of the City to instruct the Contractor will regard to sheeting and bracing to be left in place shall not be construed as creating any obligation on his part to issue such instructions, and his failure to exercise his right to do so shall not relieve the Contractor

- from liability for damages to persons or property occurring from or on the work occasioned by negligence or otherwise, growing out of a failure on the part of the Contractor to leave in place sufficient sheeting and bracing to prevent any caving or moving of the ground.
5. The Contractor shall construct cofferdams and sheeting outside the neat lines of the foundation unless indicated otherwise to the extent he deems it desirable for his method of operation. Sheeting shall be plumb and securely braced and tied in position. Sheeting, bracing, and cofferdams shall be adequate to withstand all pressures to which the structure will be subjected. Pumping, bracing, and other work within the cofferdam shall be done in a manner to avoid disturbing any construction of the masonry enclosed. Any movement or bulging which may occur shall be corrected by the Contractor at his own expense so as to provide the necessary clearances and dimensions.
 6. Drawings of cofferdams, sheeting, and bracing and design computations shall be submitted to the City and construction shall not be started until such drawings are received. The drawings and computations shall be prepared and sealed by a Registered Professional Engineer in the State of Florida and shall be in sufficient detail to disclose the method of operation for each of the various stages of construction, if required, for the completion of the substructures.
- F. Dewatering, Drainage, and Flotation:
1. The Contractor shall construct and place all pipelines, concrete work, structural fill, screened gravel, and gravel base course in the dry. All trenches and excavations are to be kept dry and free from water at all times when work is in progress and at no time is water to run through the pipeline(s) or structure excavations. The Contractor shall maintain the water level a minimum of one foot (1') below proposed bottom of excavation. For purposes of this Contract, "in the dry" is defined as within minus four (4) to plus two (2) percentage point of the optimum moisture content of the soil.
 2. The Contractor shall, at all times during construction, provide, and maintain proper equipment and facilities to remove promptly and dispose of properly all water entering excavations and keep such excavations dry so as to obtain a satisfactory undisturbed subgrade foundation condition until the fill, structures, or pipes to be built thereon have been completed to such extent that they will not be floated or otherwise damaged by allowing water levels to return to natural elevations.
 3. Pipe and masonry shall not be laid in water or submerged within 24 hours after being placed. Water shall not flow over new masonry within four (4) days after placement.
 4. In no event shall water rise to cause unbalanced pressure on structures until the concrete or mortar has set at least 24 hours. The Contractor shall prevent flotation of the pipe promptly placing backfill.
 5. Dewatering shall at all times be conducted in such a manner as to preserve the natural undisturbed bearing capacity of the subgrade soils at proposed bottom of excavation.

6. Well points may be required for pre-drainage of the soils prior to final excavation for some of the deeper in ground structures or piping and for maintaining the lowered groundwater level until construction has been completed to such an extent that the structure, pipeline, or fill will not be floated or otherwise damaged. Well points shall be surrounded by suitable filter sand and no fines shall be removed by pumping. Pumping from well points shall be continuous and standby pumps shall be provided. Once abandoned, well point holes shall immediately be backfilled with FDOT No. 89 stone from bottom to top or flowable fill meeting the requirements of FDOT Section 145, or as approved by the City.
7. The Contractor shall furnish all materials and equipment and perform all work required to install and maintain the drainage systems he proposes for handling groundwater and surface water encountered during construction of structures, pipelines, and compacted fills.
8. The Contractor shall provide for the disposal of the water removed from the excavation in such manner as shall not cause injury to public health or private or public property or to any portion of the work completed or in progress, to the surface of the streets, or cause any impediment to the reasonable use of the site by other contractors.
9. If requested by the City, the Contractor's proposed method of dewatering shall include a minimum of two (2) operating groundwater observation wells at each pump station structure and one (1) observation well at each manhole to be used to determine the water level during construction of the structure. Locations of the observations wells shall be at structures and along pipelines as approved by the City prior to their installation. The observation wells shall be extended to six inches (6") above finished grade, capped with screw on caps protected by a 24 inch X 24 inch concrete base, and left in place at the completion of this Project.
10. Prior to excavation, the Contractor shall submit his proposed method of dewatering and maintaining dry conditions to the City for review. However, such review shall not relieve the Contractor of the responsibility for the satisfactory performance of the system. The Contractor shall be responsible for correcting any disturbance or natural bearing soils or damage to structures caused by an inadequate dewatering system or by interruption of the continuous operation of the system as specified.
11. As part of his/her request for review of a dewatering system, the Contractor shall demonstrate the adequacy of the proposed system and well point filter sand by means of a test installation. Discharge water shall be clear, with no visible soil particles in a one quart sample.
12. During backfilling and construction, water levels shall be measured in observation wells located as approved by the City.
13. Continuous pumping will be required as long as water levels are required to be below natural levels.

14. In the event that it is found that the water in a trench cannot be lowered by industry standards (i.e., well points and pumps) and if it is recognized by the Contractor that it is not feasible to dewater the trench, an alternate construction method may be proposed. The Contractor shall dewater the trench for a minimum of ten (10) calendar days prior to submitting any alternate method of dewatering which shall exhaust all standard means of dewatering. Complete details, specifications, Manufacturers' descriptive literature, installation lists, and any other pertinent data regarding the alternate method(s) shall be submitted as an alternate by the Contractor to the City for review within ten (10) days of the time that the Contractor anticipates using such alternate method.
15. The alternate method may be used, so long as the work is performed in a manner which, in the opinion of the City, conforms to the method and procedure as set forth in the information supplied by the Contractor in his original application for use of an alternate method. The City may revoke the alternate method if at any time, in his opinion, the work is not conforming to any applicable portion of these Technical Specifications. All alternate methods proposed for dewatering shall be at the Contractor's expense.

3.02 TRENCH EXCAVATION

- A. Excavation for all trenches required for the installation of pipes and electrical ducts shall be made to the depths indicated in the Construction Plans. Excavate in such manner and to such widths as will give suitable room for laying the pipe or installing the ducts within the trenches, for bracing and supporting and for pumping and drainage facilities. The trench width at the top of the pipe shall not exceed the allowable as determined by the depth of cut and indicated in the Construction Plans.
 1. For water mains, excavate trench to provide a minimum of 36 inches of clear cover over the pipe bell unless otherwise noted in the Construction Plans or herein.
 2. In order to avoid existing utilities, at times it may be necessary for the pipe to be laid deeper than the minimum cover specified in the preceding paragraph. At such time the Contractor will not be allowed extra compensation for additional excavation involved.
 3. In case excavation has been made deeper than necessary, a layer of concrete, bedding rock, or other material satisfactory to the City shall be placed, at no extra cost, to secure a firm foundation for the lower third of each pipe. Where possible, excavated material shall be placed so as not to interfere with public travel. Bridging shall be provided to afford necessary access to public or private premises. Bridging shall be considered as part of the excavation operation and shall be supplied at no additional cost to the Owner.
- B. Rock shall be removed as specified herein.
- C. The bottom of the excavations shall be firm and dry and in all respects acceptable to the City. Excavate unsatisfactory soil material from the bottom of the trench to a depth determined by the City and replace with rock or shell bedding.

- D. Where pipe or ducts are to be laid in bedding or encased in concrete the trench may be excavated by machinery to, or just below, the designated subgrade provided that the material remaining in the bottom of the trench is no more than slightly disturbed.
- E. Where the pipes or ducts are to be laid directly on the trench bottom the lower part of the trenches shall not be excavated to the trench bottom by machinery. The last of the material being excavated shall be done manually in such a manner that will give a flat bottom true to grade so that pipe or duct can be evenly and uniformly supported along its entire length on undisturbed material or bedding rock. Bell holes shall be made as required manually so that there is no bearing surface on the bells and pipes are supported along the barrel only.

3.03 PIPE INTERFERENCES AND ENCASEMENT

- A. The Contractor shall abide by the following schedule of criteria concerning interferences with other utilities. In no case shall there be less than 0.3 feet between any two pipe lines or between pipe lines and structures. Concrete encasement shall be provided in accordance with the typical detail as shown in the Construction Plans.

3.04 BEDDING

- A. Where select common bedding material is used for pipe support as shown in the Construction Plans, the trench bottom or bedding should be prepared in accordance with Paragraph 3.02.E of this Section and the top six inches (6") shall be compacted using mechanical equipment to a minimum of 98 percent of the maximum dry density as determined by AASHTO T-180.
- B. Where rock or shell is used for pipe support, gravity sewer pipe shall have rock or shell bedding to six inches (6") over top of pipe, and four inches (4") to six inches (6") below the invert. Pressure pipe shall have rock or shell bedding to springline of pipe, and four inches (4") to six inches (6") below the invert depending on the diameter as shown in the Construction Plans. Rock or shell bedding shall be placed in maximum lift thicknesses of four inches (4") to six inches (6") with each lift compacted using mechanical equipment.
- C. Rock or shell bedding may be used under certain circumstances as a drain for ground water control, subject to the approval of the City. The Contractor shall take all precautions necessary to maintain the shell or rock bedding in a compacted state and to prevent washing, erosion, or loosening of this bed.

3.05 BACKFILLING

- A. Initial Backfill: Trenches shall be backfilled immediately after the pipe is laid unless other protection for the pipeline is provided. Backfill material shall be selected, deposited, and compacted simultaneously on both sides of the pipe so as to eliminate the possibility of lateral displacement of the pipe. Backfill material shall be solidly tamped around the pipes in layers to a level at least 12 inches above the top of the pipe. Each layer shall be compacted to a maximum thickness of 6 inches.

- B. The remainder of the backfill shall be deposited and compacted. Mechanical tamping of lifts in unpaved areas shall be to a maximum thickness of 12 inches. In areas to be paved or repaved, the entire depth of backfill shall be deposited in lifts and compacted by hand or mechanical tampers to a maximum thickness of 6 inches.
- C. Compaction shall be carried out to achieve a density as specified herein. Density test shall be done every lift and include a test at the spring line of the pipe line.
- D. In areas to be paved and unpaved areas, density tests for determination of the specified compaction shall be made by a testing laboratory and spaced a minimum of one in every 300 feet of trench cut per lift and shall include a test at the spring line of the pipe. In addition, a minimum of one density test per lift shall be conducted at each road crossing.
 - 1. It is the intent of this Specification to secure a condition where no further settlement of trenches will occur. When backfilling and compaction is completed, the roadway base for pavement replacement may be placed immediately. It will be the responsibility of the Contractor to restore the surface to the original grade wherever settlement occurs.

3.06 GRADING

- A. Grading shall be performed at such places as are indicated in the Construction Plans, to the lines, grades, and elevations shown or as approved by the City and shall be made in such a manner that the requirements for formation of embankments can be followed. All unacceptable material encountered, of whatever nature within the limits indicated, shall be removed and disposed of as requested. During the process of excavation, the grade shall be maintained in such condition that it will be well drained at all times. Temporary drains and drainage ditches shall be installed to intercept or divert surface water which may affect the prosecution or condition of the Work.
- B. If at the time of excavation it is not possible to place any material in its proper section of the permanent structure, it shall be stockpiled in approved areas for later use.
- C. The right is reserved to make minute adjustments or revisions in lines or grades if found necessary as the work progresses, due to discrepancies in the Construction Plans or in order to obtain satisfactory construction.
- D. Stones or rock fragments larger than 1-1/2 inches in their greatest dimensions will not be permitted in the top one foot (1') of the subgrade line of all dikes, fills, or embankments.
- E. All fill slopes shall be uniformly dressed to the slope, cross section, and alignment shown in the Construction Plans, or as approved in writing by the City.
- F. In cuts, all loose or protruding rocks on the back slopes shall be jarred loose or otherwise removed to line or finished grade of slope. All cut and fill slopes shall be uniformly dressed to the slope, cross section, and alignment shown in the Construction Plans or as approved in writing by the City.

- G. No grading is to be done in areas where there are existing pipe lines that may be uncovered or damaged until such lines which must be maintained are relocated, or where lines are to be abandoned, all required valves are closed and drains plugged at manholes.
- H. The Contractor shall replace all pavement cut or otherwise damaged during the progress of the Work as specified elsewhere herein.

3.07 DISPOSAL OF UNSUITABLE AND SURPLUS MATERIAL

- A. All surplus and/or unsuitable excavated material shall be disposed of in the following manner:
 - 1. Transport from City's property and legally dispose of. Any permit required for the hauling and disposing of this material beyond City's property shall be obtained prior to commencing hauling operations.
- B. Suitable excavated material may be used for fill if it meets the Technical Specifications for select common fill and is approved by the City. Excavated material so approved may be neatly stockpiled at the site where designated by the City provided there is an area available where it will not interfere with the operation of the facility nor inconvenience traffic or adjoining property owners.

3.08 DENSITY TESTING

- A. Density test shall be performed every lift at no less than the interval specified herein.
- B. Density test shall be taken within seven (7) days after the installation.
- C. Density shall be at least 98 percent of the maximum density as determined by AASHTO T180 for road crossing, shoulders, and where indicated on the drawings.
- D. Density shall be at least 95 percent of the maximum density as determined by AASHTO method T180 for all unpaved areas.
- E. The Contractor shall submit certified test results to the City on a weekly basis.

END OF SECTION

SECTION 02300
DIRECTIONAL DRILLING

PART 1 - GENERAL

1.01 DESCRIPTION OF REQUIREMENTS

- A. The Contractor shall provide all necessary labor, tools, materials, and equipment to successfully complete the installation of directionally drilled piping as specified herein and shown on the Construction Plans. The Contractor shall be responsible for the final constructed product and for furnishing the qualified labor and supervision necessary for this method of construction.
- B. The Contractor shall furnish all items necessary to perform the horizontal directional drilling (HDD) operation and construct the pipe to the lines and grade shown on the Construction Plans.

1.02 REFERENCE STANDARDS

- A. American Association of State Highway and Transportation Officials (AASHTO).
- B. Occupational Safety and Health Administration (OSHA).

1.03 DEFINITIONS

- A. Contractor's Construction Drawings: Drawings by which the Contractor proposes to construct, operate, build, etc., the referenced item. The submission of these drawings shall be required for the sole purpose of providing the sufficient details to verify that the Contractor's Work in progress is in accordance with the intent of the design.

1.04 QUALITY ASSURANCE

- A. Qualifications: Directional drilling contractor shall have a minimum of four (4) years experience with similar construction including pipelines of the same or larger diameter and the same or greater lengths. The Contractor shall also have successfully completed a minimum of five (5) similar projects of the same or larger diameter and of equal or greater lengths.
- B. All pipe and appurtenances of similar type and material shall be furnished by a single manufacturer.
- C. Design Requirements:
 - 1. Horizontal alignment shall be as shown on the Construction Plans. The pipe shall have a minimum cover of 36 inches. The minimum clearances shall be as indicated on the Construction Plans. Compound curvatures may be used but shall not exceed the maximum deflections as set forth by the pipe manufacturer or AWWA C906 or C900, whichever is stricter. Entry angle shall be 12 to 14 degrees ideal, and shall not to exceed 15 degrees. Exit angle shall be 6 to 12 degrees to facilitate "pull-back." Entry and exit angles are defined as

angles from the horizontal.

1.05 SUBMITTALS

- A. General: The Contractor shall submit required information to the City in conformance with Section 01340. The Contractor's schedule shall allow a minimum of two (2) weeks for review by the City.
- B. The City will base the review of submitted details and data on the requirements of the completed Work; safety of the Work in regards to the public, potential for damage to public or private utilities and other existing structures and facilities; and the potential for unnecessary delay in the execution of the Work. Such review shall not be construed to relieve the Contractor in any way of his responsibilities under the contract. The Contractor shall not commence Work on any items requiring Contractor's construction drawings or other submittals until the drawings and submittals are reviewed and accepted by the City.
- C. Prior to mobilizing HDD equipment and personnel to the site, the Contractor shall submit the following to the City for review:
 1. Work Plan: Submit a work plan detailing the procedure and schedule to be used to execute the project. The work plan should include a description of all equipment to be used; a list and resumes of key personnel and their qualifications and experience; a list of subcontractors; a schedule of work activity; a safety plan; a traffic control plan; a frac out plan; hazardous chemical list with all MSDS and technical data sheets; and contingency plans for possible problems. Work plan should be comprehensive, realistic, and based on actual working conditions for this particular project. The plan should document the thoughtful planning required to successfully complete the project.
 2. Equipment: Submit specifications on directional drilling equipment to be used to show that the equipment will be adequate to complete the project. Equipment shall include but not be limited to: drilling rig, mud system, mud motors (if applicable), down-hole tools, guidance system, and rig safety systems. Calibration records for guidance equipment shall be included. Specifications for any drilling fluid additives that Contractor intends to use or might use shall be included.
 3. Material: Specifications on material to be used shall be submitted. Material shall include the pipe, fittings, locator wire, and any other item that is to be an installed component of the project.
 4. Bore Path Layout and Design: The Contractor shall submit a proposed bore path layout in both plan and profile for each pipe to be installed by HDD. The proposed path shall conform to the drilling equipment and pipe material constraints. The Contractor shall also submit calculations confirming the stresses imposed during installation and in-service (after installation) are within the allowable limits (i.e., allowable pullback force, deflection, and buckling) of the selected pipe materials. Calculations shall utilize the equations presented in ASTM F1962. The drill mix must also be included in this bore path layout and design

- D. Following the completion of each HDD pipe installation, the Contractor shall submit the bore log to the City. The information provided shall be sufficient for the City to determine the horizontal and vertical location of the casing at any point along the bore path. The bore log shall include but not be limited to:
1. HDD Starting and Ending Locations: Provide horizontal locations and elevations, station and offset referenced to the project baseline, and swing ties to the locations of the end points of the pipe installed by HDD methods. Required information shall be provided in accordance with Section 01720.
 2. Course Length: The distance between two downhole surveys as measured along the drilled path.
 3. Measured Distance: The total distance of a downhole survey from the entry point as measured along the drilled path; also the summation of the course lengths.
 4. Inclination: The angle at which the downhole probe is projecting from the vertical axis at a particular downhole survey point; vertically downward corresponds to zero degrees.
 5. Azimuth: The angle at which the downhole probe is projecting in the horizontal plane at a particular downhole survey point; magnetic north corresponds to zero degrees.
 6. Station: The horizontal position of a downhole survey measured from an established horizontal control system.
 7. Elevation: The vertical position of a downhole survey measured from an established vertical control system.
 8. Right: The distance of a downhole survey from the design path reference line; positive values indicate right of the reference line while negative values indicate left of the reference line.

1.06 JOB CONDITIONS

- A. Safety Requirements:
1. Work shall be performed in a manner to maximize safety and reduce exposure of workers and equipment to hazardous and potentially hazardous conditions, in accordance with applicable safety standards.
 2. Whenever there is an emergency or stoppage of Work that is likely to endanger the excavation or adjacent structures, operate a full work force for 24 hours a day, including weekends and holidays, without intermission until the emergency or hazardous conditions no longer jeopardize the stability and safety of the Work.
- B. Air Quality: Conduct HDD operations by methods and with equipment that will positively control dust, fumes, vapors, gases, or other atmospheric impurities in accordance with applicable safety

requirements.

1.07 PERMITS

- A. The City will obtain an FDEP Environmental Resource Permit for the Work in this Contract. The Contractor shall obtain any and all other permits required for prosecution of the Work. The costs associated with obtaining permits shall be considered incidental to the Work unless specified otherwise in Section III – Special Provisions.
- B. The Contractor shall be responsible for complying with all permit requirements at no additional cost to the City.

PART 2 - PRODUCTS

2.01 GENERAL

- A. The directional drilling equipment shall consist of a directional drilling rig of sufficient capacity to perform the bore and pull-back the pipe; a drilling fluid mixing, delivery, and recovery system of sufficient capacity to successfully complete the crossing; a drilling fluid recycling system to remove solids from the drilling fluid so that the fluid can be reused; a magnetic guidance system to accurately guide boring operations; a vacuum truck of sufficient capacity to handle the drilling fluid volume; and trained and competent personnel to operate the system. All equipment shall be in good, safe operating condition with sufficient supplies, materials, and spare parts on hand to maintain the system in good working order for the duration of this project.

2.02 DRILLING SYSTEM

- A. The directional drilling machine shall consist of a hydraulically powered system to rotate, push, and pull hollow drill pipe into the ground at a variable angle while delivering a pressurized fluid mixture to a guidable drill (bore) head. The machine shall be anchored to the ground to withstand the pulling, pushing, and rotating pressure required to complete the crossing. The hydraulic power system shall be self-contained with sufficient pressure and volume to power drilling operations. Hydraulic system shall be free of leaks. Rig shall have a system to monitor and record maximum pull-back pressure during pull-back operations. The rig shall be grounded during drilling and pull-back operations. There shall be a system to detect electrical current from the drilling string and an audible alarm, which shall automatically sound when an electrical current is detected.

2.03 PIPE

- A. Comply with the requirements of Section 02616.

2.04 LOCATER WIRE

- A. Locater wire shall consist of a single (unspliced) length of #10 reinforced composite tracer wire. Locater wire shall be HDPE-covered, hi-carbon-steel-core copper wire as manufactured by Copperhead Industries, LLC, of Monticello, MN, or approved equal.

2.05 DRILLING FLUIDS

- A. Drilling fluids shall be a mixture of bentonite and water or polymers and additives. Bentonite sealants and water will be used to lubricate and seal the mini-tunnel.
- B. The HDD Contractor shall be responsible for obtaining, transporting, and storing any water required for drilling fluids.

PART 3 - EXECUTION

3.01 GENERAL

- A. The Contractor shall be responsible for his/her means and methods of HDD construction and shall ensure the safety of the Work, the Contractor's employees, the public, and adjacent property, whether public or private.
- B. The Contractor should anticipate that portions of the drilled excavation will be below the groundwater table and/or under waterways.
- C. The Contractor shall comply with all local, state, and federal laws, rules, and regulations at all times to prevent pollution of the air, ground, and water.

3.02 EQUIPMENT

- A. Diesel, electrical, or air-powered equipment will be acceptable, subject to applicable federal and state regulations.
- B. Any method or equipment that the Contractor can demonstrate will produce the specified results will be considered.
- C. The Contractor shall employ equipment that will be capable of handling the various anticipated ground conditions. In addition, the equipment shall:
 - 1. Be capable of minimizing loss of ground ahead of and around the machine and providing satisfactory support of the excavated face at all times.
 - 2. Provide a system to indicate whether the amount of earth material removed is equivalent to that displaced by the advance of the machine such that the advance rate may be controlled accordingly.

- D. Provide adequate secondary containment for any and all portable storage tanks.

3.03 HORIZONTAL DIRECTIONAL DRILLING

- A. Drilling must use techniques of creating or directing a borehole along a predetermined path to a

specified target location. This must involve use of mechanical and hydraulic deviation equipment to change the boring course and must use instrumentation to monitor the location and orientation of the boring head assembly along a predetermined course.

- B. Drilling must be accomplished with fluid-assisted mechanical cutting. It is mandatory that minimum pressures and flow rates be used during drilling operation as not to fracture the subgrade material around and or above the bore.
- C. The mobile drilling system shall utilize small diameter fluid jets to fracture and mechanical cutters to cut and excavate the soil as the head advances forward.
- D. Steering shall be accomplished by the installation of an offset section of drill stem that causes the cutterhead to turn eccentrically about its centerline when it is rotating. When steering adjustments are required, the cutterhead offset section is rotated toward the desired direction of travel and the drill stem is advanced forward without rotation.
- E. The mobile drilling system must be capable of being launched from the surface at an inclined angle and drilling a two-inch (2") to three-inch (3") diameter pilot hole. The pilot hole shall then be enlarged with reamers as required to achieve the completed directional drill bore hole diameter.
- F. The path of the pilot hole shall be monitored during drilling by taking downhole survey readings at least once for each rod length of bore constructed, or more often as needed or directed by the City, but in no case at intervals exceeding 35 feet. These readings shall be used to calculate the horizontal and vertical coordinates of the downhole probe as it progresses along the pilot hole. Calculations shall be performed according to American Petroleum Institute (API) Bulletin D20 – Bulletin on Directional Drilling Survey Calculation Methods and Terminology. Recorded data and calculations from downhole surveys shall include, but not be limited to the following items:
 - 1. HDD Starting and Ending Locations: Provide horizontal locations and elevations, station and offset referenced to the project baseline, and swing ties to the locations of the end points of the pipe installed by HDD methods. Required information shall be provided in accordance with Section 01720.
 - 2. Course Length: The distance between two downhole surveys as measured along the drilled path.
 - 3. Measured Distance: The total distance of a downhole survey from the entry point as measured along the drilled path; also the summation of the course lengths.
 - 4. Inclination: The angle at which the downhole probe is projecting from the vertical axis at a particular downhole survey point; vertically downward corresponds to zero degrees.
 - 5. Azimuth: The angle at which the downhole probe is projecting in the horizontal plane at a particular downhole survey point; magnetic north corresponds to zero degrees.
 - 6. Station: The horizontal position of a downhole survey measured from an established

horizontal control system.

7. Elevation: The vertical position of a downhole survey measured from an established vertical control system.
 8. Right: The distance of a downhole survey from the design path reference line; positive values indicate right of the reference line while negative values indicate left of the reference line.
- I. In addition to a magnetic downhole survey system, a surface monitoring system, such as TruTracker (or equivalent) shall be used to determine the location of the downhole probe during pilot hole drilling. The TruTracker locates the downhole probe by inducing a magnetic field in a surface coil of known location. The probe senses its location relative to this magnetic field and communicates this information to the surface. Prior to drilling, the coil shall be laid out on the ground surface and its corners accurately surveyed.
 - J. Regardless of the tolerance achieved, no pilot hole will be accepted if it will result in any of the pipeline being installed in violation of construction right-of-way or easement restrictions. Concern for adjacent utilities and/or structures takes precedence over the listed tolerances. Listing of tolerances does not relieve the Contractor of responsibility for safe operations or damage to adjacent utilities and structures.
 - K. At the completion of pilot hole drilling, the HDD contractor shall provide a tabulation of coordinates, referenced to the drilled entry point, which accurately describe the location of the pilot hole.
 - L. A swivel shall be used to connect the pull section to the reaming assembly to minimize torsional stress imposed on the section. The pull section shall be supported on rollers as it proceeds during pull back so that it moves freely.
 - M. The HDD Contractor shall maximize the recirculation of drilling fluid surface returns. The HDD Contractor shall provide solids control and fluid cleaning equipment of a configuration and capacity that can process surface returns and produce a drilling fluid suitable for reuse.
 - N. The HDD Contractor shall employ his best efforts to maintain full annular circulation of drilling fluids. Drilling fluid returns at locations other than the entry and exit points shall be minimized. In the event that annular circulation is lost, the HDD contractor shall take steps to restore circulation.

3.04 CONTROL OF THE DRILL LINE AND GRADE

A. Construction Control:

1. The Contractor shall establish and be fully responsible for the accuracy of his/her own control for the construction of the entire project, including structures, drill line, and grade.
2. The Contractor's control points shall be established sufficiently far from the drilling operation not to be affected by construction operations.

3. The Contractor shall maintain daily records of alignment and grade and shall submit these records to the City. The Contractor remains fully responsible for the accuracy of his/her Work and the correction of it, as required.
4. The Contractor shall check his/her control for the bore alignment against an above ground undisturbed reference. The Contractor shall furnish a "Directional Bore Log" for each bore completed to the City.

3.05 LOCATER WIRE

- A. Locater wire shall be provided as indicated on the Construction Plans and as required herein. Locater wire shall be securely attached to each end of the directionally drilled pipe and intermittently as needed.

3.06 DISPOSAL OF EXCESS MATERIAL

- A. Where such effort is necessary, cost for groundwater control during the course of the drilling work shall be included in the unit contract price for the Work.
- B. Dewatering required during the course of the project to lower water table, to remove standing water or surface drainage seepage, or to protect ongoing Work against rising waters or floods shall be considered incidental to the Work being performed.
- C. Contractor shall remove all puddled bentonite (drillers mud) and dispose of off-site in a legal manner, at no additional cost to the City.

3.07 PROTECTION OF EXISTING STRUCTURES

- A. When HDD operations occur in close proximity to existing structures, the Contractor shall take all reasonable precautions to prevent damage to such structures. The requirements described herein apply to all types of structures, whether on public or private property, that may be adversely affected by HDD operations due to vibrations, ground loss, ground heave, or dewatering.
- B. The Contractor shall survey and monitor structures for settlement by survey, recording elevations to 0.01 foot.
- C. The Contractor shall notify the City of any movements detected or damage to the structures and immediately stop drilling and excavation activities, backfill any open excavations, and contact the City for instructions.
- D. When excavating for construction, the Contractor is responsible for evaluating the need for, design of, and providing any necessary precautionary features to protect adjacent structures from damage, including, but not limited to, selecting construction methods and procedures that will prevent damaging the adjacent structures and monitoring and controlling the vibrations from construction activities, including driving of casings and sheeting. When sheeting and shoring are

not detailed in the Construction Plans, the Contractor shall employ a qualified Specialty Engineer to design the sheeting and shoring, and to sign and seal the plans and specification requirements. These designs shall be submitted to the City prior to beginning construction.

END OF SECTION

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SECTION 02616
POLYVINYL CHLORIDE PIPE (PVC) AND
HIGH DENSITY POLYETHYLENE PIPE (HDPE) FOR PRESSURE SERVICE

PART 1 - GENERAL

1.01 WORK INCLUDED

- A. Furnishing all labor, materials, equipment, and incidentals necessary to furnish, install, test, and disinfect (as required) all PVC and HDPE pipe and appurtenances as shown in the Construction Plans and as specified herein.
- B. Testing and disinfection (as required).

1.02 REFERENCE STANDARDS

- A. Current Florida Department of Environmental Protection (FDEP) Rules and Regulations relating to water distribution systems.

1.03 COMPLY

- A. All excavation and backfilling shall be in conformance with pertinent Sections of these Specifications.
- B. All Contract Documents reflecting potable and/or reclaimed water line location and details.

1.04 QUALIFICATIONS

- A. All PVC pipe shall be furnished by a single manufacturer who is fully experience, reputable, and qualified in the manufacture of the items to be furnished.
- B. All HDPE pipe, fittings, and appurtenances shall be furnished by a single manufacturer who is fully experience, reputable, and qualified in the manufacture of the items to be furnished.
- C. All pipe and accessories for used for potable water shall be NSF certified and copies of the lab certification shall be submitted to the City.

1.05 SUBMITTALS

- A. For each Manufacturer, type, and size of pipe to be installed, submit to the City the following in conformance with Section 01340:
 - 1. Shop drawings and product data with pipe Manufacturer's certification of compliance with the Specifications.

2. Manufacturer's recommendations for handling and storage of pipe.
 3. Manufacturer's recommendations for pipe jointing and laying.
 4. NSF certifications (for usage for potable water only).
- B. For each shipment of HDPE pipe, the Contractor shall submit one (1) original certified test report and two (2) copies of all required test reports to the City. Certification shall all test results required by AWWA.
- C. Submit to the City a pressure testing plan. At a minimum, this shall include all equipment to be used (including but not limited to pump, metering device, pressure gauge, etc., to be used for maintaining test pressure and measuring the amount of water required to maintain test pressure); method of connection of pump to water main; sections of line to be tested with length and size of pipe, the exact area being tested, and the valves, plugs, caps, etc., being tested against indicated; and allowable loss calculations.
- D. The pump suction shall be in a barrel or similar device, or metered so that the amount of water required to maintain the test pressure may be measured accurately.

1.06 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Pipe shall be unloaded and inspected in accordance with the Manufacturers' written instructions.
- B. Pipe and fittings stored on the site shall be stored in the protective unit packages provided by the Manufacturer. If packages need to be opened, the pipe shall be stored on a flat surface and not in direct contact with the ground. Do not stack higher than four (4) feet. Keep inside of pipe and fittings free from dirt and debris. Care shall be exercised to avoid compression damage or deformation to the pipe.
- C. All pipe and fittings that are stored shall be covered to provide protection from the sunlight.
- D. Handle all material carefully at all times. Any pipe or fitting having a crack or which has received a severe blow shall be marked rejected and immediately be removed from the work.

PART 2 - PRODUCTS

2.01 GENERAL – MANUFACTURE OF PIPE

- A. The inside and the outside surface of each length of pipe shall be free from nicks, scratches, and other surface defects and blemishes. The pipe shall be homogeneous throughout, free of any bubbles, voids, or inclusions.
- B. The jointing area of pipe shall be free from dents and gouges.

2.02 CLASS-RATED PVC PIPE

A. Polyvinyl chloride (PVC) pressure pipe shall conform to the requirements of American Water Works Association (AWWA) C-900 (sizes 4 inches through 12 inches) or AWWA C-905 (sizes 14 inches through 48 inches) with outside diameter equal to that of standard ductile iron pipe and minimum wall thickness of DR Series 25, Class 100, Type 1; DR Series 18, Class 150; or DR Series 14, Class 200 as indicated on the Construction Plans.

B. PVC pipe shall be colored to designate its end use:

USE	COLOR
Potable Water Mains	Blue
Reclaimed Water Mains	Purple
Sewage Force Mains	Green

C. PVC pipe shall be provided in standard 20-foot laying lengths.

D. PVC Pipe Joints:

1. Pipes four (4) inches in diameter or larger shall have an integral bell formed with a race designed to accept the gasket in accordance with AWWA C-900. The spigot end shall have a bevel and a stop mark on the outside diameter to indicate proper insertion depth. Provision shall be made for expansion and contraction at each joint.
2. Pipes with nominal diameters of less than four (4) inches may have either compression joints as described herein or solvent-welded joints. Solvent cements shall be as specified in AWWA C-900. Jointing shall be in strict accordance with the pipe manufacturer's direction.
3. When assembled, the gasket shall be compressed radially on the pipe spigot so as to effect a positive seal under all combinations of joint tolerances and is the only element depended upon to make the joint flexible and watertight.
4. All surfaces of the joint upon or against which the gasket may bear shall be smooth, free of cracks, fractures, or imperfections that could adversely affect the performance of the joint.
5. Gaskets: Gaskets shall comply with ASTM F477. Gaskets shall be molded to a circular form and to the proper cross section and shall consist of a vulcanized high grade elastomeric compound conforming to AWWA C-900, Elastomeric Seals for joining plastic pipe. Gaskets shall be suitable for use with potable water, reclaimed water, or sanitary sewer as applicable.
6. Quality Control Test Requirements: The Manufacturer shall take adequate measures in the production of PVC pipe, couplings, and solvent cements to assure product compliance with the requirements of AWWA C-900. All of the tests specified in Section 3 of AWWA C-900

shall be performed at the intervals indicated therein.

7. Hydrostatic Proof-Test: The Manufacturer shall pressure test all pipe and couplings in accordance with Section 3.3 of AWWA C-900.
- E. Pipe Fittings for PVC Pipe: All fittings four (4) inches in diameter and larger shall be ductile iron with mechanical joints and shall conform to the requirements of Section 02660.
1. All fittings indicated on the Construction Plans shall be provided unless prior written approval is granted by the City.
 2. All additional fittings required but not indicated on the Construction Plans shall be provided at no additional cost to the City.
- F. Joint Lubricant: Lubricant furnished for lubricating joints shall be nontoxic, shall not support the growth of bacteria, shall have no deteriorating effects on the gasket or pipe material, and shall not impart color, taste, or odor to the water.
- G. Fusible PVC (FPVC) Pipe Joints: Unless otherwise specified, fusible PVC pipe lengths shall be assembled in the field with butt-fused joints. The Contractor shall follow the pipe Manufacturer's written guidelines for this procedure. All fusion joints shall be completed as described in this Section.

2.03 JOINT RESTRAINTS

- A. Mechanical Joint Restraints: Mechanical joint restraint shall be incorporated in the design of the follower gland and shall include a restraining mechanism which, when actuated, imparts multiple wedging action against the pipe, increasing its resistance as the pressure increases. Flexibility of the joint shall be maintained after burial. Glands shall be manufactured of ductile iron conforming to ASTM A536. Restraining devices shall be of ductile iron heat treated to a minimum hardness of 370 BAN. Dimensions of the gland shall be such that it can be used with the standardized mechanical joint bell and tee-head bolts conforming to ANSI A21.11 and AWWA C-153/ANSI A-21.53. Twist-off nuts shall be used to insure proper actuating of the restraining devices. The mechanical joint restraint device shall have a working pressure of at least 250 psi with a minimum safety factor of 2:1.
1. Approved Products: StarGrip Series 4000 by Star Pipe Products; 2000PV MEGALUG by Ebaa Iron; EZ GRIP by SIP Industries; or approved equal.
- B. PVC Pipe Bell Restraints: Shall be made of ductile iron components conforming to ASTM A536. A split ring shall be used behind the bell and a serrated restraint ring shall be used to grip the pipe. A sufficient number of bolts shall be used to connect the bell ring and the pipe ring. The combination shall have a minimum working pressure rating of 150 psi. Shall be UL listed and/or FM approved.

1. Approved Products: Series 1100 and Series 1200 by Star Pipe Products; Series 1100, Series 1500, Series 1600, and Series 2800 by Ebaa Iron; ONE-LOK SLCE, PV-LOK PVP, and PV-LOK PWP by SIGMA Corporation; Uni-Flange Series 1350 and Uni-Flange Series 1390 by Ford Meter Box Company; EZ Grip PTP Series by SIP Industries; or approved equal.

2.04 HDPE PIPE

- A. Materials: High-density polyethylene (HDPE) pipe shall be a PE4710 high density, extra high molecular weight polyethylene manufactured from first-quality high density polyethylene resin containing no additives, fillers, or extenders. The HDPE pipe shall have an ASTM D3350 cell classification of PE 445474C or PE 445574C, and shall meet or exceed the properties listed in the table below. The HDPE pipe shall be SDR-11 DriscoPlex 4000 (blue stripe) for water mains, 4300 (green stripe) for sewage force mains or 4500 (purple stripe) for reuse water mains, or approved equal, and shall bear the seal of approval of the National Sanitation Foundation (NSF).

PROPERTY	SPECIFICATION	UNIT	NOMINAL VALUE
Material Designation	PPI/ASTM	---	PE 4710
Cell Classification	ASTM D3350	---	445574C
Density	ASTM D1505	gms/cm ³	0.960
Melt Index	ASTM D1238	gm/10 min.	0.08
Flex Modulus	ASTM D790	Psi	>120,000
Tensile Strength	ASTM D638	Psi	> 3,500
HDB @ 73°F	ASTM D2837	Psi	1,600
Color U-V Stabilizer	ASTM D3350	% (Carbon Black)	≥ 2
Hardness	ASTM D2240	Shore "D"	62
Tensile Strength @ Yield (Type VI Spec.)	ASTM D638 (2"/min.)	Psi	> 3,500
Elongation @ Break	ASTM D638	%, minimum	>800
Modulus of Elasticity	ASTM D638	Psi	>175,000
Linear Thermal Expansion Coefficient	ASTM D696	in./in./°F	1.0 x 10 ⁻⁴
Brittleness Temperature	ASTM D746	°F	<-103
Vicat Softening Temperature	ASTM D1525	°F	257

- B. Sizing: Specified HDPE pipe sizes shown in the Contract Documents are nominal inside diameters with ductile iron pipe outside dimension.
- C. HDPE Pipe Joints: Where HDPE pipe is jointed to HDPE pipe, it shall be by thermal butt fusion, meeting the requirements of ASTM F2620 and ASTM F905. Thermal fusion shall be accomplished in accordance with the recommendations of the pipe Manufacturer and the fusion equipment supplier. The fused joints shall have equal or greater tensile and hydrostatic strength than the pipe.
- D. Fittings for HDPE Pipe: Shall be butt fusion type, meeting the requirements of ASTM D3261, and shall be pressure rated to match the system piping to which they are fused. At the point of fusion, the outside diameter and minimum wall thickness shall meet the requirements of ASTM F714 for the same size pipe. The pipe Manufacturer shall supply fitting, flanges, compression couplings, or other mechanical means as approved by the City to join pipes of dissimilar materials.
 - 1. All fittings indicated on the Construction Plans shall be provided unless prior written approval is granted by the City.
- E. Markings: The manufacturer shall apply production data markings as specified herein to the outside surface of the pipe, running longitudinally, repeated continuously, using a permanent, non-toxic lettering. Required production data shall include pipe diameter and designation (e.g., 12" DIP OD), material code identification (i.e., PE4710), dimension ratio (e.g., DR9, DR26) pressure class, AWWA designation (i.e., AWWA C901 or AWWA C906), and potable water designation if applicable (i.e., NSF-pw). Continuous striping along the length of the pipe shall be used to identify pipe service. Striping shall be blue for potable water, purple for reclaimed water, and green for wastewater.

2.05 THRUST BLOCKING MATERIALS

- A. The proportions and mix design shall be such that the concrete will develop a minimum compressive strength of 2,500 psi at 28 days.
- B. The use of high-early cement will be required to allow hydrostatic testing five (5) days following the installation of the thrust blocking.

2.06 PRESSURE GAUGE (FOR PRESSURE TESTING)

- A. The Contractor shall furnish a Type A oil filled gauge for measuring pressure used during hydrostatic pressure testing. The gauge shall have pressure increments not more than 2 psi.

PART 3 - EXECUTION

3.01 PVC PIPE

- A. Inspection: Inspect each shipment of pipe and fittings and make provision for a timely replacement of any damaged material. Damaged or defective pipe shall be removed from the site and replaced with new pipe.
- B. Distributing Pipe Along the Trench: Distribute pipe by hand. Do not drop or drag pipe. Distribute sufficient pipe for one day's work, and place with bell end in the direction of pipe laying. Prevent dirt and contaminants from entering the pipe.
- C. Assembling the Pipe: Closely follow the Manufacturer's recommended procedure for cleaning, setting the ring, lubricating the spigot end of pipe, and assembling.
 - 1. Deflections: The maximum allowable deflection at pipe joints shall not exceed 75 percent of the maximum deflection specified by the Manufacturer. Where deflections greater than 75 percent of the maximum deflection specified by the Manufacturer are necessary, the Contractor shall provide ductile iron fittings.
- D. Making Special Joints: Follow Manufacturer's recommended procedure, and use only the recommended tools for cutting and beveling.
- E. Placing Pipe in Trench:
 - 2. Pipe that is assembled prior to placing in the trench shall be carefully fed by hand (or with the use of approved equipment) on the pipe bed.
 - 3. Provide pockets in the pipe bed material to accommodate bell ends and eliminate a concentration of load at these points.
- F. Preventing Trench Water from Entering Pipe: When pipe laying is not in progress, close the open ends of pipe with a watertight plug and allow no water or other objectionable materials to enter the pipe.

3.02 HDPE PIPE

- A. Inspection: Inspect each shipment of pipe and fittings and make provision for a timely replacement of any damaged material. Damaged or defective pipe shall be removed from the site and replaced with new pipe.
- B. Heat Fusion:
 - 1. Segments of HDPE pipe and HDPE fittings shall be joined by thermal butt fusion, meeting the requirements of ASTM F2620 and ASTM F905. Thermal fusion shall be accomplished in

accordance with the recommendations of the pipe Manufacturer and the fusion equipment supplier.

2. Each installer making heat fusion joints shall demonstrate proficiency by making heat fusion joints and testing the trial heat fusion joints by bent strap testing or ultrasonic testing. Trial joints shall be allowed to cool completely before testing and shall not fail at the joint. The Owner shall have the authority to disallow any installer from completing heat fusion of HDPE pipe if that installer has consecutively failed trial joints.
3. During construction, the first fusion of the day shall be a trial fusion which shall be allowed to cool completely and destructively tested as directed by the Owner. If the trial fusion fails, additional trial fusions shall be made and tested until successful fusions are completed. The procedure used to join the successful trial fusion shall be used for the balance of the day's work, provided the procedure is within the limitations recommended by the manufacturer.
4. The Contractor shall report any occurrence of potential soil contamination in the vicinity of the pipe trench to the Owner immediately. Work shall be stopped until the contamination is remedied.
5. Joint Recording: The Contractor shall record fusion joint data using a McElroy DataLogger 5 or other approved equal GPS enabled data logger. All fusion joint data shall be recorded.

C. Installation by Horizontal Directional Drilling Methods: Comply with Section 02300.

3.03 WATER/SEWER CLEARANCE REQUIREMENTS

- A. Vertical Clearance at Crossings: Gravity sewers or force main crossings under water mains shall be laid to provide a maximum vertical distance of 18 inches between the invert of the upper pipe and the crown of the lower pipe. The crossing shall be arranged so that the sewer joints and water joints will be equidistant from the point of crossing with no less than 10 feet between any two joints. Where the minimum 18-inch separation cannot be maintained, the sewer shall be placed in a sleeve or encased in concrete for 20 feet centered on the point of crossing.

Where there is no alternative to sewer pipes crossing over water mains, the pipes shall be centered at the crossing as indicated above, and the water main shall be placed in a sleeve or encased in concrete for 20 feet centered on the point of crossing. Adequate structural support shall be provided for the sewer to prevent damage to the water main.

B. Horizontal Separation Between Parallel Lines:

1. Sanitary gravity sewers shall be installed at least six feet (6') horizontally (outside to outside) from any existing or proposed water main. The distance shall be measured edge to edge. In cases where less than 10 feet of separation is provided, the water main shall be installed in a separate trench or on an undisturbed earth shelf located on one side of the sewer and at an elevation so that the bottom of the water main is at least 18 inches above the top of the

sewer, and the water and sewer joints shall be staggered.

2. Sanitary force mains shall be installed at least six feet (6') horizontally (outside to outside) from any existing or proposed water main.

3.04 SANITARY SEWER/RECLAIMED WATER AND POTABLE WATER/RECLAIMED WATER SEPARATIONS

- A. When the reclaimed water line is transporting water for public access irrigation the maximum obtainable separation of reclaimed water lines and domestic water lines shall be practiced. A minimum horizontal separation of six feet (6') (center to center) or three feet (3') (outside to outside) shall be maintained between reclaimed water lines and either potable water mains or sewage collection lines. An 18-inch vertical separation shall be maintained at crossings.
- B. When the reclaimed water line is transporting water for non-public access irrigation the reclaimed water main shall be treated like a sanitary sewer, and a separation of at least six feet (6') horizontally and 18 inches vertically shall be maintained between the reclaimed water main and all existing or proposed potable water mains. No minimum separation is required between the reclaimed water main and sanitary sewers, other than that necessary to ensure structural integrity and protection of the lines themselves.

NOTE: When it is impossible to obtain proper horizontal and vertical separations as stipulated above, DEP may allow deviation on a case-by-case basis if supported by data from the City. Approval for the deviation must be obtained prior to construction.

3.05 VALVES AND FITTINGS

- A. Fittings, plugs, and caps shall be set and jointed to pipe in the manner specified in Sections 02660. Buried valves shall be installed in the manner specified in Section 02663. Valves shall be firmly set on a foundation or footing of solid concrete or stone, not less than one (1) cubic foot in volume, which shall have been placed on firmly compacted ground.
- B. The height of the valve and its supporting foundation shall conform to the height of the connecting pipe so there will be no strain on the joints.

3.10 THRUST BLOCKING

- A. Install concrete thrust blocks at all fittings and other locations as indicated on the Construction Plans. Minimum bearing area shall be as shown in the Construction Plans. Joints shall be protected by felt roofing paper prior to placing concrete. Concrete shall be placed against undisturbed material, and shall not cover joints, bolts or nuts, or interfere with the subsequent removal of any fitting. Wooden side forms shall be provided for thrust blocks where trench conditions require. Thrust blocks shall be properly set and adequately cured prior to pressurizing the system.

3.11 FLUSHING

- A. After the mains have been laid, each run of pipe shall be thoroughly flushed so as to remove all debris and foreign matter from the lines. Flushing will ordinarily be done by opening fire hydrants or blowoffs along the pipe line. Where fire hydrants or blowoffs are not available or are of insufficient capacity to permit adequate flushing, the pipe line shall be opened and flumes or piping shall be provided by the Contractor to waste the water to the nearest approved disposal point. Sufficient flushing water shall be introduced into the mains to produce a scouring velocity of not less than 3.5 feet per second to re-suspend the solids, and this rate of flow shall be continued until the discharge is clear and no evidence of silt or foreign matter is visible.
- B. In the event that the Contractor cannot obtain the flushing velocity, a poly-pig swab must be used to clean the pipeline. The Contractor shall submit the proposed pigging plan to the City for review. The plan shall include type of pig material, water flow rate, discharge points, poly-pig detector, and retrieval options.

3.12 HYDROSTATIC TESTING OF PVC PIPE

A. General:

- 1. Hydrostatic tests shall be conducted on all newly laid pressure pipes, joints, and valves including all service lines to the curb stops. Air testing of pressure pipe shall not be permitted under any circumstance. The Contractor shall furnish all necessary equipment and materials, make all taps, and furnish all closure pieces in the pipe as required.
- 2. The Contractor's testing plan shall be submitted to the City for review and approval prior to testing.
- 3. Hydrostatic testing shall be performed at a minimum pressure of 150 psi pressure or 1.5 times the working pressure (whichever is greater) for a period of not less than two (2) hours.
- 4. The Contractor shall supply a pump to apply the specified pressure to the test system. The pump suction shall be in a barrel/drum or similar device, or metered with a calibrated meter, so that the amount of water required to maintain the test pressure may be measured accurately.
- 5. The maximum length of pipe to be tested at one time is 2,600 linear feet. If more than 2,600 linear feet of pipe is tested during a single hydrostatic test, then the allowable leakage shall not exceed that which would be allowed for 2,600 linear feet of jointed PVC pipe.
- 6. No leakage shall be permitted for jointless pipe (i.e., fusion welded HDPE or FPVC pipe). If jointless pipe is included within a section being tested, then the length of jointless pipe shall not be considered when calculating the allowable leakage.

B. Pre-Test Procedures:

1. The Contractor shall perform a hydrostatic pre-test to provide reasonable assurance of acceptance prior to performance of the witnessed test. Upon accomplishing a successful pre-test, the Contractor shall schedule testing to be conducted in the presence of persons required to witness the test.
2. Testing for acceptance shall be conducted in the presence of representatives of the Engineer of Record, the City, and the Contractor. All persons required to be present for testing shall be notified by the Contractor a minimum of two (2) business days prior to commencement of the test. Should any of the persons required to be present not be able to attend, the test shall be rescheduled.
3. Piping and appurtenance to be tested shall be within sections between valves, unless alternate methods have received prior approval. Testing shall not proceed until concrete thrust blocks are in place and cured or other restraining devices installed and all trenches have been completely backfilled in accordance with the Contract Documents. All piping shall be thoroughly cleaned and flushed prior to testing to clear the lines of all foreign matter. While the piping is being filled with water, care shall be exercised to permit the escape of air from extremities of the test section, with additional release cocks provided if required.
4. The Contractor shall ensure that all equipment such as pumps, gauges, blow-offs, and valves are in good working order.
5. The Contractor shall ensure that all valves within a section to be tested are fully open. At the request of the City or the Engineer of Record, the Contractor shall operate each valve to demonstrate that they are open.
6. One day prior to the hydrostatic test, slowly fill the pipe with water and allow it to stand for 24 hours.

C. Hydrostatic Testing for Acceptance:

1. The procedure for conducting the test shall be that each section of pipe to be tested shall be slowly filled with water and the specified test pressure shall be applied by means of a pump connected to the pipe in a manner satisfactory to the City and the Engineer of Record. Prior to applying the specified test pressure, all air shall be expelled from the pipe. To accomplish this, the Contractor shall make taps and install appropriate valves to ensure all air is bleed from the test section.
2. If during the 2-hour test period the test pressure drops by 5 psi from the starting pressure, additional water shall be pumped into the test section to return the pressure to the starting pressure. The amount of water required to return the pressure to the starting pressure shall be recorded.

3. At the end of the 2-hour test period, additional water shall be pumped into the test section to return the pressure to the starting pressure. The amount of water required to return the pressure to the starting pressure shall be recorded.
4. Leakage shall be defined as the quantity of water added to hold the specified test pressure for the duration of the test period. No pipe installation will be accepted if the leakage is greater than the number of gallons per hour as determined by the following formula:

$$L = \frac{0.9 \times S \times D \times \sqrt{P}}{133200}$$

L = allowable leakage, in gallons per hour.

S = length of pipe tested, in feet.

D = nominal pipe diameter, in inches.

P = average test pressure, in psi (gauge).

5. If during the test, the integrity of the tested line is in question, the City may require a 6-hour pressure test. Testing shall be in accordance with the applicable provisions as set forth in Section 4 of AWWA Standard C-600.
6. If defective pipes, fittings, valves, or hydrants are discovered in consequence of this pressure test, all such items shall be removed and replaced by the Contractor with sound material and the test repeated until satisfactory results are obtained.

3.13 HYDROSTATIC TESTING OF SERVICE CONNECTIONS

- A. Test service connection pipe by either testing in conjunction with the main at the test pressure required for the main, or by testing at the normal hydrostatic main pressure after the main has been completely installed and tested. Inspect visually for leaks and repair any leaks before backfilling. Duration of the test shall be at 15 minutes.

3.14 HYDROSTATIC TESTING OF HDPE PIPE

A. General:

1. Hydrostatic tests shall be conducted on all newly laid pressure pipes, joints, and valves including all service lines to the curb stops. Air testing of pressure pipe shall not be permitted under any circumstance. The Contractor shall furnish all necessary equipment and materials, make all taps, and furnish all closure pieces in the pipe as required.
2. The Contractor's testing plan shall be submitted to the City for review and approval prior to testing.
3. Hydrostatic testing shall be performed at a minimum pressure of 150 psi pressure or 1.5 times the working pressure (whichever is greater) for a period of not less than two (2) hours.

4. The Contractor shall supply a pump to apply the specified pressure to the test system. The pump suction shall be in a barrel/drum or similar device, or metered with a calibrated meter, so that the amount of water required to maintain the test pressure may be measured accurately.

B. Pre-Test Procedures:

1. The Contractor shall perform a hydrostatic pre-test to provide reasonable assurance of acceptance prior to performance of the witnessed test. Upon accomplishing a successful pre-test, the Contractor shall schedule testing to be conducted in the presence of persons required to witness the test.
2. Testing for acceptance shall be conducted in the presence of representatives of the Engineer of Record, the City, and the Contractor. All persons required to be present for testing shall be notified by the Contractor a minimum of two (2) business days prior to commencement of the test. Should any of the persons required to be present not be able to attend, the test shall be rescheduled.
3. Piping and appurtenance to be tested shall be within sections between valves, unless alternate methods have received prior approval. Testing shall not proceed until concrete thrust blocks are in place and cured or other restraining devices installed and all trenches have been completely backfilled in accordance with the Contract Documents. All piping shall be thoroughly cleaned and flushed prior to testing to clear the lines of all foreign matter. While the piping is being filled with water, care shall be exercised to permit the escape of air from extremities of the test section, with additional release cocks provided if required.
4. The Contractor shall ensure that all equipment such as pumps, gauges, blow-offs, and valves are in good working order.

C. Hydrostatic Testing for Acceptance: Procedures for conducting this test shall be in accordance with AWWA M55, ASTM F2164, and AWWA C600, where applicable.

1. Fill main slowly with water to remove air.
2. Pressurize the HDPE main to 150 psi by gradually adding water. The test pressure shall be initially advanced to 50 psi. Then the pressure shall be advanced in gradual additions until 150 psi is achieved. The 150 psi pressure shall be maintained for three (3) hours to allow for pipe expansion, adding water as necessary.
3. Immediately after the three (3) hour expansion period, the pressure shall be reduced to 140 psi and addition of water stopped. Monitor for one (1) hour. If the pressure drops by less than five percent (5%), then the section of HDPE main passes.
4. If the test fails, the Contractor shall locate and correct the faulting work and repeat the test.

3.15 DISINFECTION (POTABLE WATER ONLY)

- A. Following pressure testing and before water main disinfection, the water main shall be filled to eliminate air pockets and flushed to remove particulates. The flushing velocity in the main shall not be less than 2.5 ft/sec. unless the City determines that conditions do not permit the required flow.
- B. Water mains shall be disinfected in accordance with requirements of the City of North Port Utilities Standard Specifications, latest edition, and applicable Health Department standards and requirements.

3.14 BACTERIOLOGICAL TESTING (POTABLE WATER ONLY)

- A. General: Comply with the requirements of FAC Rule 62-555.340, AWWA C651, all applicable permits, and all requirements of the Contract Documents.
- B. Chlorinated water shall be flushed from the main until measured levels of chlorine leaving the main are no higher than background levels prevailing in the system.
- C. A neutralizing agent shall be applied to the chlorinated discharge if there is a question as to whether this discharge will damage the environment.
- D. Bacterial samples shall be collected by a representative of the Sarasota County Health Department. Sampling locations shall be at each location required by the water main construction permit plus a minimum of one sample for each 1,200 LF of new water main, at each line end, and at each connection to an existing water main. The sampling locations shall be submitted to the City for review and approval prior to the collection of bacteriological samples. The Contractor shall provide acceptable taps for samples.
- E. Sampling shall be the responsibility of the Contractor. Samples will be taken on two (2) consecutive days by a laboratory certified by the State of Florida in the presence of the City's representative in accordance with F.A.C. 17-555. The Contractor shall contact the City minimum of two (2) business days prior to chlorination to coordinate witnessing chlorination by the City.
- F. If bacteriological results do not show an absence of total coliform at all sample stations for two consecutive days, the Contractor will be required to rechlorinate and flush the line and conduct additional bacteriological testing at no additional cost to the City.

3.15 CONNECTIONS TO EXISTING PIPING SYSTEMS

- A. Approximate locations for existing piping systems are shown in the construction documents. Prior to making connections into existing piping systems, the Contractor shall:
 - 1. Field verify location, size, piping material, and piping system of the existing pipe.
 - 2. Obtain all required fittings, which may include saddles, sleeve type couplings, flanges, tees,

or others as shown in the Construction Plans.

3. Have installed all temporary pumps and/or pipes in accordance with established connection plans.
- B. Unless otherwise approved, new piping systems shall be completely assembled and successfully tested prior to making connections into existing pipe systems.

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SECTION 02660
DUCTILE IRON PIPE AND FITTINGS FOR PRESSURE PIPE

PART 1 - GENERAL

1.01 WORK INCLUDED

- A. Furnishing all labor, materials, equipment, and incidentals necessary to furnish, install, test, and disinfect (as required) all ductile iron pipe and appurtenances as shown in the Construction Plans and as specified herein.
- B. Testing and disinfection (as required).

1.02 REFERENCE STANDARDS

- A. American National Standards Institute (ANSI)/American Water Works Association (AWWA):
 - 1. ANSI A21.4/AWWA C104 – Cement-Mortar Lining for Ductile Iron and Gray Iron Pipe and Fittings for Water and Other Liquids.
 - 2. ANSI A21.5/AWWA C105 – American National Standard for Polyethylene Encasement for Ductile Iron Piping for Water and Other Liquids.
 - 3. ANSI A21.10/AWWA C110 – Ductile Iron and Gray Iron Fittings, 3 In. through 48 In., for Water and Other Liquids.
 - 4. ANSI A21.11/AWWA C111 – Rubber Gasket Joints for Ductile Iron and Gray Iron Pressure Pipe and Fittings.
 - 5. ANSI A21.15/AWWA C115 – Flanged Ductile-Iron Pipe with Ductile-Iron or Gray-Iron Threaded Flanges.
 - 6. ANSI 21.50/AWWA C150 – Ductile Iron Pipe, Thickness Classification.
 - 7. ANSI A21.51/AWWA C151 – Ductile Iron Pipe, Centrifugally Cast in Metal Molds or Sand-Lined Molds for Water or Other Liquids.
 - 8. ANSI A21.53/AWWA C153 – Ductile-Iron Compact Fittings.
- B. American Society of Mechanical Engineers (ASME):
 - 1. ASME B16.5 – Pipe Flanges and Flanged Fittings.
- C. American Standard for Testing and Materials (ASTM):
 - 1. ASTM A536 – Standard Specification for Ductile Iron Castings.

2. ASTM D1248 – Standard Specification for Polyethylene Plastics Extrusion Materials for Wire and Cable.

D. American Water Works Association (AWWA):

1. AWWA C600 – Installation of Ductile Iron Water Mains and Their Appurtenances.
2. AWWA C651 – Disinfecting Water Mains.

1.03 QUALIFICATIONS

- A. All ductile iron pipe and fittings shall be furnished by a single manufacturer who is fully experience, reputable, and qualified in the manufacture of the items to be furnished.
- B. All pipe and accessories for used for potable water shall be NSF certified and copies of the lab certification shall be submitted to the City.

1.04 SUBMITTALS

- A. General: Submit all submittals to the City in accordance with Section 01340.
- B. Required Submittals:
 1. Manufacturer’s recommendations for pipe jointing and laying.
 2. Product Data: Product literature including detailed listing of materials and materials of construction for the following (as required):
 - a. Ductile Iron Pipe.
 - b. Fittings.
 - c. Flange Adapters.
 - d. Restraints.

1.05 QUALITY ASSURANCE

- A. The Contractor shall provide thoroughly trained and experienced personnel who are completely familiar with and adequately equipped for the Work in this Section. Follow the Manufacturer’s recommendation and the requirements herein for standard installation procedures for ductile iron pipe and fittings.

PART 2 - PRODUCTS

2.01 DUCTILE IRON PIPE

- A. Size: As shown in the Construction Plans.
- B. Minimum Thickness Class: Ductile iron pipe shall conform to ANSI A21.51/AWWA C151 and pressure rated 350 psi for 4 inches to 12 inches and 250 psi for 16 inches and larger. Buried pipe shall have a minimum thickness of Class 51. Above-ground pipe shall have a minimum thickness of Class 53.
- C. Lining:
 - 1. Potable and Reclaimed Water: Cement lining meeting the requirements of ANSI A21.4/AWWA C104, minimum 1/8-inch thick.
 - 2. Wastewater: Corrosion resistant material meeting Calcium Aluminate Cement Mortar.
 - a. Approved Products: SewperCoat, Amine Cured Novalac Epoxy, Protecto 401, or a Polyethylene Epoxy composite.
- D. Coating: Bituminous seal coating inside and outside, standard thickness, ANSI A21.4/AWWA C104.
- E. Joint: Push-on unless otherwise shown in the Construction Plans, ANSI A21.51/AWWA C151.
- F. Gaskets: ANSI A21.53/AWWA C153.
- G. Maximum Length: 20 feet.

2.02 DUCTILE IRON FITTINGS

- A. Mechanical Joint Fittings: Ductile iron fittings complying with AWWA C153, designed to withstand a working pressure of not less than 350 psi, and conforming to the requirements of ASNI A21.51.
 - 1. Joints and Gaskets: Mechanical joint with retainer gland. Comply with ANSI A21.11/AWWA C111.
- B. Flanged Joint Fittings: Ductile iron fittings complying with AWWA C110/ANSI A21.10, designed with a minimum working pressure of 250 psi, and conforming to the requirements of ASNI A21.51.
 - 1. Joints and Gaskets: Flanged joint pipe shall be joined utilizing stainless steel nuts and bolts with full-face gaskets or tru-ring gaskets.

- C. Lining and Coating: As specified for ductile iron pipe.

2.03 FLANGED JOINTS

- A. All flanged joints shall be Class 125 standard per ASME B16.5 with neoprene rubber gaskets, minimum 1/8-inch thick.

2.04 IDENTIFICATION

- A. Each pipe length and fitting shall be clearly marked with:
 1. Manufacturer's name and trademark.
 2. Nominal pipe size.
 3. Material designation.

2.05 POLYETHYLENE WRAP

- A. Ductile iron pipe shall be fully encased in an 8-mil polyethylene sleeve, in accordance with ANSI A21.5/AWWA C105, Method A, at locations designated on the Construction Plans. Polyethylene material shall conform with the requirements of ASTM D1248.
- B. Polyethylene wrap shall be colored to designate the end use of the ductile iron pipe:

USE	COLOR
Potable Water Mains	Blue
Reclaimed Water Mains	Purple
Sewage Force Mains	Green

2.06 FLANGE ADAPTERS

- A. Restrained flange adapters shall be used in lieu of threaded or welded flanged spool pieces, unless specified otherwise.
- B. Flange adapters shall be made of ductile iron conforming to ASTM A536 and have flange bolt circles that are compatible with AWWA C115/ANSI A21.15.
- C. Restraint for the flange adapter shall consist of a plurality of individually actuated gripping wedges to maximize restraint capability. Torque limiting actuating screws shall be used to ensure proper initial set of the gripping wedges.
- D. The flange adapters shall be capable of deflection during assembly or permit lengths of pipe to be field cut to allow a minimum of 0.6-inch gap between the end of the pipe and the mating flange without affecting the integrity of the seal.

- E. The flange adapter shall have a minimum safety factor of 2:1.
- F. Acceptable Products: Series 2100 MEGAFLANGE Restrained Flange Adapter produced by Ebaa Iron, or approved equal.

2.07 JOINT RESTRAINTS

- A. Mechanical Joint Restraints: Mechanical joint restraint shall be incorporated in the design of the follower gland and shall include a restraining mechanism which, when actuated, imparts multiple wedging action against the pipe, increasing its resistance as the pressure increases. Flexibility of the joint shall be maintained after burial. Glands shall be manufactured of ductile iron conforming to ASTM A536. Restraining devices shall be of ductile iron heat treated to a minimum hardness of 370 BAN. Dimensions of the gland shall be such that it can be used with the standardized mechanical joint bell and tee-head bolts conforming to ANSI A21.11 and AWWA C-153/ANSI A-21.53. Twist-off nuts shall be used to insure proper actuating of the restraining devices. The mechanical joint restraint device shall have a working pressure of at least 250 psi with a minimum safety factor of 2:1.
 - 1. Approved Products: StarGrip Series 3000 by Star Pipe Products; 1100PV MEGALUG by Ebaa Iron; EZ GRIP by SIP Industries; or approved equal.
- B. Pipe Bell Restraints: Shall be made of ductile iron components conforming to ASTM A536. A split ring shall be used behind the bell and a serrated restraint ring shall be used to grip the pipe. A sufficient number of bolts shall be used to connect the bell ring and the pipe ring. The combination shall have a minimum working pressure rating of 150 psi. Shall be UL listed and/or FM approved.
 - 1. Approved Products: Series 1100, Series 1500, Series 1600, and Series 1700 by Ebaa Iron; ONE-LOK SSLDH and ONE-LOK SLDEH by SIGMA Corporation; Uni-Flange Series 1455 and Uni-Flange Series 1490 by Ford Meter Box Company; or approved equal.

2.08 THRUST BLOCKING MATERIALS

- A. The proportions and mix design shall be such that the concrete will develop a minimum compressive strength of 2,500 psi at 28 days.
- B. The use of high-early cement will be required to allow hydrostatic testing five (5) days following the installation of the thrust blocking.

2.09 PRESSURE GAUGE (FOR PRESSURE TESTING)

- A. The Contractor shall furnish a Type A oil filled gauge for measuring pressure used during hydrostatic pressure testing. The gauge shall have pressure increments not more than 2 psi.

PART 3 - EXECUTION

3.01 GENERAL

- A. Pipe and fittings shall be handled with care to ensure that the pipe and fittings are in sound, undamaged condition. Particular care shall be taken to prevent damage to pipe coating and lining.
- B. The Contractor shall furnish slings, straps, and/or other approved devices to support the pipe when it is lifted. Pipe and fittings shall not be dropped from trucks onto the ground or into the trench. Transporting pipe and fittings from storage areas shall be restricted to operations which will not cause damage to the pipe or lining.
- C. All pipe and fittings shall be examined before laying and no pipe or fittings shall be installed which are found to be defective. Damaged pipe coatings and/or lining, shall be repaired as approved or directed by the City.
- D. Any pipe showing a distinct crack with no evidence of incipient fracture beyond the limits of the visible crack, if approved, may have the cracked portion cut off, at no expense to the City, by the Contractor before the pipe is laid so that the pipe used is sound. The cut shall be made in the sound portion of the barrel at least 12 inches from the visible limit of the crack.
- E. If any defective pipe is discovered after it has been laid, the Contractor shall remove the defective pipe and replace it with sound pipe at no additional cost to the City.

3.02 CONTROL OF ALIGNMENT AND GRADE

- A. Easement and property and other control lines necessary for locating the Work as well as elevations and bench marks used in the design of the Work are shown in the Construction Plans. The Contractor shall use this information to set line and use a level or transit to set grade.
- B. The use of string levels, hand levels, carpenter's levels, or other similar devices for transferring grade or setting pipe are not permitted.
- C. At the request of the City, provide during construction all reasonable and necessary materials, opportunities, and assistance for setting stakes and making measurements, including the furnishing of one or two rodmen as needed at intermittent times.
- D. The Contractor shall not proceed until he/she has made timely request of the City for, and has received from the City, such controls and instructions as may be necessary as Work progresses. Work shall be done in strict conformity with such controls and instructions.
- E. The Contractor shall carefully preserve bench marks, reference points and stakes, and in case of willful, careless, or accidental destruction by his own men, he will be responsible for the resulting expense to re-establish such destroyed control data and shall be responsible for any mistakes or delay that may be caused by the loss or disturbance of such control data.

- F. The Contractor shall maintain good alignment in laying pipe. The deflection at joints shall not exceed the Manufacturer's recommended limit. Provide fittings, if required, in addition to those shown in the Construction Plans when pipe crosses utilities encountered when excavating the trench. Use solid sleeves only where approved by the City.

3.03 INSTALLING PIPE AND FITTINGS

- A. The Contractor shall have on the job site with each pipe laying crew, all the proper tools to handle and cut the pipe.
- B. All pipe and fittings shall be thoroughly cleaned before laying and shall be kept clean until installed.
- C. Pipe shall be laid in the dry trench conditions. At no time shall water in the trench be permitted to flow into the pipe. At any time that Work is not in progress, or the trench is unattended, the end of the pipe shall be suitably closed to prevent the entry of animals, earth, water, etc., using watertight expandable plugs.
- D. Lay pipe and fittings in accordance with the requirements of AWWA C600, except as provided herein.
- E. Excavation shall conform to Section 02231.
- F. As soon as excavation has been completed to the proper depth, the pipe bed shall be prepared as follows:
 - 1. Pipe Laid on Undisturbed Subgrade: Manually excavate for pipe bells and along the trench bottom as necessary to provide a uniform bearing surface along the entire length of the pipe barrels.
 - 2. Pipe Laid on Bedding Material: Place and compact bedding materials, as specified Section 02231, to the elevation necessary to bring the pipe to grade. The compacted material shall be shaped so that the bottom quadrant of the pipe rests firmly on the bedding for the entire length of pipe barrels. Suitable holes shall be dug for bells or couplings to provide ample space for jointing pipe.
- G. When ledge is encountered in the bottom of the trench, pipe shall be bedded on a layer of crushed gravel having a minimum thickness of six inches (6"). Blocking shall not be permitted.
- H. Each pipe section shall be placed into position on the pipe bed in such a manner and by such means required to avoid injury to persons, any property or the pipe.
- I. Permanent blocking under the pipe is not permitted except where a concrete cradle is required, in which case precast concrete blocks shall be used.

- J. Jointing shall conform to the Manufacturer's instructions and appropriate ASTM Standards.
 - 1. Deflections: The maximum allowable deflection at pipe joints shall not exceed 75 percent of the maximum deflection specified by the Manufacturer. Where deflections greater than 75 percent of the maximum deflection specified by the Manufacturer are necessary, the Contractor shall provide ductile iron fittings.
- K. Any debris, tools, etc., shall be removed from the pipe.
- L. Place bedding material in accordance with Section 02231.
- M. After placement of the bedding material the pipe shall be checked for alignment and grade. If the pipe has been properly installed, the Contractor may refill or backfill the remainder of the trench in conformance with Section 02231 and details shown in the Construction Plans.
- N. At the end of each day's work or at other intervals, the City, with the Contractor will inspect the pipe installation. Unsatisfactory work shall be dug up and reinstalled to meet the requirements of the Contract Documents with no additional time allowed for completion of the Work and at no additional cost to the City.
- O. When cutting of pipe is required, the cutting shall be done by machine (power cutter) without damage to the pipe or cement lining. Cut ends shall be smooth and at right angles to the axis of the pipe. Pipe ends to be used with a rubber gasket joint shall be beveled and filed or ground smoothly to conform to a manufactured spigot end.
- P. Install concrete thrust blocks at all fittings and other locations as indicated on the Construction Plans. Minimum bearing area shall be as shown in the Construction Plans. Joints shall be protected by felt roofing paper prior to placing concrete. Concrete shall be placed against undisturbed material, and shall not cover joints, bolts or nuts, or interfere with the subsequent removal of any fitting. Wooden side forms shall be provided for thrust blocks where trench conditions require. Thrust blocks shall be properly set and adequately cured prior to pressurizing the system.

3.04 JOINTING DUCTILE IRON PIPE (PUSH-ON TYPE)

- A. Make push-on joints in strict accordance with the Manufacturer's written instructions. Lay pipe with bell ends looking ahead. Insert a rubber gasket in the groove of the bell end of the pipe and clean and lubricate the joint surfaces. The plain end of the pipe to be entered shall then be inserted in alignment with the bell of the pipe to which it is to be jointed and pushed home with a bar and block. Two (2) continuity brass wedges shall be installed in each push-on joint.

3.05 JOINTING MECHANICAL JOINT FITTINGS

- A. Mechanical joints at valves, fittings, and where designated in the Construction Plans shall be in accordance with ANSI A21.11/AWWA C111, Appendix A – Notes on Installation of Mechanical Joints, and the Manufacturer's written instructions.

- B. Field Installation: Thoroughly clean the joint surfaces and rubber gasket with soapy water before tightening the bolts. Tightening torque for bolts shall be 75 to 90 ft-lbs. Under no condition shall extension wrenches or pipe over handle or ordinary ratchet wrenches be used to secure greater leverage. After installation, apply a bituminous coating to bolts and nuts. A retainer gland (not a common follower gland) shall be used whenever mechanical joints are used.

3.06 FLANGED JOINTS

- A. Tighten bolts in flanged joints alternately and evenly as specified for mechanical joints. Apply a bituminous coating to bolts and nuts for buried joints.

3.07 VALVES

- A. Buried valves shall be installed in the manner specified in Section 02663. Valves shall be firmly set on a foundation or footing of solid concrete or stone, not less than one (1) cubic foot in volume, which shall have been placed on firmly compacted ground.
- B. The height of the valve and its supporting foundation shall conform to the height of the connecting pipe so there will be no strain on the joints.

3.08 THRUST BLOCKING

- A. Install concrete thrust blocks at all fittings and other locations as indicated on the Construction Plans. Minimum bearing area shall be as shown in the Construction Plans. Joints shall be protected by felt roofing paper prior to placing concrete. Concrete shall be placed against undisturbed material, and shall not cover joints, bolts or nuts, or interfere with the subsequent removal of any fitting. Wooden side forms shall be provided for thrust blocks where trench conditions require. Thrust blocks shall be properly set and adequately cured prior to pressurizing the system.

3.09 FLUSHING

- A. After the mains have been laid, each run of pipe shall be thoroughly flushed so as to remove all debris and foreign matter from the lines. Flushing will ordinarily be done by opening fire hydrants or blowoffs along the pipe line. Where fire hydrants or blowoffs are not available or are of insufficient capacity to permit adequate flushing, the pipe line shall be opened and flumes or piping shall be provided by the Contractor to waste the water to the nearest approved disposal point. Sufficient flushing water shall be introduced into the mains to produce a scouring velocity of not less than 3.5 feet per second to re-suspend the solids, and this rate of flow shall be continued until the discharge is clear and no evidence of silt or foreign matter is visible.
- B. In the event that the Contractor cannot obtain the flushing velocity, a poly-pig swab must be used to clean the pipeline. The Contractor shall submit the proposed pigging plan to the City for review. The plan shall include type of pig material, water flow rate, discharge points, poly-pig detector, and retrieval options.

3.10 HYDROSTATIC TESTING OF DUCTILE IRON PIPE

A. General:

1. Hydrostatic tests shall be conducted on all newly laid pressure pipes, joints, and valves including all service lines to the curb stops. Air testing of pressure pipe shall not be permitted under any circumstance. The Contractor shall furnish all necessary equipment and materials, make all taps, and furnish all closure pieces in the pipe as required.
2. The Contractor's testing plan shall be submitted to the City for review and approval prior to testing.
3. Hydrostatic testing shall be performed at a minimum pressure of 150 psi pressure or 1.5 times the working pressure (whichever is greater) for a period of not less than two (2) hours.
4. The Contractor shall supply a pump to apply the specified pressure to the test system. The pump suction shall be in a barrel/drum or similar device, or metered with a calibrated meter, so that the amount of water required to maintain the test pressure may be measured accurately.
5. The maximum length of pipe to be tested at one time is 2,600 linear feet. If more than 2,600 linear feet of pipe is tested during a single hydrostatic test, then the allowable leakage shall not exceed that which would be allowed for 2,600 linear feet of jointed ductile iron pipe.
6. No leakage shall be permitted for jointless pipe (i.e., fusion welded HDPE or FPVC pipe). If jointless pipe is included within a section being tested, then the length of jointless pipe shall not be considered when calculating the allowable leakage.

B. Pre-Test Procedures:

1. The Contractor shall perform a hydrostatic pre-test to provide reasonable assurance of acceptance prior to performance of the witnessed test. Upon accomplishing a successful pre-test, the Contractor shall schedule testing to be conducted in the presence of persons required to witness the test.
2. Testing for acceptance shall be conducted in the presence of representatives of the Engineer of Record, the City, and the Contractor. All persons required to be present for testing shall be notified by the Contractor a minimum of two (2) business days prior to commencement of the test. Should any of the persons required to be present not be able to attend, the test shall be rescheduled.
3. Piping and appurtenance to be tested shall be within sections between valves, unless alternate methods have received prior approval. Testing shall not proceed until concrete thrust blocks are in place and cured or other restraining devices installed and all trenches have been completely backfilled in accordance with the Contract Documents. All piping shall

be thoroughly cleaned and flushed prior to testing to clear the lines of all foreign matter. While the piping is being filled with water, care shall be exercised to permit the escape of air from extremities of the test section, with additional release cocks provided if required.

4. The Contractor shall ensure that all equipment such as pumps, gauges, blow-offs, and valves are in good working order.
5. The Contractor shall ensure that all valves within a section to be tested are fully open. At the request of the City or the Engineer of Record, the Contractor shall operate each valve to demonstrate that they are open.
6. One day prior to the hydrostatic test, slowly fill the pipe with water and allow it to stand for 24 hours.

C. Hydrostatic Testing for Acceptance:

1. The procedure for conducting the test shall be that each section of pipe to be tested shall be slowly filled with water and the specified test pressure shall be applied by means of a pump connected to the pipe in a manner satisfactory to the City and the Engineer of Record. Prior to applying the specified test pressure, all air shall be expelled from the pipe. To accomplish this, the Contractor shall make taps and install appropriate valves to ensure all air is bleed from the test section.
2. If during the 2-hour test period the test pressure drops by 5 psi from the starting pressure, additional water shall be pumped into the test section to return the pressure to the starting pressure. The amount of water required to return the pressure to the starting pressure shall be recorded.
3. At the end of the 2-hour test period, additional water shall be pumped into the test section to return the pressure to the starting pressure. The amount of water required to return the pressure to the starting pressure shall be recorded.
4. Leakage shall be defined as the quantity of water added to hold the specified test pressure for the duration of the test period. No pipe installation will be accepted if the leakage is greater than the number of gallons per hour as determined by the following formula:

$$L = \frac{S \times D \times \sqrt{P}}{133200}$$

L = allowable leakage, in gallons per hour.

S = length of pipe tested, in feet.

D = nominal pipe diameter, in inches.

P = average test pressure, in psi (gauge).

5. If during the test, the integrity of the tested line is in question, the City may require a 6-hour pressure test. Testing shall be in accordance with the applicable provisions as set forth in Section 4 of AWWA Standard C-600.

6. If defective pipes, fittings, valves, or hydrants are discovered in consequence of this pressure test, all such items shall be removed and replaced by the Contractor with sound material and the test repeated until satisfactory results are obtained.

3.11 DISINFECTION (POTABLE WATER ONLY)

- A. Following pressure testing and before water main disinfection, the water main shall be filled to eliminate air pockets and flushed to remove particulates. The flushing velocity in the main shall not be less than 2.5 ft/sec. unless the City determines that conditions do not permit the required flow.
- B. Water mains shall be disinfected in accordance with requirements of the City of North Port Utilities Standard Specifications, latest edition, and applicable Health Department standards and requirements.

3.14 BACTERIOLOGICAL TESTING (POTABLE WATER ONLY)

- A. General: Comply with the requirements of FAC Rule 62-555.340, AWWA C651, all applicable permits, and all requirements of the Contract Documents.
- B. Chlorinated water shall be flushed from the main until measured levels of chlorine leaving the main are no higher than background levels prevailing in the system.
- C. A neutralizing agent shall be applied to the chlorinated discharge if there is a question as to whether this discharge will damage the environment.
- D. Bacterial samples shall be collected by a representative of the Sarasota County Health Department. Sampling locations shall be at each location required by the water main construction permit plus a minimum of one sample for each 1,200 LF of new water main, at each line end, and at each connection to an existing water main. The sampling locations shall be submitted to the City for review and approval prior to the collection of bacteriological samples. The Contractor shall provide acceptable taps for samples.
- E. Sampling shall be the responsibility of the Contractor. Samples will be taken on two (2) consecutive days by a laboratory certified by the State of Florida in the presence of the City's representative in accordance with F.A.C. 17-555. The Contractor shall contact the City minimum of two (2) business days prior to chlorination to coordinate witnessing chlorination by the City.
- F. If bacteriological results do not show an absence of total coliform at all sample stations for two consecutive days, the Contractor will be required to rechlorinate and flush the line and conduct additional bacteriological testing at no additional cost to the City.

3.15 CONNECTIONS TO EXISTING PIPING SYSTEMS

- A. Approximate locations for existing piping systems are shown in the construction documents.

Prior to making connections into existing piping systems, the Contractor shall:

1. Field verify location, size, piping material, and piping system of the existing pipe.
 2. Obtain all required fittings, which may include saddles, sleeve type couplings, flanges, tees, or others as shown in the Construction Plans.
 3. Have installed all temporary pumps and/or pipes in accordance with established connection plans.
- B. Unless otherwise approved, new piping systems shall be completely assembled and successfully tested prior to making connections into existing pipe systems.

END OF SECTION

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SECTION 02661
PIPING SPECIALTIES

PART 1 - GENERAL

1.01 WORK INCLUDED

- A. Furnishing all labor, materials, equipment, and incidentals necessary to furnish and install valve boxes, tracer wire boxes, brass tags, tracer wire, identification tape, couplings, and appurtenances as shown in the Construction Plans and as specified herein.

1.02 SUBMITTALS

- A. General: Submit all submittals to the City in accordance with Section 01340.
- B. Required Submittals:
 - 1. Product Data: Product literature including detailed listing of materials and materials of construction for the following (as required):
 - a. Valve Boxes.
 - b. Tracer Wire Boxes.
 - c. Brass Tags.
 - d. Tracer Wire.
 - e. Identification Tape.
 - e. Couplings.

PART 2 - PRODUCTS

2.01 VALVE BOXES

- A. Valve boxes shall be cast iron, heavy pattern, sliding adjustable type with cast iron cover. The upper section shall have a flange to prevent settling.
- B. Valve boxes shall have barrels not less than five (5) inches inside diameter and lengths adapted to valve depth. The barrels shall lap at least six (6) inches when in the most extended position.
- C. The word "WATER", "SEWER", or "REUSE" shall be cast into the cover, as appropriate.
- D. Acceptable Manufacturers: Tyler Union, Russco, Opelika Foundry, and SIP Industries.

2.02 TRACER WIRE BOXES

- A. Where not subject to vehicular traffic, tracer wire boxes shall be 2-1/2 inch diameter, ABS plastic with cast iron rim and lid. Lid shall be locked and opened with a standard pentagon head key wrench.
 - 1. Approved Products: Series 200 by Bingham & Taylor, TWAB by Valvco, or approved equal.
- B. Where tracer wire boxes will be in streets or subject to vehicular traffic, test boxes shall be 5-1/4 inch diameter, H-20 rated.
 - 2. Approved Products: RWAB by Valvco, or approved equal.

2.03 BRASS TAGS

- A. The Contractor shall provide a brass tag with valve identification information for each valve.
- B. Brass tags shall be 3-inch diameter, 1/8-inch (min.) thick, brass discs with an anchor permanently attached to the underside of the disc.
- C. The following identifying information shall be engraved in 1/4-inch (min.) tall letters. All lettering shall be upper case.
 - 1. Size and type of valve.
 - 2. Type of service.
 - 3. Direction and number of turns to open.
 - 4. Year of installation.

2.04 TRACER WIRE

- A. Insulated (30 mil min.), color-coded THHN tracer wire capable of detection by a cable locator.
- B. Shall be 12 AWG single strand copper for pipe installed by open cut methods. For pipe installed by horizontal directional drilling or jack and bore methods, tracer wire shall be 10 AWG single strand copper wire.
- C. Approved Products: Copperhead High Strength Tracer Wire (Part # 1230*-HS-**), or approved equal.

2.05 IDENTIFICATION TAPE

- A. Shall be three-inch (3") width, detectable marking tape, with a minimum 5.0 mil overall thickness.

- B. Shall be color-coded for identification of the buried utility and printed with the words “CAUTION BURIED WATER LINE BELOW”, “CAUTION BURIED SANITARY SEWER LINE BELOW”, “CAUTION BURIED RECLAIMED WATER LINE BELOW”, or similar as directed by the City.

2.06 COUPLINGS

- A. General: For joining the plain end of a PVC or ductile iron pipe to any existing pipe that is not asbestos cement pipe, a solid sleeve with joint restraints shall be used. HYMAX couplings shall be used for joining the plain end of a PVC or ductile iron pipe to an existing asbestos cement pipe.
- B. HYMAX Couplings:
 - 1. Acceptable Manufacturer: Shall be manufactured by Krausz; substitutions will not be accepted.
 - 2. Coupling shall be selected based on the sizes and materials of pipe to be joined.
 - 3. Materials of construction shall be:
 - a. Center Rings: ASTM A53 Grade A steel for sizes 1-1/2 inches to 12 inches. ASTM A283 Grade C steel for sizes 14 inches to 60 inches.
 - b. Coatings: Fusion bonded epoxy, interior and exterior.
 - c. End Ring: ASTM A283 Grade C steel.
 - d. Gaskets: EPDM compounded for water, complying with NSF 61 and NSF 371.
 - e. Nuts and Bolts: Type 304 stainless steel.
 - f. Bridge: Type 304 stainless steel.
- C. Solid Sleeves: Shall be mechanical joint, solid sleeve fittings, equipped with joint restraints. Coupling shall be selected based on the sizes and materials of pipe to be joined. Comply with the requirements of Section 02660 for ductile iron fittings.

PART 3 - EXECUTION

3.01 INSTALLATION – GENERAL

- A. Install products in accordance with the manufacturer's written instructions, applicable details on in the Construction Plans, and these Specifications.
- B. Solid sleeves shall be restrained to pipe on both ends with mechanical pipe joint restraints.

3.02 VALVE BOXES, CONCRETE PADS, AND BRASS TAGS

- A. Valve boxes shall be carefully centered over the operating nuts of underground valves to permit a valve wrench to be easily fitted to the nut. The bottom of the lower section shall enclose the valve bonnet and operating nut. The valve box shall not transmit surface loads directly to either the pipe or valve. Care shall be taken to prevent earth and other material from entering the valve boxes. A concrete support collar shall be provided for the valve box.
- B. Grade around valve box slab shall be level within a 4-foot square area. Soil surface shall slope uniformly from the level portion at 5 (H) : 1 (V) until it shall meet existing or proposed grade.
- C. The brass tag shall be anchored in the concrete pad and shall be flush with the furnished surface.

END OF SECTION

SECTION 02713
WATER SERVICES

PART 1 - GENERAL

1.01 WORK INCLUDED

- A. Furnishing all labor, materials, equipment, and incidentals necessary for the connection of water services as shown in the Construction Plans and as specified herein.

1.02 SUBMITTALS

- A. General: Submit all submittals to the City in accordance with Section 01340.
- B. Required Submittals:
 - 1. Product Data: Product literature including detailed listing of materials and materials of construction for the following (as required):
 - a. Service Saddles.
 - b. Corporation and Curb Stops.
 - c. Meter Boxes.
 - d. Polyethylene Tubing.
 - e. Polyethylene Pipe.
 - e. Casings.
 - f. Service Line Fittings.
 - g. Tracer Wire and Connectors.

PART 2 - PRODUCTS

2.01 GENERAL

- A. Water services lines shall be a minimum one inch (1”) in diameter (nominal). Services lines shall be connected to mains by a tapping saddle and valves unless otherwise indicated in the Construction Plans.

2.02 SERVICE SADDLES

- A. Services saddles shall be double stainless steel strap, anchored by a minimum four (4) bolt pattern

on an epoxy coated ductile iron saddle body. All hardware shall be stainless steel. Sealing gaskets shall be suitable for the application.

- B. Acceptable Manufacturers: Smith-Blair, Mueller, Ford, and JCM.

2.03 CORPORATION STOPS AND CURB STOPS

- A. Provide in accordance with Section 02663.

2.04 METER BOXES

- A. Meter boxes shall be plastic units of a size comparable with the meter. Box height shall extend from the bottom of the meter to the final grade at the meter location. Cover shall be traffic bearing and have a cast iron hinged meter reading viewing lid.
- B. For reclaimed water service, boxes and lids shall be purple in color. Lids shall be stamped with "NON-POTABLE" and "DO NOT DRINK" in both English and Spanish.
- C. Acceptable Manufacturers: CDR, Polyplastics, Carson Brooks, NDS, and Glasmasters.

2.05 POLYETHYLENE TUBING FOR SERVICE LINES

- A. General: Polyethylene tubing shall be used for water and reclaimed water services lines in sizes two inches (2") and smaller.
- B. Polyethylene tubing shall be high density PE 3408 polyethylene resin per ASTM D2737 with a cell classification of PE345343C or better, Pressure Class 200, Copper Tube Size (CTS), SDR 9 per ASTM F714, and shall meet the requirements of AWWA C901. Each length shall be marked with the manufacturer's name or trademark, size, material code, and pressure class. Rework material is not acceptable.
 - 1. Color Coding: Tubing shall be blue for potable water services and purple for reclaimed water services. Shall have a minimum of 2% carbon black to withstand exposure to ultraviolet light without loss of properties.
- C. Acceptable Products: Performance Pipe DriscoPlex 5100, Endot EndoPure, Charter Plastics, or approved equal

2.06 POLYETHYLENE PIPE FOR SERVICE LINES

- A. General: Polyethylene pipe shall be used for water and reclaimed water services lines in sizes three inches (3") and larger.
- B. Polyethylene pipe shall be high density PE 4710 polyethylene per ASTM D3350 with a cell classification of PE445574C or better, Pressure Class 160, Iron Pipe Size (IPS), DR 11 per ASTM F714, and shall meet the requirements of ASTM D3035, AWWA C901, and AWWA C906.

1. Color Coding: Pipe shall be provided with blue striping for potable water services and purple striping for reclaimed water services. Striping shall be applied by the manufacturer.

- C. Acceptable Products: Performance Pipe DriscoPlex 4100, or approved equal.

2.07 CASINGS

- A. Casings for polyethylene tubing for reclaimed water service lines shall be Schedule 40 PVC. Nominal size shall be two times the size of the tubing (e.g., 2-inch Schedule 40 PVC is to be used as a casing for 1-inch polyethylene tubing water services), unless otherwise indicated.

2.08 SERVICE LINE FITTINGS

- A. Fittings Two Inches (2") in Diameter and Smaller: Copper tube size (CTS) brass compression fittings connections shall be used. All surfaces that come into contact with water shall be no-lead brass manufactured from UNS/CDA No. 898633 alloy containing no more than 0.25% total lead content by weight. Shall be embossed "NL" or similar for "no lead." All fittings shall conform to the requirements of AWWA C800.

- B. U-Branch Fittings: Provide for dual services. Size per Construction Plans. Inlet and outlets shall be pack joints for plastic tubing.

1. Acceptable Manufacturers: Ford Meter Box, Mueller Co., or approved equal.

- C. Y-Branch Fittings: Provide for dual services where field conditions prohibit the use of a U-branch fittings. Size per Construction Plans. Inlet and outlets shall be pack joints for plastic tubing.

1. Acceptable Products: Y44-xxx-NL Style by Ford Meter Box, H-15343 by Mueller Co., or approved equal.

2.09 TRACER WIRE AND CONNECTORS

- A. Tracer Wire: Provide 12 AWG tracer wire complying with Section 02661.

- B. Connectors: Main line splices to services lines shall be made using a produce manufactured by the tracer wire manufacturer and specifically designed for the application.

PART 3 - EXECUTION

3.01 PREPARATION

- A. Establish the location for the installation of each meter. General locations for each meter are indicated on the Construction Plans. The Contractor shall coordinate with the City to determine the exact installation location for each meter.

3.02 WATER SERVICES

- A. General: Water services shall comply with applicable details included in the Construction Plans and as specified herein.
- B. Each service shall consist of the following:
 - 1. A service saddle and corporation stop on the associated reclaimed water main.
 - 2. A polyethylene service line terminating with a curb stop. The length of service line constructed shall be sufficient to properly connect with the constructed location of the meter box. A copper tracer wire shall be attached to the top of the service line. The tracer wire shall be spliced at the main line tracer wire and shall terminate in the meter box.
 - a. When installed below a roadway, the service line shall be installed within a PVC casing.
 - b. For double service connections, a U-branch or a Y-branch fitting shall be provided.
- D. Service Connection to Potable or Reclaimed Water Mains:
 - 1. The Contractor shall install service saddle and corporation stop for each service that is to be connected to the main.
 - 2. Taps shall not be closer than two feet (2') apart or within two feet (2') of any joint. Taps in multiple groups shall not be made in the same longitudinal line of the pipe but must be staggered vertically. Location information shall be recorded for each service saddle in accordance with Section 01720.
 - 3. The Contractor shall use proper seals or other devices to ensure that no leaks are left in the water mains at the points of tapping. Do not backfill or cover the service connection until observed by the City.
- E. Service line may be installed by open cut or trenchless methods. Pneumatic bullet or horizontal directional drill (HDD) are acceptable trenchless methods.
 - 1. Service lines shall not be located below driveways.

3.03 METER BOXES

- A. Excavate and place a minimum of four inches (4") of $\frac{3}{4}$ inch washed gravel or crushed shell on compacted subgrade as a base for the meter box.
- B. Meter boxes shall completely enclose the meter and curb stop. Boxes shall be positioned to allow access to the meter connections for installation and removal of the meter and to the curb stop for opening and closing the valve.

- C. The top of meter box shall be flush with surrounding grade in paved areas; in unpaved areas, the top of the meter box shall extend 1/4" to 1/2" above surrounding grade.

END OF SECTION

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SECTION 02932
TOPSOIL

PART 1 - GENERAL

1.01 WORK INCLUDED

- A. Furnishing all labor, materials, equipment, and incidentals necessary to furnish, prepare, and spread topsoil, fertilizer, lime, and mulch as shown in the Construction Plans and as specified herein.

1.02 REFERENCE STANDARDS

- A. Florida Department of Transportation (FDOT):
 - 1. Standard Specifications for Road and Bridge Construction (Standard Specifications), latest edition.
 - 2. FDOT FM 1-T 267 – Florida Method of Test of Determination of Organic Content in Soils by Loss on Ignition.

1.03 SUBMITTALS

- A. General: Submit all submittals to the City in accordance with Section 01340.
- B. Required Submittals:
 - 1. Product Data: Product literature showing compliance with the requirements herein and including source/supplier information (as required):
 - a. Topsoil.
 - b. Lime.
 - c. Fertilizer.
 - d. Mulch.

PART 2 - PRODUCTS

2.01 TOPSOIL

- A. Topsoil shall comply with the requirements of Section 162 – Prepared Soil Layer of the FDOT Standard Specifications for “Finish Soil Layer” and those requirements herein.

- B. Topsoil shall be reasonably free from subsoil, stumps, roots, brush, rock or stones exceeding two inches (2") in diameter, clay lumps, trash, or other similar objects.
- C. Topsoil shall have a pH between 4.5 and 8.5 and shall have an organic content of 2.5 to 10 percent in accordance with FDOT FM 1-T 267.

2.02 LIME

- A. Lime shall be ground dolomite limestone, designated for agricultural use.

2.03 FERTILIZER

- A. Fertilizer shall comply with the requirements of Section 982 – Fertilizer of the FDOT Standard Specifications and those requirements herein.
- B. Fertilizer shall be a standard commercial fertilizer containing 12 percent nitrogen, 8 percent phosphoric acid, and 8 percent potassium.
- C. Fertilizer shall comply with the requirements of applicable state and federal laws and Code of the City of North Port Chapter 22 – Environmental and Natural Resources, Article II – Fertilizer and Landscape Management.

2.04 MULCH

- A. Mulch shall comply with the requirements of Section 981 – Turf Materials of the FDOT Standard Specifications.

PART 3 - EXECUTION

3.01 PREPARATION OF AREA

- A. Clear stones larger than two inches (2") in diameter, sticks, and other debris which might interfere with the establishment, growth, or maintenance of acceptable turf and roller the area before applying fertilizer and limestone.

3.02 PLACING TOPSOIL

- A. Evenly spread topsoil prepared area to a uniform depth of 4 inches, after compaction. Spreading shall not be done when the ground or topsoil is excessively wet or otherwise in a condition detrimental to the work. Spreading shall be carried on so that sodding operations can proceed with a minimum of soil preparation or tilling.
- B. After spreading, any large stiff clods and hard lumps shall be broken with a pulverizer or by other effective means and any subsoil, stumps, roots, brush, rock or stones exceeding 2 inches in diameter, clay lumps, trash, or other similar objects shall be removed.

- C. The final topsoil surface shall conform to the required lines, grades, and cross sections.
- D. Any topsoil or other dirt falling upon pavements as a result of hauling or handling of topsoil shall be promptly removed.

3.03 PLACING LIME, FERTILIZER, AND MULCH

- A. The rate and method of application of lime, fertilizer, and mulch shall comply with the recommendations of the supplier and the requirements of Code of the City of North Port Chapter 22 – Environmental and Natural Resources, Article II – Fertilizer and Landscape Management

3.04 DISPOSAL OF WASTE MATERIALS

- A. The Contractor shall dispose of all material and debris generated by hauling such material and debris away to an approved facility.

END OF SECTION

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SECTION 02933
SODDING

PART 1 - GENERAL

1.01 WORK INCLUDED

- A. Furnishing all labor, materials, equipment, and incidentals necessary to furnish, haul, place, and establish sod on prepared topsoil as shown in the Construction Plans and as specified herein.

1.02 DEFINITIONS

- A. Satisfactory Turf: A healthy, well-rooted, even colored, viable turf, free of open joints, bare areas, and surface irregularities.

1.03 SUBMITTALS

- A. General: Submit all submittals to the City in accordance with Section 01340.
- B. Required Submittals:
 - 1. Product Data: Product literature showing compliance with the requirements herein and including source/supplier information (as required):
 - a. Sod.

PART 2 - PRODUCTS

2.01 SOD

- A. General: Sod shall have a good cover of living or growing grass. All sod shall be obtained from areas where the soil is reasonably fertile and contains a high percentage of loamy topsoil. Sod shall be cut or stripped from living, thickly matted turf relatively free of weeds or other undesirable foreign plants, large stones, roots, or other materials which might be detrimental to the establishment, growth, or maintenance of acceptable turf. Minimum thickness of sod shall be two inches (2").
- B. Where replacing existing sod, the new sod shall match the existing sod, unless otherwise directed by the City.
- C. Where not replacing existing sod, sod shall be Argentine Bahia, unless otherwise directed by the City.

2.02 LIME AND FERTILIZER

- A. Shall comply with the requirements of Section 02932.

2.03 WATER

- A. Water shall be sufficiently free from oil, acid, alkali, salt, or other harmful materials that would inhibit the growth of satisfactory turf.
- B. The Contractor shall supply all necessary water.

2.04 SOIL FOR REPAIRS

- A. Topsoil complying with the requirements of Section 02932.

PART 3 - EXECUTION

3.01 PREPARATION OF GROUND SURFACE

- A. Prepare the final topsoil surface and apply lime and fertilizer in accordance with the requirements of Section 02932.

3.02 OBTAINING AND DELIVERING SOD

- A. After inspection and approval of the sod by the City, the sod shall be cut with approved sod cutters to such a thickness that after it has been transported and placed on the prepared bed but before it has been compacted, it shall have a uniform thickness of not less than two inches (2"). Sod sections or trips shall be cut in uniform widths, not less than 10 inches, and in lengths of not less than 18 inches, but of such length as may be readily lifted without breaking, tearing, or loss of soil. Sod shall be cut and moved only when the soil moisture conditions are such that favorable results can be expected. Where the soil is too dry, permission to cut sod may be granted only after it has been watered sufficiently to moisten the soil to the depth the sod is to be cut.
- B. The sod shall be transplanted with 24 hours from the time it is stripped, unless circumstances beyond the Contractor's control make storing necessary. In such cases, sod shall be stacked, kept moist, the protected from exposure to the air and sun and shall be kept from freezing.

3.03 LAYING SOD

- A. Sodding shall be performed only during the seasons when satisfactory results can be expected. Frozen sod shall not be used and sod shall not be placed upon frozen soil. Sod may be transplanted during periods of drought with the approval of the city, provided the sod bed is watered to moisten the soil to a depth of at least four inches (4") immediately prior to laying the sod.
- B. Pitch forks shall not be used to handle sod. Dumping from vehicles shall not be permitted.

- C. The sod shall be moist and shall be placed on a moist earth bed. The sod shall be carefully placed by hand, edge to edge, and with staggered joints, in rows at right angles to the slopes, commencing at the base of the area to be sodded and working upward. The sod shall immediately be pressed firmly into contact with the sod bed by tamping or rolling with approved equipment to provide a true and even surface, and insure knitting without displacement of the sod or deformation of the surfaces of sodded areas.
1. Where the sod may be displaced during sodding operations, the workmen when replacing it shall work from ladders or treaded planks to prevent further displacement.
 2. Soil for repairs shall be used to fill all cracks between sods; the quantity of the soil shall not cause smothering of the grass.
 3. Where the grades are such that the flow of water will be from paved surfaces across sodded areas, the surface of the soil in the sod after compaction shall be set approximately 1 inch below the pavement edge. Where the flow will be over the sodded areas and onto the paved surfaces around manholes and inlets, the surface of the soil in the sod after compaction shall be placed flush with pavement edges.
 4. On slopes steeper than 2.5 (H) : 1 (V) and in V-shaped or flat-bottom ditches or gutters, the sod shall be pegged with wooden pegs not less than 12 inches in length and have a cross-sectional area of not less than 3/4 square inch. The pegs shall be driven flush with the surface of the sod.

3.05 WATERING

- A. Adequate water and watering equipment must be on hand before sodding begins.
- B. Sod shall be saturated with fine water spray within two (2) hours of laying and soil shall be kept moist to a minimum depth of 1-1/2 inches below the sod until it has become established and its continued growth assured.
- C. In all cases, watering shall be done in a manner which will avoid erosion from the application of excessive quantities and will avoid damage to the finished surface.

3.06 ESTABLISHING TURF

- A. The Contractor shall provide general care for the sodded areas as soon as the sod has been laid and shall continue until final inspection and acceptance of the work. All sodded areas shall be protected against traffic or other use by warning signs or barricades approved by the City.

3.07 REPAIRING

- A. When the surface has become disturbed or otherwise damaged during the period covered by this contract, the Contractor shall repair the affected area to re-establish the grade and the

condition of the topsoil, as directed by the City, and shall then be re-sod the area in accordance with the requirements of this Section.

3.08 DISPOSAL OF WASTE MATERIALS

- A. The Contractor shall dispose of all material and debris generated by hauling such material and debris away to an approved facility.

END OF SECTION

SECTION 02990
MISCELLANEOUS WORK AND CLEANUP

PART 1 - GENERAL

1.01 WORK INCLUDED

- A. Furnishing all labor, materials, equipment, and incidentals necessary for completing all miscellaneous work and cleanup not specified elsewhere, including but not limited to:
1. Cleaning up the construction site.
 2. Disposing of waste material and debris.
 3. The extra work of crossing existing sewers, drains, electrical and telephone conduits, and water mains.
 4. Miscellaneous work associated with connecting to existing piping.
 5. Disconnecting, plugging, and abandoning the existing piping including all excavation, backfill, concrete plugs, and surface restoration items.
 6. Repair building components damaged during construction.
 7. All other work incidental to completing the project.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.01 CLEANUP

- A. Remove all construction material, excess excavation, equipment, or other debris remaining on the Site as a result of construction operations and render the Site in a neat and orderly condition equal to or better than which existed prior to the start of Work.
- B. The Contractor shall dispose of all material and debris by hauling such material and debris away to an approved facility. The cost of hauling and disposal shall be considered a subsidiary obligation of the Contractor and the cost shall be included in the Contract prices.

3.02 INCIDENTAL WORK

- A. All incidental work not otherwise specified but necessary to the proper completion of the Contract as specified and as shown in the Contract Documents shall be completed.

END OF SECTION

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SECTION 03315
NONSTRUCTURAL CONCRETE

PART 1 - GENERAL

1.01 WORK INCLUDED

- A. Furnishing and placing of all nonstructural concrete, including thrust blocks, pipe encasement, and pipe support.
- B. Furnishing and placing steel reinforcement.
- C. Furnishing, installing, and removing formwork.

1.02 REFERENCE STANDARDS

- A. American Concrete Institute (ACI):
 - 1. ACI 301 – Specifications for Structural Concrete.
- B. American Society of Testing and Materials (ASTM):
 - 1. ASTM A185 – Welded Steel Wire Fabric for Concrete Reinforcement.
 - 2. ASTM A615 – Deformed and Plain Billet-Steel Bars for Concrete Reinforcement.
 - 3. ASTM C33 – Concrete Aggregates.
 - 4. ASTM C94 – Ready-Mixed Concrete.
 - 5. ASTM C150 – Portland Cement.

1.03 QUALITY ASSURANCE

- A. Concrete work shall conform to all requirements of ACI 301, except as modified herein.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Cement: ASTM C150, Portland Type II.
- B. Fine and Coarse Aggregates: ASTM C33, 3/4-inch maximum size.
- C. Water: Fresh, clean, potable water.

- D. Reinforcing Steel: ASTM A615, Grade 60.
- E. Stirrups and Ties: ASTM A615, Grade 40.
- E. Welded Wire Fabric: ASTM A185.
- F. No chemical admixtures shall be used.

2.02 CONCRETE

- A. Concrete placement exceeding 1 cubic yard shall be transit mixed conforming to ASTM C94.
- B. Concrete shall have a minimum compressive strength of 2,500 psi at 28 days, unless specified otherwise.
- C. Slump: 5 inches maximum.

PART 3 - EXECUTION

3.01 PREPARATION

- A. General:
 - 1. Thoroughly clean all areas to ensure proper placement and bonding of concrete. Remove all wood scraps and debris from the areas in which concrete will be placed.
 - 2. Thoroughly oil or wet (except in freezing weather) the forms; remove all standing water.
 - 3. Earth subgrades to receive concrete shall be clean, undisturbed surfaces, free from mud, debris, and standing or running water.

3.02 FORMS

- A. Forms shall be soundly built, tied, and properly aligned.

3.03 NOTIFICATION

- A. Notify the City at least 24 hours before placing concrete.

3.04 THRUST BLOCKS

- A. Thrust blocks shall be formed and cast in place in accordance with details shown in the Construction Plans.

END OF SECTION

APPENDIX
Geotechnical Report

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TIERRA

September 30, 2015

Stantec Consulting Services, Inc.
5172 Station Way
Sarasota, Florida 34233

Attn: Mr. Stephen MacEachern, P.E.

**RE: Report of Geotechnical Engineering Services
City of North Port Reclaimed Water Main (Phase III)
Sarasota County, Florida
Tierra Project Number: 6511-15-124**

Mr. MacEachern:

Tierra, Inc. has completed the geotechnical engineering study for the above referenced project. The results of the study are provided herein.

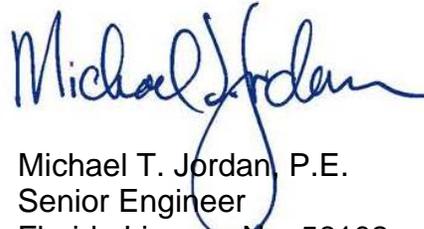
Should there be any questions regarding the report, please do not hesitate to contact our office at (813) 989-1354. Tierra would be pleased to continue providing geotechnical services throughout the implementation of the project. We look forward to working with you and your organization on this and future projects.

Respectfully Submitted,

TIERRA, INC.



V. Seth Collie, P.E.
Geotechnical Engineer
Florida License No. 79305



Michael T. Jordan, P.E.
Senior Engineer
Florida License No. 56102

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PROJECT DESCRIPTION

Project Information

The project is located in the City of North Port, Florida. The project, as Tierra understands it, is to provide geotechnical services for the Horizontal Directional Drilling (HDD) associated with the extension of a reclaimed water main. The pipe alignment travels along Appomattox Drive from North Port Boulevard to Pan American Boulevard (approximately 3,000 feet), and along Spring Haven Drive from Pan American Boulevard to West Price Boulevard (approximately 4,100 feet). The water main pipe sizes will range from 16 to 18 inches with a minimum of 3 feet of cover, and a majority of the water main will be installed by open cut trench methods. Horizontal Directional Drilling (HDD) techniques are proposed where the water main crosses under existing intersections (approximately 3 locations), under a drainage ditch, and under the two bridges over Big Slough.

Scope of Services

The objective of our study was to obtain information concerning subsurface conditions at the site to base engineering estimates and recommendations in each of the following areas:

1. General location and description of potentially deleterious materials discovered in the borings which may interfere with the HDD and pipe installation including dense soil materials, rock, shell or other materials detrimental to HDD methods.
2. Identification of groundwater levels.

In order to meet the preceding objectives, we provided the following services:

1. Reviewed published soils and topographic information. This published information was obtained from the "Murdock, Florida" Quadrangle Map published by the United States Geological Survey (USGS) and the Soil Survey of Sarasota County, Florida, published by the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS).
2. Executed a program of subsurface exploration consisting of borings, subsurface sampling, and field testing.
3. Visually classified the samples in the laboratory using the Unified Soil Classification System (USCS) and the AASHTO Soil Classification System. Identified soil conditions at each boring location.
4. Collected groundwater level measurements.

5. Prepared this formal engineering report that summarizes the course of study pursued, the field data generated, subsurface conditions encountered and our engineering recommendations in each of the pertinent topic areas.

The scope of our services did not include an environmental assessment for determining the presence or absence of wetlands or hazardous or toxic materials in the soil, bedrock, groundwater, or air, on or below or around this site. The scope of our services did not include determination of the potential for sinkhole activity. Any statements in this report or on the boring logs regarding odors, colors, unusual or suspicious items or conditions are strictly for the information of our client.

SITE AND SUBSURFACE CONDITIONS

General Site Information

Based on the "Murdock, Florida" United States Geological Survey (USGS) Quadrangle Map, the natural ground elevations along the project alignment ranges from approximately +5 to +20 feet, National Geodetic Vertical Datum of 1929 (NGVD 29).

Land use in the project area typically consists of residential and commercial developments.

Sarasota County Soil Survey

Based on a review of the Soil Survey for Sarasota County published by the USDA NRCS, it appears that there are three (3) primary soil-mapping units noted along the project. The general soil descriptions, as described in the Soil Survey, are presented in the following table.

SUMMARY OF USDA SOIL SURVEY SARASOTA COUNTY, FLORIDA							
USDA Map Symbol and Soil Name	Depth (in)	Soil Classification		Permeability (in/hr)	pH	Seasonal High Water Table	
		USCS	AASHTO			Depth (feet)	Months
(10) EauGallie - Myakka	0-6	SP, SP-SM	A-3	6.0 - 20.0	4.5-6.0	0.5-1.5	June-Sept
	6-22	SP, SP-SM	A-3	6.0 - 20.0	4.5-6.0		
	22-44	SM, SP-SM	A-2-4, A-3	0.6 - 6.0	4.5-6.5		
	44-48	SP, SP-SM	A-2-4, A-3	6.0 - 20.0	4.5-7.8		
	48-66	SC, SC-SM, SM	A-2-4, A-2-6	0.1 - 0.6	4.5-7.8		
	66-80	SC, SC-SM, SM	A-2-4, A-2-6	0.6 - 6.0	4.5-7.8		
	0-6	SP, SP-SM	A-3	6.0 - 20.0	3.5-6.5	0.5-1.5	June-Sept
	6-24	SP, SP-SM	A-3	6.0 - 20.0	3.5-6.5		
	24-42	SM, SP-SM	A-2-4, A-3	0.6 - 6.0	3.5-6.5		
	42-80	SP, SP-SM	A-3	6.0 - 20.0	3.5-6.5		
(13) Felda, flooded - Pompano, flooded	0-4	SP, SP-SM	A-3	6.0 - 20.0	5.1-7.8	0.0-0.5	June-Nov
	4-24	SP, SP-SM	A-3	6.0 - 20.0	5.1-7.8		
	24-65	SC, SC-SM, SM	A-2-4, A-2-6	0.6 - 6.0	6.1-7.8		
	65-80	SP, SP-SM	A-2-4, A-3	6.0 - 20.0	6.1-8.4		
	0-3	SP, SP-SM	A-2-4, A-3	6.0 - 20.0	4.5-7.8	0.0-0.5	June-Nov
	3-80	SP, SP-SM	A-2-4, A-3	6.0 - 20.0	4.5-7.8		
(33) Pomello	0-4	SP, SP-SM	A-3	20.0 - 40.0	4.5-6.0	2.0-3.5	June-Nov
	4-48	SP, SP-SM	A-3	20.0 - 40.0	4.5-6.0		
	48-80	SM, SP-SM	A-2-4, A-3	2.0 - 6.0	4.5-6.0		

It should be noted that information contained in the USDA NRCS Soil Survey may not be reflective of current subsurface conditions particularly if recent development in the project vicinity has modified existing soils or surface/subsurface drainage.

Subsurface Conditions

Prior to commencing our subsurface explorations, a boring location plan was developed based on project information provided by Stantec. The subsurface conditions along the alignment of the proposed water main were explored using six (6) SPT borings performed to depths ranging from approximately 15 to 30 feet below existing site grades.

The borings were located in the field using hand-held Garmin eTrex Global Positioning System (GPS) equipment with an accuracy of up to 10-feet. Generally, the borings were performed at the proposed boring locations. When not possible, due to access or utility constraints, the boring locations were altered and the relocated GPS coordinates were

recorded on the field boring logs. The approximate boring locations are presented on the **Boring Location Plan** sheet in the **Appendix**.

The SPT borings were performed with the use of a drill rig using Bentonite Mud drilling procedures. The soil sampling was performed in general accordance with American Society for Testing and Materials (ASTM) Test Designation D-1586 titled "Penetration Test and Split-Barrel Sampling of Soils." The initial 4 feet of most of the SPT borings were manually augered to verify utility clearance. Thereafter, SPT resistance N-values were recorded and soil samples were collected continuously from a depth of 4 feet to a depth of 10 feet and at intervals of 5 feet thereafter. The soil samples were classified in the field and transported to our laboratory for review.

The soil strata encountered in the borings performed at the proposed project site are summarized in the following table:

Stratum Number	Soil Description	AASHTO Symbol	USCS Symbol
1	Pale Brown to Gray to Dark Brown SAND to SAND with Silt	A-3	SP/SP-SM
2	Light Gray to Orange-Brown Silty SAND	A-2-4	SM
3	Gray Clayey SAND	A-2-6/A-6	SC
4	Light Gray to Green-Gray Indurated Sandy SILT to Sandy CLAY	A-7-5/A-7-6	ML/CL

The subsurface soil stratification is of a generalized nature to highlight the major subsurface stratification features and material characteristics. The soil profiles included in the **Appendix** should be reviewed for specific information at individual boring locations. These profiles include soil descriptions, stratifications, and penetration resistances. The stratifications shown on the boring profiles represent the conditions only at the actual boring location. Variations did occur and should be expected between boring locations. The stratifications represent the approximate boundary between subsurface materials and the actual transition may be gradual.

Groundwater Information

The groundwater table was measured at depths ranging from approximately 4 to 7 feet below the existing ground surface. The encountered groundwater levels are presented on **Sheet 2** in the **Appendix**.

The groundwater table was not apparent in the borings prior to the start of mud rotary drilling at a depth of 10 feet below the existing ground surface at the time of our field activities. When performing SPT borings, the use of drilling mud can limit the ability to obtain accurate groundwater table measurements when the groundwater table depth is

greater than the depth where the drilling mud is introduced. As a result, GNA (groundwater not apparent) is indicated on the soil profiles of these borings presented in the **Appendix**.

It should be noted that groundwater levels tend to fluctuate during periods of prolonged drought and extended rainfall and may be affected by man-made influences. In addition, a seasonal effect will also occur in which higher groundwater levels are normally recorded in rainy seasons.

EVALUATION AND RECOMMENDATIONS

General

The boring encountered sand with various amounts of silt and shell to depths ranging from 13 to 28 feet below natural grade. This was underlain by intermittent layers of firm to very hard silts and clays to the boring termination depths.

Very hard (indurated) clays/silts were encountered within the borings. Drilling and reaming within this material will be difficult. If the horizontal directional drilling operations extend into this stratum, the Contractor should anticipate difficult drilling conditions in and through these layers and should be prepared to utilize specialized equipment to facilitate drilling and reaming within this stratum. In addition, based on the relatively high permeability rates presented in the USDA Soil Survey and the presence of shelly sand and shell, the Contractor should anticipate greater than normal dewatering efforts and higher than normal losses of circulation of drilling fluid.

Based on a review of the "Potentiometric Surface of the Upper Floridan Aquifer, West-Central Florida" maps published by the USGS; the potentiometric surface elevation of the upper Floridan Aquifer in the project vicinity ranges from approximately +30 to +40 feet, NGVD 1929. The project site elevations range from approximately +5 to +20 feet NGVD 1929. Artesian conditions were not encountered at the time of our field activities; however, the Contractor should be prepared to handle artesian conditions, if encountered.

Drainage and Groundwater Concerns

As mentioned above, the groundwater table was measured at depths ranging from approximately 4 to 7 feet below the existing ground surface. The groundwater levels presented in this report are the levels that were measured at the time of our field activities. Fluctuation should be anticipated. We recommend that the Contractor determine the actual groundwater levels at the time of the construction to determine groundwater impact on his construction procedure. Care should be given to open excavations and site grading to minimize ponding of surface water.

REPORT LIMITATIONS

The analyses, conclusions and recommendations contained in this report are professional opinions based on the site conditions and project layout described herein and further assume that the conditions observed in the exploratory borings are representative of the subsurface conditions throughout the site, i.e., the subsurface conditions elsewhere on the site are the same as those disclosed by the borings. If, during construction, subsurface conditions different from those encountered in the exploratory borings are observed or appear to be present beneath excavations, we should be advised at once so that we can review these conditions and reconsider our recommendations where necessary.

If there is a substantial lapse in time between the submittal of this report and the start of work at the site, or if conditions or project layout are changed due to natural causes or construction operations at or adjacent to the site, we recommend that this report be reviewed to determine the applicability of conclusions and recommendations considering the changed conditions and time lapse.

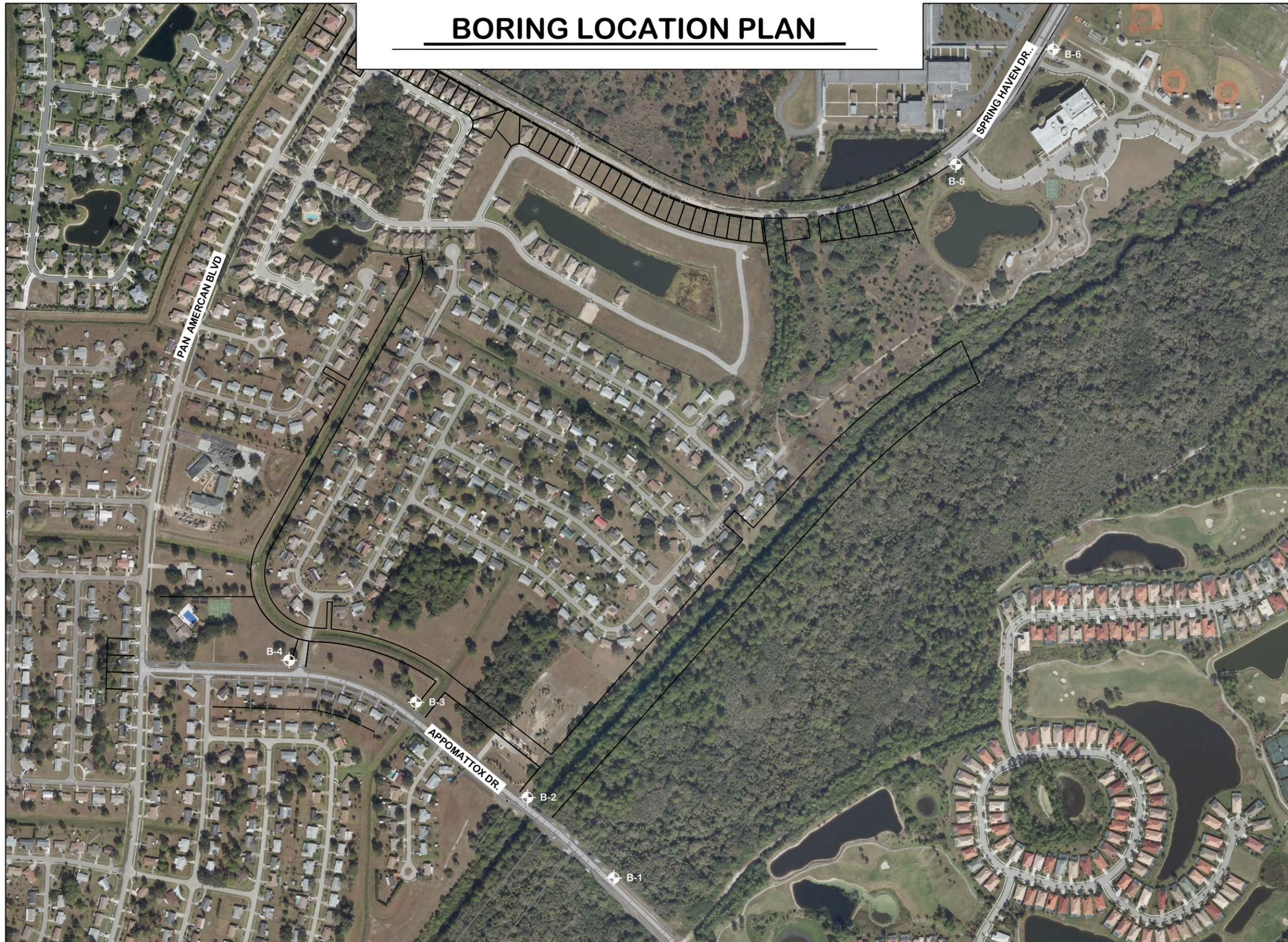
This report was prepared for the exclusive use of Stantec and their client for evaluating the design of the project as it relates to the geotechnical aspects discussed herein. It should be made available to prospective contractors for information on factual data only and not as a warranty of subsurface conditions included in this report. Unanticipated soil conditions may require that additional expense be made to attain a properly constructed project. Therefore, some contingency fund is recommended to accommodate such potential extra costs.

APPENDIX

Boring Location Plan (1 Sheet)

Soil Profiles (1 Sheet)

BORING LOCATION PLAN



0 500'
PLAN SCALE

LEGEND

APPROXIMATE LOCATION OF SPT BORING

NOTE: BASE MAP PROVIDED BY STANTEC CONSULTING SERVICES, INC.

DRAWN BY:
SW

CHECKED BY:
VSC

APPROVED BY:
VSC

DATE:
SEP 2015

ENGINEER OF RECORD:
VINCENT S. COLLIE, P.E.
FLORIDA LICENSE NO.:
79305



TIERRA
7351 Temple Terrace Highway
Tampa, Florida 33637
Phone: 813-989-1354 Fax: 813-989-1355
FL Cert. No.: 6486

SCALE:
NOTED

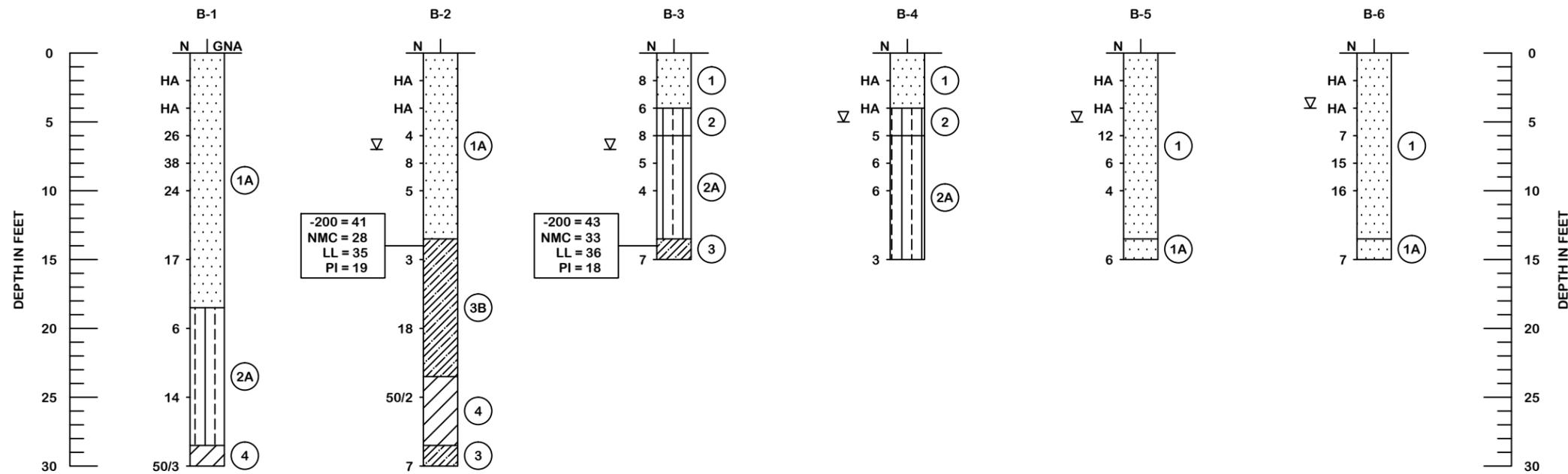
PROJECT NUMBER:
6511-15-124

**GEOTECHNICAL ENGINEERING SERVICES
CITY OF NORTH PORT
RECLAIMED WATER MAIN (PHASE III)
SARASOTA COUNTY, FLORIDA**

SHEET 1

SOIL PROFILES

LEGEND



- ① PALE BROWN TO GRAY TO DARK BROWN SAND TO SAND WITH SILT (SP/SP-SM) [A-3]
- ② LIGHT GRAY TO ORANGE-BROWN SILTY SAND (SM) [A-2-4]
- ③ GRAY CLAYEY SAND (SC) [A-2-6/A-6]
- ④ LIGHT GRAY TO GREEN-GRAY INDURATED SANDY SILT TO SANDY CLAY (ML/CL) [A-7-5/A-7-6]
- A - WITH SHELL
- B - WITH PHOSPHATE
- ▽ GROUNDWATER LEVEL ENCOUNTERED DURING INVESTIGATION
- N SPT N-VALUE IN BLOWS/FOOT FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED)
- SP UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 3282) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW
- A-3 AASHTO GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW
- GNA GROUNDWATER NOT APPARENT DUE TO DRILLING METHOD USED
- 50/3 NUMBER OF BLOWS FOR 3 INCHES OF PENETRATION
- HA HAND AUGERED TO VERIFY UTILITY CLEARANCES
- 200 PERCENT PASSING #200 SIEVE
- NMC NATURAL MOISTURE CONTENT (%)
- LL LIQUID LIMIT (%)
- PI PLASTICITY INDEX (%)

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS-RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

DRAWN BY:
SW

CHECKED BY:
VSC

APPROVED BY:
VSC

DATE:
SEP 2015

ENGINEER OF RECORD:
VINCENT S. COLLIE, P.E.
FLORIDA LICENSE NO.:
79305



TIERRA
7351 Temple Terrace Highway
Tampa, Florida 33637
Phone: 813-989-1354 Fax: 813-989-1355
FL Cert. No.: 6486

SCALE:
NOTED

PROJECT NUMBER:
6511-15-124

**GEOTECHNICAL ENGINEERING SERVICES
CITY OF NORTH PORT
RECLAIMED WATER MAIN (PHASE III)
SARASOTA COUNTY, FLORIDA**

SHEET 2



An Equal Opportunity Employer

Southwest Florida Water Management District

2379 Broad Street, Brooksville, Florida 34604-6899

(352) 796-7211 or 1-800-423-1476 (FL only)

WaterMatters.org

Bartow Service Office
170 Century Boulevard
Bartow, Florida 33830-7700
(863) 534-1448 or
1-800-492-7862 (FL only)

Sarasota Service Office
6750 Fruitville Road
Sarasota, Florida 34240-9711
(941) 377-3722 or
1-800-320-3503 (FL only)

Tampa Service Office
7601 U.S. 301 North (Fort King Highway)
Tampa, Florida 33637-6759
(813) 985-7481 or
1-800-836-0797 (FL only)

Michael A. Babb
Chair, Hillsborough

Randall S. Maggard
Vice Chair, Pasco

Jeffrey M. Adams
Secretary, Pinellas

David W. Dunbar
Treasurer, Hillsborough, Pinellas

H. Paul Senft, Jr.
Former Chair, Polk

Ed Armstrong
Pinellas

Bryan K. Beswick
DeSoto, Hardee, Highlands

Thomas E. Bronson
Hernando, Marion

Wendy Griffin
Hillsborough

John Henslick
Manatee

George W. Mann
Polk

Michael A. Moran
Charlotte, Sarasota

Kelly S. Rice
Citrus, Lake, Levy, Sumter

Robert R. Beltran, P.E.
Executive Director

November 9, 2015

Ms. Jennifer L. Rogers, P.E.
City of North Port Utilities
6644 W. Price Boulevard
North Port, FL 34291-4106

Subject: City of North Port Reclaimed Water Transmission Phase 3 (N667);
Agreement No. 15CS0000003

Dear Ms. Rodgers:

Enclosed is one executed original of the agreement between the Southwest Florida Water Management District and City of North Port for the subject project. I look forward to working with you on this project.

If you have any questions, please contact me at extension 4562 at the Brooksville office.

Sincerely,

Lisann C. Morris
Sr. Professional Engineer
Water Supply
Water Resources Bureau

LCM:abp
Enclosures (1)



COOPERATIVE FUNDING AGREEMENT (2)
BETWEEN THE
SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT
AND
CITY OF NORTH PORT
FOR
RECLAIMED WATER TRANSMISSION MAIN PHASE 3 (N667)

THIS COOPERATIVE FUNDING AGREEMENT (Agreement) is made and entered into by and between the SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT, a public corporation of the State of Florida, whose address is 2379 Broad Street, Brooksville, Florida 34604-6899, hereinafter referred to as the "DISTRICT," and CITY OF NORTH PORT, a municipal corporation of the State of Florida, whose address is 4970 City Hall Boulevard, North Port, Florida 34286, hereinafter referred to as the "CITY."

WITNESSETH:

WHEREAS, the CITY proposed a project to the DISTRICT for funding consideration under the DISTRICT'S cooperative funding program; and

WHEREAS, the project consists of design, permitting, and construction of reclaimed water transmission infrastructure that includes approximately 7,400 feet of reclaimed water lines and necessary appurtenances to supply reclaimed water to recreational and commercial customers, hereinafter referred to as the "PROJECT"; and

WHEREAS, the DISTRICT considers the resource benefits to be achieved by the PROJECT worthwhile and desires to assist the CITY in funding the PROJECT; and

WHEREAS, DISTRICT funding for the PROJECT includes funds from the Water Protection and Sustainability Program Trust Fund (WPSPTF); Catalog of State Financial Assistance number: CSFA 37.039.

NOW THEREFORE, the DISTRICT and the CITY, in consideration of the mutual terms, covenants and conditions set forth herein, agree as follows:

1. PROJECT CONTACTS AND NOTICES. Each party hereby designates the individual set forth below as its prime contact for matters relating to this Agreement. Notices and reports shall be sent to the attention of each party's prime contact as set forth herein by U.S. mail, postage paid, by nationally recognized overnight courier, or personally to the parties' addresses as set forth below. Notice is effective upon receipt.

Contract Manager for the DISTRICT: Lisann Morris
Southwest Florida Water Management District
2379 Broad Street
Brooksville, Florida 34604-6899

Project Manager for the CITY:

Jennifer Rogers
City of North Port Utilities Department
6644 West Price Boulevard
North Port, Florida 34291

Any changes to the above representatives or addresses must be provided to the other party in writing.

- 1.1 The DISTRICT'S Contract Manager is authorized to approve requests to extend a PROJECT task deadline set forth in this Agreement. Such approval must be in writing, explain the reason for the extension and be signed by the Contract Manager and his or her Bureau Chief, or Director if the Bureau Chief is the Contract Manager, unless the DISTRICT'S Signature Authority provides otherwise. The DISTRICT'S Signature Authority supersedes the approval requirements provided in this provision. The DISTRICT'S Contract Manager is not authorized to approve any time extension which will result in an increased cost to the DISTRICT or which will exceed the expiration date set forth in this Agreement.
- 1.2 The DISTRICT'S Contract Manager is authorized to adjust a line item amount of the PROJECT budget contained in the Project Plan set forth in Exhibit "A" or, if applicable, the refined budget as set forth in Subparagraph 3.4 below. The authorization must be in writing, explain the reason for the adjustment, and be signed by all appropriate DISTRICT staff in accordance with the DISTRICT'S Signature Authority. The DISTRICT'S Contract Manager is not authorized to make changes to the Scope of Work and is not authorized to approve any increase in the amounts set forth in the funding section of this Agreement.
2. SCOPE OF WORK. Upon receipt of written notice to proceed from the DISTRICT, the CITY shall perform the services necessary to complete the PROJECT in accordance with the CITY'S Project Plan set forth in Exhibit "A." Any changes to this Agreement, except as provided herein, must be mutually agreed to in a formal written amendment approved by the DISTRICT and the CITY prior to being performed by the CITY. The CITY shall be solely responsible for managing and controlling the PROJECT, both during and after construction and during and after the operation and maintenance of the PROJECT, including the hiring and supervising of any consultants or contractors it engages.

The parties agree that time is of the essence in the performance of each obligation under this Agreement.

3. FUNDING. The parties anticipate that the total cost of the PROJECT will be One Million Three Hundred Twenty Thousand Dollars (\$1,320,000). The DISTRICT agrees to fund PROJECT costs as appropriated by the DISTRICT in accordance with Subparagraph 3.1 below and anticipates funding PROJECT costs up to Six Hundred Fifty Thousand Five Hundred Seventy Nine Dollars and Eighty One Cents (\$650,579.81), and shall have no obligation to pay any costs beyond this anticipated maximum amount. The CITY agrees to provide all remaining funds necessary for the satisfactory completion of the PROJECT.
 - 3.1 The DISTRICT'S performance and payment pursuant to this Agreement are contingent upon the DISTRICT'S Governing Board appropriating funds in its

approved budget for the PROJECT in each fiscal year of this Agreement. The CITY recognizes that the DISTRICT has approved Thirty-Three Thousand Dollars (\$33,000) for the PROJECT through Fiscal Year 2015. This amount includes Eighteen Thousand Eight Hundred Forty Dollars and Thirty Seven Cents (\$18,840.37) of WPSPTF funds. The additional funds identified in this Agreement are contingent upon approval of such amounts by the DISTRICT Governing Board, in its sole discretion, in its annual budgets for future fiscal years. The CITY'S payment of any financial obligation under this Agreement is subject to appropriation by the CITY'S Commission of legally available funds.

- 3.2 The CITY shall pay PROJECT costs prior to requesting reimbursement from the DISTRICT. The DISTRICT shall reimburse the CITY for the DISTRICT'S share of allowable PROJECT costs in accordance with the PROJECT budget contained in the Project Plan set forth in Exhibit "A." Reimbursement for expenditures of contingency funds is contingent upon approval by the DISTRICT. If a reimbursement request includes the expenditure of contingency funds, the CITY shall provide sufficient documentation to the DISTRICT to explain the basis of the expense. The DISTRICT shall not reimburse the CITY for any contingency funds that the DISTRICT determines, in its sole discretion, to be in excess of what was reasonably necessary to complete the PROJECT. The DISTRICT shall reimburse the CITY for fifty percent (50%) of all allowable costs in each DISTRICT approved invoice received from the CITY, but at no point in time will the DISTRICT'S expenditure amounts under this Agreement exceed expenditures made by the CITY. The parties acknowledge that the DISTRICT'S reimbursement percentage stated above is subject to change if the percentage of the DISTRICT'S anticipated funding amount is changed due to subsequent Governing Board approvals, but amounts approved by the DISTRICT in its annual budget shall not be reduced after the CITY has paid PROJECT costs of incurred obligations approved by the DISTRICT pursuant to Subparagraph 3.4 and are otherwise reimbursable by the DISTRICT under this Agreement.
- 3.3 Any funds received from the WPSPTF shall be applied to equally reduce each party's share of allowable construction costs not to exceed 20% of the total allowable construction costs for the PROJECT. Unless otherwise stated in this Agreement, any federal, state, local or grant monies received by the CITY for this PROJECT shall be applied to equally reduce each party's share of PROJECT costs. The CITY shall provide the DISTRICT with written documentation detailing its allocation of any such funds appropriated for this PROJECT.
- 3.4 The CITY may contract with consultant(s), contractor(s) or both to accomplish the PROJECT. The CITY must obtain the DISTRICT'S written approval prior to posting solicitations for consultants or contractors and prior to entering into agreements with consultants or contractors to ensure that costs to be reimbursed by the DISTRICT under those agreements are reasonable and allowable under this Agreement. The DISTRICT shall provide a written response to the CITY within fifteen (15) business days of receipt of the solicitation or agreement. Upon written DISTRICT approval, the budget amounts for the work set forth in such contract(s) shall refine the amounts set forth in the PROJECT budget and be incorporated herein by reference. The DISTRICT shall not reimburse the CITY for costs incurred

under consultant and contractor agreements until the DISTRICT approvals required under this provision have been obtained.

- 3.5 Payment shall be made to the CITY within forty-five (45) days of receipt of an invoice with adequate supporting documentation to satisfy auditing purposes. Invoices shall be submitted to the DISTRICT every two (2) months electronically at invoices@WaterMatters.org, or at the following address:

Accounts Payable Section
Southwest Florida Water Management District
Post Office Box 15436
Brooksville, Florida 34604-5436

The above-referenced payment due date shall not apply to that portion of an invoice that includes contingency expenses. The DISTRICT agrees to reimburse the CITY for contingency expenses within a reasonable time to accommodate the process provided for in Subparagraph 3.2 of this Agreement.

In addition to sending an original invoice to the DISTRICT'S Accounts Payable Section as required above, copies of invoices may also be submitted to the DISTRICT'S Contract Manager in order to expedite the review process. Failure of the CITY to submit invoices to the DISTRICT in the manner provided herein shall relieve the DISTRICT of its obligation to pay within the aforementioned timeframe.

- 3.6 The parties acknowledge that the PROJECT was approved for funding by the DISTRICT based upon the resource benefits expected to be achieved by the PROJECT (the "Measurable Benefit"). The parties also acknowledge that the CITY is solely responsible for implementing the PROJECT in such a manner that the expected resource benefits are achieved. If at any point during the progression of the PROJECT, the DISTRICT determines that it is likely that the Measurable Benefit as set forth in the Project Plan will not be achieved, the DISTRICT shall provide the CITY with fifteen (15) days advance written notice that the DISTRICT shall withhold payments to the CITY until such time as the CITY demonstrates that the PROJECT shall achieve the required resource benefits, to provide the CITY with an opportunity to cure the deficiencies.
- 3.7 Any travel expenses which may be authorized under this Agreement shall be paid in accordance with Section 112.061, Florida Statutes (F.S.), as may be amended from time to time. The DISTRICT shall not reimburse the CITY for any purpose not specifically identified in Paragraph 2, Scope of Work. Surcharges added to third party invoices are not considered an allowable cost under this Agreement. Costs associated with in-kind services provided by the CITY are not reimbursable by the DISTRICT and may not be included in the CITY'S share of funding contributions under this Agreement.
- 3.8 The DISTRICT has no obligation and shall not reimburse the CITY for any costs under this Agreement until the Notice to Proceed with construction has been issued to the CITY'S contractor. Additionally, the DISTRICT has no obligation to reimburse the CITY for any costs under this Agreement until the related wastewater treatment

facility which must be permitted by the Florida Department of Environmental Protection to deliver reclaimed water flows to the PROJECT as proposed in the Project Plan, is constructed and operational, and if the proposed user of the reclaimed water is a newly proposed development or subdivision, until said development or subdivision is fully permitted and under construction.

- 3.9 Each CITY invoice must include the following certification, and the CITY hereby delegates authority by virtue of this Agreement to its Project Manager to affirm said certification:

"I hereby certify that the costs requested for reimbursement and the CITY'S matching funds, as represented in this invoice, are directly related to the performance under the Reclaimed Water Transmission Main Phase 3 (N667) agreement between the Southwest Florida Water Management District and City of North Port (Agreement No. 15C00000081), are allowable, allocable, properly documented, and are in accordance with the approved project budget. This invoice includes \$__ of contingency expenses. The CITY has been allocated a total of \$__ in federal, state, local or grant monies for this PROJECT (not including DISTRICT funds) and \$__ has been allocated to this invoice, reducing the DISTRICT'S and CITY'S share to \$__."

- 3.10 In the event any dispute or disagreement arises during the course of the PROJECT, including whether expenses are reimbursable under this Agreement, the CITY will continue to perform the PROJECT work in accordance with the Project Plan. The CITY is under a duty to seek clarification and resolution of any issue, discrepancy, or dispute by providing the details and basis of the dispute to the DISTRICT'S Contract Manager no later than ten (10) days after the precipitating event. If not resolved by the Contract Manager, in consultation with his or her Bureau Chief, within ten (10) days of receipt of notice, the dispute will be forwarded to the DISTRICT'S Assistant Executive Director. The DISTRICT'S Assistant Executive Director in consultation with the DISTRICT'S Office of General Counsel will issue the DISTRICT'S final determination. The CITY'S continuation of the PROJECT work as required under this provision shall not constitute a waiver of any legal remedy available to the CITY concerning the dispute.

4. COMPLETION DATES. The CITY shall commence and complete the PROJECT and meet the task deadlines in accordance with the project schedule set forth in Exhibit "A," including any extensions of time provided by the DISTRICT in accordance with Subparagraph 1.1 of this Agreement. In the event of hurricanes, tornados, floods, acts of God, acts of war, or other such catastrophes, or other man-made emergencies such as labor strikes or riots, which are beyond the control of the CITY, the CITY'S obligations to meet the time frames provided in this Agreement shall be suspended for the period of time the condition continues to exist. During such suspension, this Agreement shall remain in effect. When the CITY is able to resume performance of its obligations under this Agreement, in whole or in part, it shall immediately give the DISTRICT written notice to that effect and shall resume performance no later than two (2) working days after the notice is delivered. The suspension of the CITY'S obligations provided for in this provision shall be the CITY'S sole remedy for the delays set forth herein.

5. REPAYMENT.

5.1 The CITY shall repay the DISTRICT all funds the DISTRICT paid to the CITY under this Agreement, if: a) the CITY fails to complete the PROJECT in accordance with the terms and conditions of this Agreement, including failing to meet the Measurable Benefit; b) the DISTRICT determines, in its sole discretion and judgment, that the CITY has failed to maintain scheduled progress of the PROJECT thereby endangering the timely performance of this Agreement; c) the CITY fails to appropriate sufficient funds to meet the task deadlines, unless extended in accordance with Subparagraph 1.1; or d) a provision or provisions of this Agreement setting forth the requirements or expectations of a Measurable Benefit resulting from the PROJECT is held to be invalid, illegal or unenforceable during the term of this Agreement, including the duration of the operation and maintenance obligations set forth in Paragraph 6 of this Agreement and the requirements applicable to reclaimed water projects set forth in Paragraphs 24 and 26. Should any of the above conditions exist that require the CITY to repay the DISTRICT, this Agreement shall terminate in accordance with the procedure set forth in Paragraph 13, Default.

5.2 Notwithstanding the above, the parties acknowledge that if the PROJECT fails to meet the Measurable Benefit specified in this Agreement, the CITY may request the DISTRICT Governing Board to waive the repayment obligation, in whole or in part.

5.3 In the event the CITY is obligated to repay the DISTRICT under any provision of this Agreement, the CITY shall repay the DISTRICT within a reasonable time, as determined by the DISTRICT in its sole discretion.

5.4 The CITY shall pay attorneys' fees and costs incurred by the DISTRICT, including appeals, as a result of CITY'S failure to repay the DISTRICT as required by this Agreement.

6. OPERATION AND MAINTENANCE. The CITY shall ensure that the reclaimed water infrastructure related to the PROJECT is constructed, operated and maintained in such a manner that it shall continue to be utilized to its proposed capacity, as described in this Agreement, for a minimum of twenty (20) years. Capacity is defined, for the purposes of this Agreement, as the reclaimed water benefits described in the Project Plan, except for adverse short-term conditions beyond the control of the CITY. The CITY shall provide written notice to the DISTRICT of any adverse short-term conditions and the CITY'S plan of action with regard to said conditions. The DISTRICT'S Contract Manager will evaluate and determine the CITY'S compliance with this provision as part of the DISTRICT required "Annual Reclaimed Water Supplier Report" evaluation. If the reclaimed water infrastructure related to the PROJECT is not utilized to its proposed capacity as described in this Agreement, the DISTRICT shall require the CITY to reimburse the DISTRICT for payments made pursuant to this Agreement in an amount equivalent to the percentage of capacity not attained.

6.1. Within thirty (30) days after construction is completed, the CITY shall provide the DISTRICT with construction record drawings, signed and sealed by a professional

engineer, certifying that the Measurable Benefit has been achieved. The CITY shall provide the DISTRICT with an operation and maintenance plan that ensures the Measurable Benefit will be maintained. Every two (2) years following the completion of the PROJECT, the CITY shall generate a report describing the operations and maintenance activities that took place during the reporting period that certifies that the Measurable Benefit set forth in the Project Plan has been maintained. The CITY'S obligation to generate reports shall continue until the expiration of the 20-year operation and maintenance period

- 6.2. The DISTRICT retains the right to audit any certification and the CITY shall provide documentation as requested by the DISTRICT to support its certification that the specified Measurable Benefit has been maintained.
7. FLORIDA SINGLE AUDIT ACT. Funding for this Agreement includes federal and state financial assistance and is therefore subject to the United States Office of Management and Budget (OMB) Circular A-133 and the Florida Single Audit Act (FSAA), Section 215.97, F.S. The CITY is a subrecipient of federal and state financial assistance under this Agreement and therefore may be subject to audits and monitoring as described in the Special Audit Requirements set forth in Exhibit "B." The CITY must also use the Florida Single Audit Act Checklist For Non-State Organizations - Recipient/Subrecipient vs. Vendor Determination (Attachment 2 of Exhibit "B"), to evaluate the applicability of the FSAA to non-state organizations to which the CITY provides State resources to assist in carrying out activities related to this Agreement.
8. WATER RATE STRUCTURES. The CITY shall adopt rate structures for water customers in the CITY'S service area that shall promote the conservation of water and the use of water from alternative water supplies. The CITY will provide a copy of such rate structures to the DISTRICT prior to the CITY'S first request for reimbursement of PROJECT costs. The CITY shall implement the rate structures as described herein within 12 months of completion of the PROJECT.
9. CONTRACT PERIOD. This Agreement shall be effective June 23, 2015 and shall remain in effect through June 30, 2018, or upon satisfactory completion of the PROJECT and subsequent reimbursement to the CITY, whichever occurs first, unless amended in writing by the parties. The CITY shall not be eligible for reimbursement for any work that is commenced, or costs that are incurred, prior to the effective date of this Agreement.
10. PROJECT RECORDS AND DOCUMENTS. Upon request by the DISTRICT, the CITY shall permit the DISTRICT to examine or audit all PROJECT related records and documents during or following completion of the PROJECT at no cost to the DISTRICT. Payments made to the CITY under this Agreement shall be reduced for amounts found to be not allowable under this Agreement by an audit. If an audit is undertaken by either party, all required records shall be maintained until the audit has been completed and all questions arising from it are resolved. Each party shall maintain all such records and documents for at least five (5) years following completion of the PROJECT. Each party shall allow public access to PROJECT documents and materials made or received by either party in accordance with the Public Records Act, Chapter 119, F.S. Should either party assert any exemption to the requirements of Chapter 119, F.S., the burden of

establishing such exemption, by way of injunctive or other relief as provided by law, shall be upon the asserting party.

11. REPORTS.

- 11.1 The CITY shall provide the DISTRICT with a quarterly report describing the progress of the PROJECT tasks, adherence to the performance schedule and any developments affecting the PROJECT. The CITY shall promptly advise the DISTRICT of issues that arise that may impact the successful and timely completion of the PROJECT. Quarterly reports shall be submitted to the DISTRICT'S Contract Manager no later than forty-five (45) days following the completion of the quarterly reporting period. It is hereby understood and agreed by the parties that the term "quarterly" shall reflect the calendar quarters ending March 31, June 30, September 30 and December 31.
- 11.2 Upon request by the DISTRICT, the CITY shall provide the DISTRICT with copies of all data, reports, models, studies, maps or other documents resulting from the PROJECT. Additionally, one (1) set, electronic and hardcopy, of any final reports must be submitted to the DISTRICT as Record and Library copies.
- 11.3 The CITY shall provide the DISTRICT with the proposed final design, including supporting documentation for review by the DISTRICT in order for the DISTRICT to verify that the proposed design meets the requirements of the PROJECT as set forth in Exhibit "A." The DISTRICT shall provide a written response to the CITY within ten (10) business days of receipt of the proposed design plans and supporting documentation either verifying the design plans appear to meet the requirements of the Agreement or stating its insufficiencies. The CITY shall not finalize the design or advertise the construction bid documents until the DISTRICT provides the required verification. The DISTRICT'S verification shall not constitute an approval of the design, or a representation or warranty that the DISTRICT has verified the architectural, engineering, mechanical, electrical, or other components of the construction bid documents or that such documents are in compliance with DISTRICT rules and regulations or any other applicable rules, regulations or law. The CITY shall require the design professional to warrant that the construction documents are adequate for bidding and construction of the PROJECT.
- 11.4 The CITY shall provide the DISTRICT with an "*Annual Reclaimed Water Supplier Report*" showing the reuse flow and customer information for the CITY'S entire reuse system. This report requirement shall become effective upon execution of this Agreement. The reporting period shall be October 1st through September 30th and the report must be submitted by April 1st of the calendar year following the fiscal year period. The Annual Reclaimed Water Supplier Report is available at:

http://www.swfwmd.state.fl.us/download/view/site_file_sets/118/SWFWMD_Annual_Reclaimed_Water_Supplier_Report_LEG-R02600_AA.xlsx

The report format will be updated by the DISTRICT as needed. The CITY shall obtain the DISTRICT'S approval of the report before the report is finalized, and the DISTRICT will not unreasonably withhold its approval. Annual submission of this

report will eliminate the requirement for the Reclaimed Water Offset Report by the CITY from any ongoing or previously completed reclaimed water projects with the DISTRICT. In addition to other remedies provided in this Agreement, noncompliance with this report requirement may affect the CITY'S eligibility for further DISTRICT funding.

- 11.5 Reclaimed water facility information must be delivered to the DISTRICT as one ESRI Geodatabase that will contain the three feature classes and characteristics identified in the CITY'S Project Plan set forth in Exhibit "A."
- 11.6 The CITY shall provide the data, reports and documents referenced in this provision at no cost to the DISTRICT.

12. RISK, LIABILITY, AND INDEMNITY.

- 12.1 To the extent permitted by Florida law, the CITY assumes all risks relating to the PROJECT and agrees to be solely liable for, and to indemnify and hold the DISTRICT harmless from all claims, loss, damage and other expenses, including attorneys' fees and costs and attorneys' fees and costs on appeal, arising from the design, construction, operation, maintenance or implementation of the PROJECT; provided, however, that the CITY shall not indemnify for that portion of any loss or damages proximately caused by the negligent act or omission of the DISTRICT'S officers, employees, contractors and agents. The acceptance of the DISTRICT'S funding by the CITY does not in any way constitute an agency relationship between the DISTRICT and the CITY.
- 12.2 The CITY agrees to indemnify and hold the DISTRICT harmless, to the extent allowed under Section 768.28, F.S., from all claims, loss, damage and other expenses, including attorneys' fees and costs and attorneys' fees and costs on appeal, arising from the negligent acts or omissions of the CITY'S officers, employees, contractors and agents related to its performance under this Agreement.
- 12.3 This Paragraph 12 shall not be construed as a waiver of the CITY'S sovereign immunity or an extension of CITY'S liability beyond the limits established in Section 768.28, F.S. Additionally, this Paragraph 12 will not be construed to impose contractual liability on the CITY for underlying tort claims as described above beyond the limits specified in Section 768.28, F.S., nor be construed as consent by the CITY to be sued by third parties in any manner arising out of this Agreement.
- 12.4 Nothing in this Agreement shall be interpreted as a waiver of the DISTRICT'S sovereign immunity or an extension of its liability beyond the limits established in Section 768.28, F.S., nor be construed as consent by the DISTRICT to be sued by third parties in any manner arising out of this Agreement.

13. DEFAULT. Either party may terminate this Agreement upon the other party's failure to comply with any term or condition of this Agreement, including the failure to meet task deadlines established in this Agreement, as long as the terminating party is not in default of any term or condition of this Agreement at the time of termination. To effect termination,

the terminating party shall provide the defaulting party with a written "Notice of Termination" stating its intent to terminate and describing all terms and conditions with which the defaulting party has failed to comply. If the defaulting party has not remedied its default within thirty (30) days after receiving the Notice of Termination, this Agreement shall automatically terminate. If a default cannot reasonably be cured in thirty (30) days, then the thirty (30) days may be extended at the non-defaulting party's discretion, if the defaulting party is pursuing a cure of the default with reasonable diligence. The rights and remedies in this provision are in addition to any other rights and remedies provided by law or this Agreement.

14. RELEASE OF INFORMATION. The parties agree not to initiate any oral or written media interviews or issue press releases on or about the PROJECT without providing notices or copies to the other party no later than three (3) business days prior to the interview or press release. This provision shall not be construed as preventing the parties from complying with the public records disclosure laws set forth in Chapter 119, F.S.
15. DISTRICT RECOGNITION. The CITY shall recognize DISTRICT funding in any reports, models, studies, maps or other documents resulting from this Agreement, and the form of said recognition shall be subject to DISTRICT approval. If construction is involved, the CITY shall provide signage at the PROJECT site that recognizes funding for this PROJECT provided by the DISTRICT. All signage must meet with DISTRICT written approval as to form, content and location, and must be in accordance with local sign ordinances.
16. PERMITS AND REAL PROPERTY RIGHTS. The CITY shall obtain all permits, local government approvals and all real property rights necessary to complete the PROJECT prior to commencing any construction involved in the PROJECT. The DISTRICT shall have no obligation to reimburse the CITY for any costs under this Agreement until the CITY has obtained all permits, approvals, and property rights necessary to accomplish the objectives of the PROJECT. In the event a permit, approval or property right is obtained but is subsequently subject to a legal challenge that results in an unreasonable delay or cancellation of the PROJECT as determined by the DISTRICT in its sole discretion, the CITY shall repay the DISTRICT all monies contributed to the PROJECT.
17. LAW COMPLIANCE. The CITY shall comply with all applicable federal, state and local laws, rules, regulations and guidelines, including those of the DISTRICT, related to performance under this Agreement. If the PROJECT involves design services, the CITY'S professional designers and the DISTRICT'S regulation and projects staff shall meet regularly during the PROJECT design to discuss ways of ensuring that the final design for the proposed PROJECT technically complies with all applicable DISTRICT rules and regulations. However, the DISTRICT undertakes no duty to ensure compliance with such rules and regulations.
18. DIVERSITY IN CONTRACTING AND SUBCONTRACTING. The DISTRICT is committed to supplier diversity in the performance of all contracts associated with DISTRICT cooperative funding projects. The DISTRICT requires the CITY to make good faith efforts to encourage the participation of minority owned and woman owned and small business enterprises, both as prime contractors and subcontractors, in the performance of this Agreement, in accordance with applicable laws.

- 18.1 If requested, the DISTRICT shall assist the CITY by sharing information to help the CITY in ensuring that minority owned and woman owned and small businesses are afforded an opportunity to participate in the performance of this Agreement.
- 18.2 The CITY agrees to provide the DISTRICT with a report indicating all contractors and subcontractors who performed work in association with the PROJECT, the amount spent with each contractor or subcontractor, and to the extent such information is known, whether each contractor or subcontractor was a minority owned or woman owned or small business enterprise. If no minority owned or woman owned or small business enterprises were used in the performance of this Agreement, then the report shall so indicate. The Minority/Women Owned and Small Business Utilization Report form is attached as Exhibit "B." The report is required upon final completion of the PROJECT prior to final payment, or within thirty (30) days of the execution of any amendment that increases PROJECT funding, for information up to the date of the amendment and prior to the disbursement of any additional funds by the DISTRICT.
19. ASSIGNMENT. Except as otherwise provided in this Agreement, no party may assign any of its rights or delegate any of its obligations under this Agreement, including any operation or maintenance duties related to the PROJECT, without the prior written consent of the other party. Any attempted assignment in violation of this provision is void.
20. CONTRACTORS. Nothing in this Agreement shall be construed to create, or be implied to create, any relationship between the DISTRICT and any consultant or contractor of the CITY.
21. THIRD PARTY BENEFICIARIES. Nothing in this Agreement shall be construed to benefit any person or entity not a party to this Agreement.
22. LOBBYING PROHIBITION. Pursuant to Section 216.347, F.S., the CITY is prohibited from using funds provided by this Agreement for the purpose of lobbying the Legislature, the judicial branch or a state agency.
23. PUBLIC ENTITY CRIMES. Pursuant to Subsections 287.133(2) and (3), F.S., 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 bid, proposal, or reply on a contract to provide any goods or services to a public entity; may not submit a bid, proposal, or reply on a contract with a public entity for the construction or repair of a public building or public work; may not submit bids, proposals, or replies on leases of real property to a public entity; may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity; and may not transact business with any public entity in excess of the threshold amount provided in Section 287.017, F.S., for Category Two, for a period of 36 months following the date of being placed on the convicted vendor list. The CITY agrees to include this provision in all contracts issued as a result of this Agreement.
24. DISTRIBUTION REQUIREMENTS. The CITY shall adhere to the following terms and conditions and shall provide written documentation of the status of each prior to requesting any reimbursement.

Prior to submitting the first invoice for DISTRICT reimbursement the CITY shall continue to:

- 24.1. Adopt, or have the associated local government adopt, an ordinance requiring dual distribution (potable and reclaimed) lines in new developments within their reclaimed water service area, and provide for the necessary enforcement.
- 24.2. Adopt an ordinance and provide enforcement for the efficient use of reclaimed water for aesthetic landscape irrigation which results in at least a fifty percent (50%) offset to groundwater, surface water, and or potable water supplies. Examples may include, but are not limited to: eliminating daytime reclaimed water irrigation, odd/even reclaimed watering schedules, and residential reclaimed water metering coupled with water conserving rates. Such measures shall be developed with the intent of eliminating practices which do not result in the beneficial offset of potable or groundwater uses.
- 24.3. Adopt a policy to guarantee a rate of connection to the reclaimed water system that is not less than fifty percent (50%) of the customer accounts in the PROJECT'S service area. This fifty percent (50%) rate of connections shall be achieved in the PROJECT service area within one year of PROJECT completion. The policy and proof of this connection rate is included in the CITY'S Project Plan set forth in Exhibit "A."
- 24.4. Have initiated the installation of reclaimed water meters within the PROJECT service area identified in the CITY'S Project Plan set forth in Exhibit "A." A minimum of a master meter per subdivision is required. The CITY shall maintain said meter(s) for the life of the reuse system.
25. EDUCATION PROGRAM AND APPROVAL. The CITY shall continue its previously approved customer education program promoting the efficient use and conservation of reclaimed water.
26. 20-YEAR CUSTOMER COMMITMENT AGREEMENT. The CITY shall obtain written agreements with reclaimed water customers served by the PROJECT that provide at least fifty percent (50%) of the PROJECT'S proposed reclaimed water offsets of existing or planned, groundwater or surface water withdrawals, under normal operating conditions for a minimum of 20 years. Written notification that all such agreements have been secured shall be provided to the DISTRICT'S Contract Manager prior to initiating construction of the PROJECT, and copies shall be furnished upon request. Agreements must include at a minimum term of agreement, quantities to be supplied, rates and seasonal availability.
27. GOVERNING LAW. This Agreement is governed by Florida law and venue for resolving disputes under this Agreement shall be exclusively in Hernando County, Florida.
28. SEVERABILITY. If any provision or provisions of this Agreement shall be held to be invalid, illegal, or unenforceable, the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired thereby. Notwithstanding the above, if a provision or provisions of this Agreement setting forth the requirements or

expectations of a Measurable Benefit resulting from the PROJECT is held to be invalid, illegal or unenforceable during the term of this Agreement, this Agreement shall terminate in accordance with Subparagraph 5.1.

29. SURVIVAL. The provisions of this Agreement that require performance after the expiration or termination of this Agreement shall remain in force notwithstanding the expiration or termination of this Agreement including Subparagraphs 3.3, 11.2, 11.4, 11.5, 24.3 and 24.4, and Paragraphs 5, 6, 8, 10, 12, 16, 19, 26, 27 and 28 and any provisions requiring an offset or other continuing resource benefit.
30. ENTIRE AGREEMENT. This Agreement and the attached exhibits listed below constitute the entire agreement between the parties and, unless otherwise provided herein, may be amended only in writing, signed by all parties to this Agreement.
31. DOCUMENTS. The following documents are attached and made a part of this Agreement. In the event of a conflict of contract terminology, priority shall first be given to the language in the body of this Agreement, then to Exhibit "C," then to Exhibit "A," and then to Exhibit "B."

Exhibit "A"	CITY'S Project Plan
Exhibit "B"	Minority/Women Owned and Small Business Utilization Report Form
Exhibit "C"	Special Audit Requirements

The remainder of this page intentionally left blank.

IN WITNESS WHEREOF, the parties hereto, or their lawful representatives, have executed this Agreement on the day and year set forth next to their signatures below.

SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT

By:  11/5/15
Brian J. Armstrong, P.G. Date
Assistant Executive Director

CITY OF NORTH PORT

By:  10/27/15
Rhonda DiFranco, Mayor Date

ATTEST


Helen M. Rando, MMC
City Clerk

COOPERATIVE FUNDING AGREEMENT (2)
BETWEEN THE
SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT
AND
CITY OF NORTH PORT
FOR
RECLAIMED WATER TRANSMISSION MAIN PHASE 3 (N667)

DISTRICT APPROVAL	INITIALS	DATE
LEGAL	_____	_____
RISK MGMT	_____	_____
CONTRACTS	_____	_____
BUREAU CHIEF	_____	_____
DIRECTOR	_____	_____
GOVERNING BOARD	_____	_____

IN WITNESS WHEREOF, the parties hereto, or their lawful representatives, have executed this Agreement on the day and year set forth next to their signatures below.

SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT

By: _____
Brian J. Armstrong, P.G. Date
Assistant Executive Director

CITY OF NORTH PORT

By: _____
Jonathan Lewis, City Manager Date

COOPERATIVE FUNDING AGREEMENT (2)
BETWEEN THE
SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT
AND
CITY OF NORTH PORT
FOR
RECLAIMED WATER TRANSMISSION MAIN PHASE 3 (N667)

DISTRICT APPROVAL	INITIALS	DATE
LEGAL	<i>msm</i>	<i>8/28/15</i>
RISK MGMT	<i>N/A</i>	
CONTRACTS	<i>Aut</i>	<i>8/31/15</i>
BUREAU CHIEF	<i>JAM</i>	<i>9-14-15</i>
DIRECTOR	<i>MAN</i>	<i>9/23/15</i>
GOVERNING BOARD	<i>Aut</i>	<i>5/19/15</i>

EXHIBIT "A"
CITY'S PROJECT PLAN

PROJECT DESCRIPTION

The PROJECT is for design, permitting and construction of reclaimed water transmission infrastructure that includes approximately 7,400 feet of 16-inch to 18-inch diameter reclaimed transmission pipeline and necessary appurtenances to supply reclaimed water to customers.

The closed loop hydraulics obtained by this PROJECT forms the basis for future projects to be constructed to the east of the CITY'S existing waste water treatment facility (WWTF) while maintaining adequate pressures to future reuse customers. The PROJECT will provide an additional demand of reclaimed water to existing users and approximately 0.36 mgd for residential, commercial, recreational park and golf course use. The total amount of water that could potentially be reused is estimated at approximately 1.3 million gallons per day by existing and proposed customers in the Southern Water Use Caution Area (SWUCA).

20-YEAR CUSTOMER COMMITMENT AGREEMENT

The 20-Year Customer Commitment Agreement referenced in Paragraph 25 of this Agreement shall include a provision that requires each water use permit (WUP) permittee to submit a permit modification application to modify its WUP within fifteen (15) days of being provided reclaimed water to: a) transfer groundwater quantities equal to the quantities of reclaimed water received by the permittee as a result of the PROJECT to standby quantities; and b) prohibit the use of the groundwater standby quantities except to the extent necessary to compensate for unavailable reclaimed water.

MEASURABLE BENEFIT

Utilization of 0.36 mgd of reclaimed water for residential and commercial customers and a recreational park in the SWUCA.

DELIVERABLES

- Quarterly Design/Construction Status Reports
- Copy of contract with consultant and contractor (for cost approval, prior to execution)
- Copy of executed contract with consultant and contractor
- Proposed Final Design Plans (verify design meets requirements of PROJECT Plan)
- 20-Year Customer Commitment Agreements with users (prior to construction)
- Copy of Construction Bid Package (for cost approval prior to posting)
- Copy of all required federal, state and local environmental permit application packages and final permits
- Copy of Construction Permits
- Signed and sealed As-Built drawings
- Construction Completeness Letter

- Documentation of policy to guarantee rate of connection and subsequent proof of connection
- Copy of Operation and Maintenance Plan
- Reclaimed Water GIS Data*
- One (1) set, electronic and hardcopy, of any final reports
- Minority/Women Owned and Small Business Utilization Report
- Upon District request, Bi-annual Operation and Maintenance Reports

PERFORMANCE SCHEDULE

TASKS	COMMENCE	COMPLETE
Survey, and Design	June 23, 2015	October 1, 2016
Permitting	October 1, 2015	October 1, 2016
Construction	December 31, 2017	April 1, 2018

Additional task deadlines contained in the performance schedules of any consultant and contractor contracts will be incorporated by reference.

PROJECT BUDGET

TASKS	CITY	WPSTF	DISTRICT	TOTAL
Survey, Design, & Permitting	\$66,430.00	\$0.00	\$66,430.00	\$132,860.00
Construction	\$584,149.82	\$18,840.37	\$584,149.81	\$1,187,140.00
CEI	\$0.00	\$0.00	\$0.00	\$0.00
Total	\$650,579.82	\$18,840.37	\$650,579.81	\$1,320,000.00

*ADDITIONAL INFORMATION

RECLAIMED WATER GIS DATA SPECIFICATIONS. Reclaimed water facility information must be delivered to the DISTRICT as one ESRI Geodatabase that will contain three feature classes. The deliverables will have the following characteristics:

- The data must be delivered in an ArcGIS geodatabase (file or personal) that is no higher in version than the version being used by the DISTRICT at the time the data is submitted.
- Projection will be either:
 - Universal Transverse Mercator, Zone 17, NAD 83/90 HARN, units of meters
 - Florida State Plane Feet West Zone, NAD 83/90 HARN, units of feet
- All line features must be snapped at connecting ends.
- Include geospatial metadata compliant with DISTRICT and Federal Geographic Data Committee standards. Copies of standards are available for download from the DISTRICT'S FTP website.

http://ftp.swfwmd.state.fl.us/pub/gisdata/metadata_stnds/

File name: *ContractorsXML.ZIP*

- Deliverable media will be CD, DVD, USB external/portable hard drive or flash drive.

- The horizontal accuracy of all features shall meet or exceed the accuracy of the 1:12,000 (1":1000') scale maps (plus or minus 20 feet).
The geodatabase template in XML format and an empty geodatabase format are available for download from the DISTRICT'S FTP website.

<http://ftp.swfwmd.state.fl.us/pub/gisdata/schema/>

File name: *ReclaimedWater_schema.ZIP*

FEATURE CLASSES

Wastewater Treatment Plants

Feature Class Name: RECLAIMEDWATERTREATMENTPLANTS

Description: Locations of all wastewater treatment plants. Locations are to be represented by a point that represents the approximate center of the main entry gate of the property on which the treatment plant resides.

Feature Class Type: POINT

Attributes in addition to default attributes for point feature classes:

PLANTCAPACOMPANY

Type: Numeric / Double

Description: Permitted annual daily average treatment capacity, in millions of gallons per day (mgd).

Nullable: No

PLANTREUSEFLOW

Type: Numeric / Double

Description: Annual daily average flow of reclaimed water (mgd).

Nullable: No

PLANTFLOW

Type: Numeric / Double

Description: Annual daily average of treated water (mgd).

Nullable: No

REPORTINGYEAR

Type: Numeric / Short Integer

Description: Reporting year for PLANTFLOW and PLANTREUSEFLOW values.

Nullable: No

RWPLANTNAME

Type: Text / String

Length: 60

Description: Name of wastewater treatment plant.

Nullable: No

TREATLEVEL

Type: Text / String
Length: 5
Description: Treatment level:
ADV Advanced (AWT)
SAD Secondary Advanced treatment with filtration
SEC Secondary treatment
FT Full treatment
PRI Primary treatment
TER Tertiary treatment
Nullable: No

DISINFLEVEL

Type: Text / String
Length: 5
Description: Disinfection level:
BA Basic
IN Intermediate
HI High
FT Full treatment disinfection
Nullable: No

RWOWNER

Type: Text / String
Length: 40
Description: The name of the utility or agency that owns the water treatment plant.
Nullable: No

RWSTATUS

Type: Text / String
Length: 4
Description: Current status of wastewater treatment plant:
EX Existing
DC Design/Construction
PR Proposed
Nullable: No

PERMITTEDANNUAL

Type: Numeric / Double
Description: Permitted annual average reuse capacity (mgd).
Nullable: No

PROJECTNUMBER

Type: Text / String
Length: 50
Description: Project number used by DISTRICT staff for budget tracking (e.g., A123). If a treatment plant supplies water to more than one project, list project numbers separated by commas.
Nullable: No

COMMENTS

Type: Text / String
Length: 100
Description: Optional field for additional comments.
Nullable: Yes

Reclaimed Water Transmission Lines

Feature Class Name: RECLAIMEDWATERLINES

Description: All proposed and existing reclaimed water lines.

Feature Class Type: LINE

Attributes in addition to default attributes for line feature classes:

RWSTATUS

Type: Text / String
Length: 2
Description: Current status of reclaimed water line:
EX Existing line
DC Design/Construction line
PR Proposed line
Nullable: No

RWFUNDING

Type: Text / String
Length: 1
Description: Is funding provided by the DISTRICT for this line?
Y Yes
N No
Nullable: No

RWOWNER

Type: Text / String
Length: 40
Description: The name of the utility or agency that owns the reclaimed water lines.
Nullable: No

RWLINESIZE

Type: Numeric / Long Integer
Description: The diameter of reclaimed water line in inches.
Nullable: No

PROJECTNUMBER

Type: Text / String
Length: 10
Description: Project number used by DISTRICT staff for budget tracking (e.g., A123)
Nullable: No

COMMENTS

Type: Text / String
Length: 100
Description: Optional field for additional comments.
Nullable: Yes

Reclaimed Water Storage Areas

Feature Class Name: RECLAIMEDWATERSTORAGE

Description: Locations of all storage facilities. Locations are to be represented by a point that represents the approximate center of each individual storage tank/pond/ASR.

Feature Class Type: POINT

Attributes in addition to default attributes for point feature classes:

RWSTORAGETYPE

Type: Text / String
Length: 4
Description: Type of reclaimed water storage facility:
POND Pond or uncovered tank
TANK Tank
ASR Aquifer storage and recovery
Nullable: No

RWFUNDING

Type: Text / String
Length: 1
Description: Is funding provided by the DISTRICT for this facility?
Y Yes
N No
Nullable: No

RWSTATUS

Type: Text / String
Length: 2
Description: Current status of storage facility:
EX Existing
DC Design/Construction
PR Proposed
Nullable: No

RWOWNER

Type: Text / String
Length: 40
Description: The name of the utility or agency that owns the storage facility.
Nullable: No

PROJECTNUMBER

Type: Text / String
Length: 10
Description: Project number used by DISTRICT staff for budget tracking (e.g., A123)
Nullable: No

COMMENTS

Type: Text / String
Length: 100
Description: Optional field for additional comments.
Nullable: Yes

PROJECT MAP



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- Existing Reuse Mains
- Proposed PH-3A

**Proposed Reuse Mains
PH-3A**



EXHIBIT "B"
MINORITY/WOMEN OWNED AND SMALL BUSINESS UTILIZATION REPORT

Projects receiving \$100,000 or more in cooperative funding from the Southwest Florida Water Management District require the submission of the following information within 30 days of any amendment increasing project funding and with the final invoice. Questions regarding use of this form should be directed to Contracts Administration, Phone (352) 796-7211 ext. 4132.

INDICATE THE ONE CATEGORY THAT BEST DESCRIBES EACH ORGANIZATION LISTED*		NON-CERTIFIED MBE										UNKNOWN					
		CERTIFIED MBE					NON-CERTIFIED MBE					UNKNOWN					
BUSINESS CLASSIFICATION	CERTIFIED MBE										NON-CERTIFIED MBE					UNKNOWN	
	SMALL BUSINESS Section 288.703(1) F.S.	AFRICAN AMERICAN	HISPANIC AMERICAN	ASIAN/HAWAIIAN AMERICAN	NATIVE AMERICAN	AMERICAN WOMAN	AFRICAN AMERICAN	HISPANIC AMERICAN	ASIAN/HAWAIIAN AMERICAN	NATIVE AMERICAN	AMERICAN WOMAN	AFRICAN AMERICAN	HISPANIC AMERICAN	ASIAN/HAWAIIAN AMERICAN	NATIVE AMERICAN	AMERICAN WOMAN	UNKNOWN
COOPERATOR: _____																	
AGREEMENT NO.: _____																	
PROJECT NAME: _____																	
TOTAL PROJECT COST: _____																	
NAMES OF CONTRACTORS AND SUBCONTRACTORS UTILIZED	TOTAL AMOUNT PAID																

* Our organization does not collect minority status data.

Signature _____ Date _____ Print Name and Title _____

EXHIBIT "C"

SPECIAL AUDIT REQUIREMENTS

The administration of resources awarded by the DISTRICT to the CITY, a subrecipient under this Agreement, may be subject to audits and monitoring as described in this Exhibit.

MONITORING

In addition to reviews of audits conducted in accordance with Section 215.97, Florida Statutes (F.S.), as revised (see "AUDITS" below), monitoring procedures may include, but not be limited to, on-site visits by DISTRICT staff, and other procedures. By entering into this Agreement, the CITY agrees to comply and cooperate with any monitoring procedures or processes deemed appropriate by the DISTRICT. The CITY further agrees to comply and cooperate with any inspections, reviews, investigations, or audits deemed necessary by the Department of Environmental Protection (DEPARTMENT), Chief Financial Officer (CFO), or Auditor General of the State of Florida.

AUDITS

PART I: STATE FUNDED

This part is applicable if the CITY is a nonstate entity as defined by Section 215.97(2)(m), F.S.

1. In the event that the CITY expends a total amount of state financial assistance equal to or in excess of \$500,000 in any fiscal year of such CITY, the CITY must have a state single or project-specific audit for such fiscal year in accordance with Section 215.97, F.S.; applicable rules of the Department of Financial Services; and Chapters 10.550 (local governmental entities) or 10.650 (nonprofit and for-profit organizations), Rules of the Auditor General. Attachment 1 to this Exhibit indicates the amount of state financial assistance awarded through the DISTRICT by this Agreement. In determining the state financial assistance expended in its fiscal year, the CITY shall consider all sources of state financial assistance, including state financial assistance received from the DISTRICT, DEPARTMENT, other state agencies, and other nonstate entities. State financial assistance does not include federal direct or pass-through awards and resources received by a nonstate entity for Federal program matching requirements.
2. In connection with the audit requirements addressed in Part I, Paragraph 1, the CITY shall ensure that the audit complies with the requirements of Section 215.97(8), F.S. This includes submission of a financial reporting package as defined by Section 215.97(2), F.S., and Chapters 10.550 (local governmental entities) or 10.650 (nonprofit and for-profit organizations), Rules of the Auditor General.
3. If the CITY expends less than \$500,000 in state financial assistance in its fiscal year, an audit conducted in accordance with the provisions of Section 215.97, F.S., is not required. In the event that the CITY expends less than \$500,000 in state financial assistance in its fiscal year and elects to have an audit conducted in accordance with the provisions of Section 215.97, F.S., the cost of the audit must be paid from the non-state entity's resources (i.e., the cost of such an audit must be paid from the CITY'S resources obtained from other than state entities).
4. For information regarding the Florida Catalog of State Financial Assistance (CSFA), the CITY should access the Florida Single Audit Act (FSAA) website located at <https://apps.fldfs.com/fsaa>.

PART II: REPORT SUBMISSION

1. Copies of financial reporting packages required by PART I of this Exhibit shall be submitted by or on behalf of the CITY directly to each of the following:

A. The DISTRICT at the following address:

Accounting and Financial Reporting Manager
Southwest Florida Water Management District
Post Office Box 15436
Brooksville, Florida 34604-5436

B. The Department of Environmental Protection at the following address:

Audit Director
Florida Department of Environmental Protection
Office of the Inspector General, MS 40
3900 Commonwealth Boulevard
Tallahassee, Florida 32399-3000

C. The Auditor General's Office at the following address:

State of Florida Auditor General
Room 401, Claude Pepper Building
111 West Madison Street
Tallahassee, Florida 32399-1450

2. Any reports, management letters, or other information required to be submitted pursuant to this Exhibit shall be submitted timely in accordance with Chapters 10.550 (local governmental entities) or 10.650 (nonprofit and for-profit organizations), Rules of the Auditor General, as applicable.
3. The CITY, when submitting financial reporting packages for audits done in accordance with Chapters 10.550 (local governmental entities) or 10.650 (nonprofit and for-profit organizations), Rules of the Auditor General, should indicate the date that the reporting package was delivered to the CITY in correspondence accompanying the reporting package.

PART III: RECORD RETENTION

The CITY shall retain sufficient records demonstrating its compliance with the terms of this Agreement for a period of five (5) years from the date the audit report is issued, and shall allow the DISTRICT, or its designee, DEPARTMENT, CFO, or Auditor General access to such records upon request. The CITY shall ensure that audit working papers are made available to the DISTRICT, or its designee, DEPARTMENT, CFO, or Auditor General upon request for a period of three (3) years from the date the audit report is issued, unless extended in writing by the DISTRICT.

PART IV: RECIPIENT/SUBRECIPIENT VS. VENDOR DETERMINATION

The CITY, as a subrecipient of state financial assistance, must use the Florida Single Audit Act Checklist for Non-State Organizations - Recipient/Subrecipient Vs. Vendor Determination (Attachment 2), to evaluate the applicability of the FSAA to non-state organizations to which the CITY provides State resources to assist in carrying out activities related to this Agreement.

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ATTACHMENT 1

FUNDS AWARDED TO THE CITY PURSUANT TO THIS AGREEMENT CONSIST OF THE FOLLOWING:

State Resources Awarded to the CITY Pursuant to this Agreement Consist of the Following Resources Subject to Section 215.97, F.S.:						
State Program Number	Funding Source	State Fiscal Year	Catalog of State Financial Assistance Number	CSFA Title or Funding Source Description	Funding Amount	State Appropriation Category
37350000	Water Protection and Sustainability Program Trust Fund	2005-2006	37.066	Water Protection and Sustainability Program	\$18,840.37	149931
DISTRICT Resources Awarded to the CITY Pursuant to this Agreement:					\$641,159.63	
Total Award:					\$660,000.00	

For each program identified above, the CITY shall comply with the program requirements described in the Florida Catalog of State Financial Assistance (CSFA) [<https://apps.fldfs.com/fsaa/>]. The services/purposes for which the funds are to be used are included in the Agreement scope of work. Any match required by the CITY is clearly indicated in the Agreement.

ATTACHMENT 2

**FLORIDA SINGLE AUDIT ACT CHECKLIST FOR NON-STATE ORGANIZATIONS -
RECIPIENT/SUBRECIPIENT VS. VENDOR DETERMINATION**

This checklist and the standard contract audit language may be obtained electronically from the Department of Financial Services website (<https://apps.fldfs.com/fsaa>).

If a Florida Single Audit Act State Project Determination Checklist has not been previously completed, please complete it now. (Applies only to State agencies)

This checklist must be used by State agencies to evaluate the applicability of the Florida Single Audit Act (FSAA) to non-state organizations¹ after a state program has been determined (using the Florida Single Audit Act State Project Determination Checklist) to provide state financial assistance (i.e. is a State Project as defined in 215.97 (2)(t), F.S.). This checklist assists in determining if the non-state organization is a vendor, recipient/subrecipient, or an exempt organization.

¹ A non-state organization is defined as a nonprofit organization, for-profit organization (including sole proprietors), or Florida local government (excluding district school boards, charter schools and community colleges), which receives State resources.

Recipients and subrecipients of state financial assistance must also use this checklist to evaluate the applicability of the FSAA to non-state organizations to which they provide State resources to assist in carrying out a State Project.

Name of Non-state Organization: _____

Type of Non-state Organization: _____

(i.e. nonprofit, for-profit, local government; if the non-state organization is a local government, please indicate the type of local government – municipality, county commission, constitutional officer, water management district, etc.)

Awarding Agency: _____

Title of State Project: _____

Catalog of State Financial Assistance (CSFA) Number: _____

Contract/Grant/Agreement Number: _____

PART A

<u>YES</u>	<u>NO</u>	
___	___	1. Is the non-state organization a district school board, charter school, community college, government/public university outside of Florida or a Federal agency?
___	___	2. Is the relationship with the non-state organization only to procure commodities (as defined in 287.012(5) F.S.)?
___	___	3. Does the relationship with the non-state organization consist of only Federal resources, State matching resources for Federal Programs or local matching resources for Federal Programs?
___	___	4. Does the relationship with the non-state organization consist of only State maintenance of effort (MOE) ² resources that meet all of the following criteria?
___	___	A. Do Federal Regulations specify the requirements for the use of the State MOE resources and are there no additional State requirements?
___	___	B. Do contracts contain sufficient language to identify the State MOE resources and the associated Federal Program?
___	___	C. Do A-133 audit requirements apply to the State MOE resources and do contracts stipulate that the State MOE resources should be tested in an A-133 audit in accordance with Federal Program requirements?

² MOE refers to the Federal maintenance of effort/level of effort requirements as defined by OMB Circular A-133 Compliance Requirement G (Matching, Level of Effort, Earmarking).

If **any** of 1-4 above is **yes**, the recipient/vendor relationship determination does not need to be completed because **the FSAA is not applicable to the non-state organization.**

PART B

Recipient/Vendor Relationship Determination:

The following should be analyzed for each relationship with a non-state organization where it has been determined that the state program provides state financial assistance (i.e. is a State Project) and the non-state organization is not exempt based on the questions above. This relationship may be evidenced by, but not limited to, a contract, agreement, or application.

YES NO

- 1. Does State law or legislative proviso create the non-state organization to carry out this State Project?
- 2. Is the non-state organization required to provide matching resources not related to a Federal Program?
- 3. Is the non-state organization required to meet or comply with specified State Project requirements in order to receive State resources? (State Project requirements include laws, rules, or guidelines specific to the State Project such as eligibility guidelines, specified types of jobs to be created, donation of specified assets, etc. Specified State Project requirements do not include procurement standards, general guidelines, or general laws/rules.)
- 4. Is the non-state organization required to make State Project decisions, which the State agency would otherwise make? (e.g. determine eligibility, provide case management, etc.)
- 5. Is the non-state organization's performance measured against whether State Project objectives are met? (e.g. number of jobs to be created, number of patients to be seen, number of disadvantaged citizens to be transported, etc. Performance measures may or may not be related to State performance-based budgeting.)

If any of the above is yes, there is a **recipient/subrecipient relationship** and the non-state organization is subject to the FSAA. Otherwise the non-state organization is a **vendor** and is **not** subject to the FSAA.

PART C

Based on your analysis of the responses above and discussions with appropriate agency personnel, state your conclusion regarding the non-state organization:

(Check one) Recipient/Subrecipient: _____ Vendor: _____ Exempt Organization: _____

Comments:

Print Name: _____ Telephone Number: _____

Title: _____

Signature: _____ Date: _____

Note it is the program personnel's responsibility to notify Finance and Accounting of which non-state organizations have been determined to be recipients and are receiving state financial assistance (i.e. disbursements must be coded as 7500 object code in FLAIR).

Note it is possible to have a contractual agreement with a non-state organization under Chapter 287, Florida Statutes, and still consider the non-state organization a recipient under the Florida Single Audit Act.

If a recipient/subrecipient relationship exists the standard contract audit language, including Attachment 1, must be included in the document that established the State's, recipient's, or subrecipient's relationship with the non-state organization.

Questions regarding the evaluation of a non-state organization or if it has been determined that the non-state organization is a recipient and a CSFA number has not been assigned, contact your FSAA State agency liaison or the Department of Financial Services, Bureau of Auditing at (850) 413-3060. Reference may be made to Rule 69I-5, FAC.

SHEET INDEX

- 1 COVER SHEET
- 2 GENERAL NOTES AND LEGEND
- 3 KEY SHEET
- 4-13 PLAN AND PROFILE
- 14-15 STANDARD DETAILS
- 16 BEST MANAGEMENT PRACTICES

CITY OF NORTH PORT

CONSTRUCTION DRAWINGS FOR

PHASE 3 RECLAIMED WATER MAIN EXTENSIONS SPRING HAVEN DRIVE



Know what's below
Call before you dig



**UTILITIES
TELEPHONE CONTACT NUMBERS**

ENGINEERING
PHONE: (941) 240-8000

OPERATIONS
PHONE: (941) 240-8000

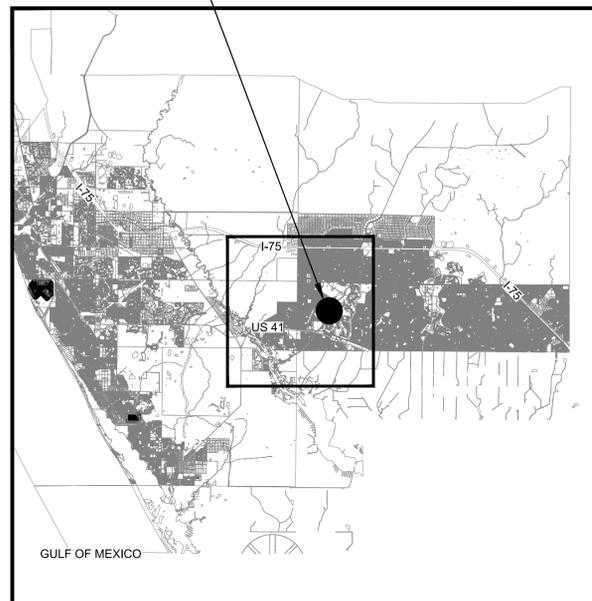
NORTH PORT CITY COMMISSION

VANESSA CARUSONE.....	SEAT 1 (VICE-MAYOR)
CHRISTOPHER HANKS.....	SEAT 2
DEBBIE MCDOWELL.....	SEAT 3
(EMPTY).....	SEAT 4
LINDA YATES.....	SEAT 5 (MAYOR)
PETER LEAR.....	INTERIM CITY MANAGER

NORTH PORT UTILITIES

RICK NEWKIRK.....UTILITIES DIRECTOR
 JENNIFER DESROSIERS.....UTILITIES BUSINESS MANAGER
 DARRELL SMITH.....CONSTRUCTION COORDINATOR

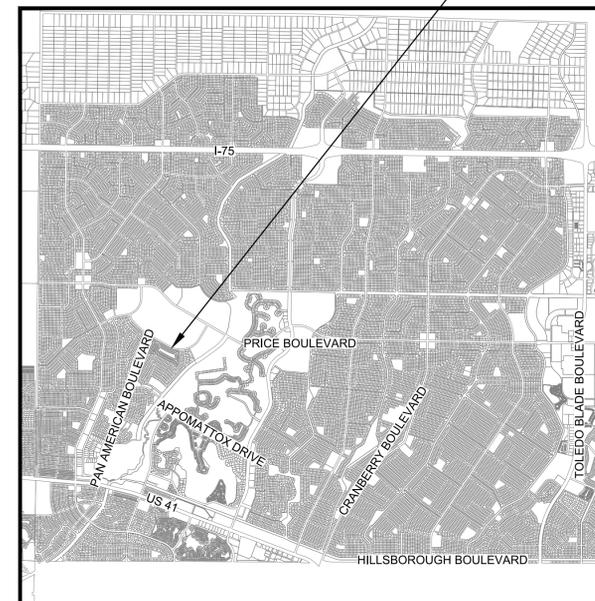
PROJECT VICINITY
CITY OF NORTH PORT, FL



VICINITY MAP



PROJECT LOCATION



LOCATION MAP



PLANS PREPARED BY:



Stantec Consulting Services Inc.
 5172 Station Way
 Sarasota, FL U.S.A.
 34233
 Tel. 941.365.5500
 Fax. 941.366.1922
 www.stantec.com
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ATTENTION IS DIRECTED TO THE FACT THAT
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**STANTEC PROJECT NO. 177310592
MAY 2017**

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