Contract Proposal Documents

SOUTHWEST AREA ELEVATED TOWER AND WATER LINE

City of Wauchula
126 South 7th Avenue
Wauchula, Florida 33873

Project No. 10371.03

Mandatory Pre-Submittal Meeting:
Date: December 3, 2026
Time: 11:00 AM
Location: City of Wauchula Commission Chamber
225 East Main Street, Suite 105
Wauchula, Florida 33873

Sealed Proposals Due:
Date: December 17, 2026
Time: 11:00 AM
Location: City of Wauchula Administration Building
126 South 7th Avenue
Wauchula, Florida 33873

Prepared by
Chastain-Skillman | DCCM
205 East Orange Street, Ste. 110
Lakeland, Florida 33801
(863) 646-1402
Reg. No. 262

Vaughan S. Leer, P.E.
Florida License No. 94781

TABLE OF CONTENTS

DIVISION 1: 1

INSTRUCTIONS TO PROPOSERS 1

REQUEST FOR PROPOSALS 1

SECTION 1.1: GENERAL INSTRUCTIONS TO PROPOSERS 3

1.1.1 Defined Terms in the Instructions to Proposers 3
1.1.2 Minimum Qualifications for Eligibility 3
1.1.3 Bid Security 4
1.1.4 Minority and Women's Business Enterprise Goals 4
1.1.5 Notice of Liquidated Damages 4
1.1.6 Florida Trench Safety Act 4
1.1.7 Subcontractors 4
1.1.8 Payment and Performance Bonds 5
1.1.9 Estimated Quantities Provided for Proposal Reference 5
1.1.10 Existing Site Conditions & Technical Data 5
1.1.11 Pre-Submittal Clarifications & Addenda 6
1.1.12 Completing the Proposal Form 6
1.1.13 Modification or Withdrawal of Proposals 7
1.1.14 Submitting the Proposal Documents 7
1.1.15 Opening of Price Proposals, Evaluation, and Posting 8
1.1.16 Basis of Award — Evaluation Criteria and Weighting 9
1.1.17 Award 9
1.1.18 Notice of Award 10
1.1.19 Notice to Proceed 10
1.1.20 Certification and Representations of the Proposer 10
1.1.21 Conflict of Interest 11
1.1.22 Ethics 12
1.1.23 Ex Parte Communication 12
1.1.24 Prohibition Against Contingent Fees 13
1.1.25 Protest of Solicitation's Terms 13
1.1.26 Protest and Award Process 14
1.1.27 Owner's Reservations 14
1.1.28 Documents and Forms Included in the Proposal Documents 15

SECTION 1.2: REQUIRED FORMS AND DOCUMENTS TO SUBMIT WITH PROPOSAL 15

1.2.1 Proposal Forms and Documents 15

DIVISION 2: 1

AGREEMENT 1

SECTION 2.1: WORK 1

2.1.1 Completion of Work 1

SECTION 2.2: CONTRACT PRICE 1

2.2.1 Contract Price 1
2.2.2 Quantities 1

SECTION 2.3: CONTRACT TIME 2

2.3.1 Time of the Essence 2
2.3.2 Days to Achieve Substantial Completion and Final Payment 2

SECTION 2.4: CONTRACT ROLES AND RESPONSIBILITIES 2

2.4.1 Contract Administrator: 2
2.4.2 Project Manager: 2
2.4.3 SRF Funding Administrator: 3
2.4.4 Contractor's Representative: 3
2.4.5 Contractor's Supervisor: 3

SECTION 2.5: CONTRACT DOCUMENTS 3

2.5.1 Contents 3

SECTION 2.6: NOTICES AND CORRESPONDENCE 4

2.6.1 Transmission Method 4

DIVISION 3: 1

TERMS AND CONDITIONS 1

SECTION 3.1: DEFINED TERMS 1

3.1.1 Definitions 1

SECTION 3.2: PRELIMINARY MATTERS 7

3.2.1 Payment Bond and Performance Bond 7
3.2.2 Liquidated Damages 8
3.2.3 Preconstruction and Progress Meetings 8
3.2.4 Contractor Review of Project Requirements 9
3.2.5 Contractor's Documents at the Work Location 9
3.2.6 Contractor's Field Office 9
3.2.7 Commercial Activities on the Work Location 10
3.2.8 Compliance with Referenced Specifications 10
3.2.9 Licenses 10
3.2.10 Limitation of Accuracy of Informational Materials 10
3.2.11 Permits 11
3.2.12 Work Information 11
3.2.13 Engineer's RPR Status During Construction 11
3.2.14 Conflict of Interest 14

SECTION 3.3: SUBSTANTIAL COMPLETION AND FINAL ACCEPTANCE 14

3.3.1 Acceptance of Work - After Receipt, Inspection, Usage and Testing 14
3.3.2 Substantial Completion 14

SECTION 3.4: PRICE & PAYMENTS 15

3.4.1 Application for Payment and Payment Terms 15
3.4.2 Retainage 15
3.4.3 Payment Method - Progress Payments and Schedule of Values 16
3.4.4 Final Application for Payment 16
3.4.5 Prompt Payment to Subcontractors and Suppliers 17
3.4.6 Taxes 17
3.4.7 Allowances 17

SECTION 3.5: INSURANCE & INDEMNITIES 18

3.5.1 Environmental Indemnity 18
3.5.2 Indemnification 18
3.5.3 Insurance Requirements 19
3.5.4 Title and Risk of Loss 20

SECTION 3.6: GENERAL PERFORMANCE OF WORK 20

3.6.1 Care of Property Owners 20
3.6.2 Workmanship 21
3.6.3 Work Location Cleanliness 21
3.6.4 Surveying 21

SECTION 3.7: SCHEDULES 22

3.7.1 Preliminary Schedules 22
3.7.2 Work Days 23
3.7.3 Changes to the Progress Schedule 23

SECTION 3.8: MATERIALS, TOOLS & EQUIPMENT 23

3.8.1 Temporary Utilities 23
3.8.2 Material Delivery Locations 24
3.8.3 Storage of Equipment 24
3.8.4 Contractor Laydown Area 24
3.8.5 Substitutions 24
3.8.6 Disposition of Salvage Material 26
3.8.7 Tools and Equipment 26

SECTION 3.9: SAFETY & SECURITY 26

3.9.1 Safety and Protection Precautions 26
3.9.2 Emergency Events 27
3.9.3 Emergency Procedures 27
3.9.4 Storm Preparedness 27
3.9.5 Weather Protection 28
3.9.6 Project Security 28
3.9.7 Protection of the Environment 28

SECTION 3.10: OTHER WORK AND OTHER PROPERTY 29

3.10.1 Encroachments on Rights or Property 29
3.10.2 Interference With Existing Utilities 30
3.10.3 Interference with Other Owner Work or Other Companies 31
3.10.4 Interference with Railroads 31
3.10.5 Interruption of Service 32
3.10.6 Protection of Existing Facilities and Grounds 32
3.10.7 Temporary Closure of Roadways 33

SECTION 3.11: DRAWINGS 33

3.11.1 Shop Drawings 33

SECTION 3.12: INSPECTIONS, QUALITY & REPORTING 34

3.12.1 Contractor's Daily Reports 34
3.12.2 Reporting 35
3.12.3 Quality Control and Quality Assurance 35
3.12.4 Inspections and Testing 36
3.12.5 Performance Evaluation 37

SECTION 3.13: OWNER-FURNISHED ITEMS 38

3.13.1 Conditions of Provisioning 38
3.13.2 Access to Work Locations 38
3.13.3 Contract Documents 38
3.13.4 Site Conditions 39

SECTION 3.14: CHANGES TO WORK 39

3.14.1 Unforeseen Conditions 39
3.14.2 Changes in the Work and Change Orders 39
3.14.3 Delay 41
3.14.4 Notification of Surety 42
3.14.5 Contingency Work 42
3.14.6 Suspension of Work 44
3.14.7 Unauthorized Work 44
3.14.8 Payment of Overtime 44
3.14.9 Scheduling of Overtime (Contractor Initiated Overtime) 45

SECTION 3.15: LABOR 45

3.15.1 E-Verify Requirements 45
3.15.2 Contractor's Labor Relations 46
3.15.3 Minimum Qualifications of Contractor Personnel 46
3.15.4 Nondiscrimination 46
3.15.5 Show-Up Pay 47

SECTION 3.16: RIGHTS, REMEDIES, AND DISPUTES 47

3.16.1 Intellectual Property 48
3.16.2 Offsets 48

3.16.3 Proprietary Information 49
3.16.4 Removal of Work 49
3.16.5 Right to Audit and Financial Reporting 49
3.16.6 Title to Materials Found 49

SECTION 3.17: REPRESENTATIONS & WARRANTIES 50

3.17.1 Contractor's Knowledge of the Work 50
3.17.2 Contractor's Plans and Specifications 50
3.17.3 Contractor's Warranties 50
3.17.4 Competent Performance of the Work 52
3.17.5 Encroachment on Outside Property 52
3.17.6 Free and Clear Title 52
3.17.7 Performance of the Work 53
3.17.8 Safety Representation 53

SECTION 3.18: TERM & TERMINATION 53

3.18.1 Term of Contract (Through Work Completion) 53
3.18.2 Termination for Convenience 53
3.18.3 Termination for Default 54

SECTION 3.19: MISCELLANEOUS TERMS & CONDITIONS 56

3.19.1 Ambiguous Contract Provisions 56
3.19.2 Amendments 56
3.19.3 Choice of Law and Waiver of Jury Trial 56
3.19.5 Cumulative Remedies 58
3.19.6 Entire Agreement 58
3.19.7 Expanded Definitions 58
3.19.8 Force Majeure 59
3.19.9 Headings 59
3.19.10 Language and Measurements 59
3.19.11 Nonwaiver 59
3.19.12 Publicity and Advertising 60
3.19.13 References 60
3.19.14 Relationship of the Parties 60
3.19.15 Severability 60
3.19.16 Subcontracting or Assigning of Contract 60
3.19.17 Survival 61
3.19.18 Third Party Agreements 61
3.19.19 Time and Date 61
3.19.20 Waiver of Claims 62
3.19.21 Conflict of Interest 62

DIVISION 4: 1

SUPPLEMENTAL CONDITIONS 1

DIVISION 5: 40

FORMS 40

SECTION 5.1: FORMS TO SUBMIT WITH PROPOSAL 1

5.1.1 Proposal Form 1
5.1.2 Bid Security 1
5.1.3 Proposer's Qualifications 1
5.1.4 Proposer's Statement of Disputes, Litigation, Arbitration, and Surety Completion 1
5.1.5 Drug-Free Workplace Certificate 1
5.1.6 Florida Trench Safety Act Acknowledgement 1
5.1.7 Non-Collusion Affidavit 1
5.1.8 Public Entity Crimes Statement 1
5.1.9 Tabulation of Subcontractors and Suppliers 1

SECTION 5.2: FORMS FOR CONVENIENCE 1

5.2.1 Certificate of Final Completion Form 1
5.2.2 Certification of Substantial Completion Form 1
5.2.3 Change Order Form 1
5.2.4 Contractor's Application for Payment Form 1
5.2.5 Field Order Form 1
5.2.6 Notice of Award Form 1
5.2.7 Notice to Proceed Form 1
5.2.8 Payment Bond Form 1
5.2.9 Performance Bond Form 1
5.2.10 Work Change Directive Form 1
5.1.1 Proposal Form 1
A. Proposal Recipient 1
B. Proposer's Acknowledgements 1
C. Proposer's Representations 1
D. Proposer's Certification 3
E. Basis of Proposal 4
5.1.2 Bid Security Form 1
5.1.3 Proposer's Qualifications 1
5.1.4 Proposer's Statement of Disputes, Litigation, Arbitration, and Surety Completion – Last Three (3) Years 1
5.1.5 Drug-Free Workplace Certificate 1
5.1.6 Certificate of Compliance with the Florida Trench Safety Act 1
5.1.7 Non-Collusion Affidavit of Prime Proposer 1
5.1.8 Sworn Statement Pursuant to Section 287.133(3)(A), Florida Statues, on Public Entity Crimes 1
5.1.9 Tabulation of Subcontractors and Suppliers 1
5.2.1 Certificate of Final Completion 1
5.2.2 Certificate of Substantial Completion 1
5.2.3 Change Order Form 1
5.2.4 Contractor's Application for Payment 1

5.2.5 Field Order Form 1
5.2.6 Notice of Award 1
5.2.7 Notice to Proceed 1
5.2.8 Payment Bond 1
5.2.9 Performance Bond 1
5.2.10 Work Change Directive Form 1

DIVISION 6: 2

TEHCNICAL SPECIFICATIONS 2

DIVISION 1:
INSTRUCTIONS TO PROPOSERS

REQUEST FOR PROPOSALS

Sealed Proposals will be received by the City of Wauchula located at 126 South 7th Avenue, Wauchula, Florida 33873, until 11:00 AM local time on December 17, 2026. Proposals received after said time will be returned unopened. The Proposer shall be solely responsible for delivery of their Proposal. Reliance upon mail or public carriers is at the Proposer's risk.

The principal features of the Work are:

1. Construction of a 150,000 gallon elevated storage tank, associated piping, civil and electrical site work, and restoration.
2. Construction of approximately 25,000 linear feet of 6-inch and 12-inch diameter water main, including horizontal directional drills, miscellaneous fittings, valves, hydrants, testing, and restoration.

The Contract(s) awarded under this Solicitation will be funded, in part, by the Florida Department of Environmental Protection State Revolving Fund (SRF) Program and is subject to Federal requirements including, but not limited to, Davis Bacon and Related Acts, Minority and Women Owned Business Enterprise, American Iron and Steel, as well as others. Neither the State nor any of its departments, agencies, or employees are or will be a party to this Solicitation or any resulting contract.

Plans and specifications are on file for inspection at the office of Chastain-Skillman | DCCM, located at 205 East Orange Street, Suite 110, Lakeland, FL 33801 and at the City of Wauchula Administration Building located at 126 South 7th Avenue, Wauchula, Florida 33873.

Proposers may secure a complete proposal set from Chastain-Skillman | DCCM located at 205 East Orange Street, Suite 110, Lakeland, FL 33801, Phone: (863) 646-1402.

The Proposer is solely responsible for obtaining Proposal Documents from the Project Engineer.

Sealed Proposals shall reference the following on the outer envelope:

SEALED PROPOSAL: PROPOSER'S NAME AND ADDRESS
CITY OF WAUCHULA – SOUTHWEST AREA ELEVATED TOWER –
PROJECT NO. 10371.03

All Proposals will be received until at 11:00 AM local time on December 17, 2026 and will be publicly opened at 11:00 AM local time on December 17, 2026 in the City of Wauchula Administration Building, 126 South 7th Avenue, Wauchula, Florida 33873. At the public opening, the Owner's representative will open each Proposal received before the submission deadline, announce the name of each Proposer, and read aloud and record the Total Base Proposal price stated on each Proposer's Proposal Form. The Owner's representative will not evaluate or score the Proposals at the public opening. The reading of prices is for recording purposes only and does not constitute acceptance of any Proposal or a determination of responsiveness or responsibility. Evaluation, scoring, and award will proceed as set forth in Sections 1.1.15 through 1.1.18.

Mandatory Pre-Submittal Meeting: All interested Proposers must attend the entire meeting. Proposers not attending the Pre-Submittal Meeting will have their Proposals returned unopened. The Pre-Submittal

meeting will be held at 11:00 AM local time on December 3, 2026 in the City of Wauchula Commission Chamber, 225 East Main Street, Suite 105, Wauchula, Florida 33873.

Questions: All questions regarding this Request for Proposals shall be submitted via email and delivered to the Engineer, Vaughan S. Leer, P.E., vleer@dccm.com.

The Owner's Procurement Representative is Stephanie Camacho, and may be contacted via email at scamacho@cityofwauchula.com.

SECTION 1.1: GENERAL INSTRUCTIONS TO PROPOSERS

1.1.1 Defined Terms in the Instructions to Proposers

A. The words and terms defined in DIVISION 3: TERMS AND CONDITIONS are hereby incorporated by reference into this part.

1.1.2 Minimum Qualifications for Eligibility

A. Receipt of this Solicitation and other Proposal and Contract related documents from the Owner or its designated representatives does not constitute the Owner's approval of the Proposer's qualifications.

B. Proposers shall have the following minimum qualifications to be considered eligible to submit a proposal in response to this Solicitation. It is the responsibility of the Proposer to ensure and certify that it meets the minimum qualifications. Proposers not meeting all of the following criteria will not have their Proposals considered for Award.

1. Proposer shall be a licensed contractor in the State of Florida, in accordance with Chapter 489, Florida Statutes.

2. Proposer shall have completed the design, construction and commissioning of at least three (3) single pedestal elevated tanks of equal or greater capacity in the last seven (7) years.

3. Proposers are required to have an Experience Modification Rate (EMR) below 0.75 and a Total Recordable Incident Rate (TRIR) below 2.5 for the last three (3) years.

4. Factors the Owner may consider in determining a Proposer's eligibility under this criterion include but are not limited to:

   a. The Proposer's ability to perform work in a satisfactory manner as evidenced by the Proposer's past performance on other projects performed for the Owner, and

   b. The Proposer's past performance of satisfactory work as evidenced by project descriptions submitted for three stated projects as part of the Proposal and the Owner's verification of associated references; and

   c. The Proposer's past performance as evidenced by any other information the Owner gathers or obtains during the Proposal review process, including but not limited to information included on the Proposer's Qualifications questionnaire, and information the Owner gathers, from any source, in the course of checking Bidder's references.

5. The Owner reserves the right to seek additional information on a Bidder's qualifications and performance from all, some, or none of the references disclosed in a bid submission.

C. The Proposer certifies, under penalty of perjury, that it holds all licenses, permits, certifications, insurances, bonds and other credentials required by law, Contract or practice to perform the Work. The Proposer also certifies that, upon the prospect of any change in the status of applicable licenses, permits, certifications, insurances, bonds or other credentials, the Proposer shall immediately notify the Owner of the change.

1.1.3 Bid Security

A. Each Proposal is to be accompanied by a Bid Security made payable to the Owner in an amount at least equal to five (5) percent of the Proposer's maximum Proposal Price and in the form of a Certified Check or Bid Bond. Failure to furnish the required Bid Security will disqualify the Proposal.

1.1.4 Minority and Women's Business Enterprise Goals

A. DIVISION 4: SUPPLEMENTAL CONDITIONS states the goals of Minority Business Enterprise (MBE) participation and Women's Business Enterprise (WBE) participation in the Work. The Proposer is expected to fully comply with the requirements for MBE and WBE participation as stated in DIVISION 4: SUPPLEMENTAL CONDITIONS of this document. Failure to comply with these requirements will disqualify the Proposal.

1.1.5 Notice of Liquidated Damages

A. In the event a Contract is awarded as a result of this Solicitation, the Contract will be subject to liquidated damages as set forth in DIVISION 3: TERMS AND CONDITIONS.

1.1.6 Florida Trench Safety Act

A. The Proposer shall complete and submit with its Proposal the Florida Trench Safety Act Acknowledgment form, in accordance with Section 553.60, Florida Statutes, et. Seq., when the Work includes trench excavations that exceed five (5) feet in depth and as written assurance that the Proposer shall comply with all applicable trench safety standards, laws, rules and regulations during performance of any Work awarded from this Solicitation.

1.1.7 Subcontractors

A. The Proposer shall supply with their Proposal a list of all Subcontractors and Suppliers that it intends to use for the Work. The Successful Proposer shall not be permitted to use Subcontractors and Suppliers other than those shown in the Proposal unless good cause is shown and prior written consent is obtained from the Owner.

B. The Proposer shall not separately subcontract the design, fabrication and erection of the steel tank, pedestal and base cone support structure. In other words, the Tank Contractor or Subcontractor shall own their fabrication facilities. Divided responsibilities between design, fabrication and erection will not be allowed.

C. Proposer's choice of subcontractors or subconsultants must be approved by the Owner. While the Owner shall have the right to approve or reject each subcontractor or subconsultant, such approval shall not be unreasonably withheld.

D. The Proposer may not use as a Subcontractor or Supplier, any Proposers that were rejected in the Proposal process due to incomplete status or unqualified Proposals.

1.1.8 Payment and Performance Bonds

A. As stated in DIVISION 3: TERMS AND CONDITIONS of the Contract Documents, the successful Proposer shall be required to furnish a Payment Bond and a Performance Bond in accordance with Section 255.05, Florida Statutes, prior to the start of any Field Work.

1.1.9 Estimated Quantities Provided for Proposal Reference

A. The Proposer understands and agrees that the Owner's estimated Contract amounts shall not obligate the Owner in any way to issue Purchase Orders under the Contract of this amount, or any amount of Work under the Contract. The Owner may, at its sole discretion, issue Purchase Orders under the Contract totaling more or less than the estimated amounts, or may award the Contract, and is under no obligation to issue any Purchase Orders under the Contract. In the event that quantities change after Award, the changes to price and/or scope shall be made in accordance with the terms and conditions stated in the Contract Documents.

B. Any item not shown on the Proposal Form, but that is shown in the Drawings or Technical Specifications section, that is required to perform the Work, or that is required as part of a complete and operable system, shall be included in the Proposal Price.

1.1.10 Existing Site Conditions & Technical Data

A. Where the Proposer visits sites, no Work or other disturbance is to be performed while at the site without written permission by the Owner in advance of the site visit. The Proposer shall comply with all safety requirements described in the Proposal Documents and the Owner may require the Proposer to show proof of a minimum of $1 million of general liability insurance.

B. No reports of Hazardous Materials at the Site are known to the Owner or the Engineer, unless disclosed in the specifications.

C. In the preparation of Drawings and Technical Specifications, the Engineer relied upon the following drawings of physical conditions in or relating to existing surface and subsurface structures (except Underground Facilities) which are at or contiguous to the Site:

1. Topographical Survey provided by Chastain-Skillman, LLC
2. Geotechnical Engineering Report provided by Madrid CPWG dated September 20, 2023.

3. Test Hole Summary Report provided by George F. Young, Inc. dated May 5, 2025.

D. Copies of the reports (and drawings) itemized above that are not included with the Proposal Documents may be examined at Chastain-Skillman, LLC located at 205 E Orange Street, Lakeland, FL 33801 during regular business hours. These reports (and drawings) are not part of the Contract Documents but comprise additional “technical data” upon which the Proposer may rely as identified and established.

E. The Proposer is solely responsible for obtaining and verifying all technical data necessary to submit its Proposal.

1.1.11 Pre-Submittal Clarifications & Addenda

A. All questions regarding the Proposal Documents must be submitted to the Procurement Representative identified in the Solicitation no later than ten (10) business days prior to the Proposal Opening date. The Proposer shall promptly give the Owner written notice of any errors, conflicts or ambiguities it discovers in the Proposal Documents.

B. If the Proposer objects in any manner to the Terms and Conditions or Technical Specifications, the objection must be addressed in writing no later than ten (10) business days prior to the Proposal Opening Date. The Owner will address the objection in an Addendum if the Owner believes that a clarification or change is necessary.

C. The Owner may issue Addenda prior to the opening of Proposals to change or clarify the intent of the Proposal Documents. The Owner will issue written responses to questions and requests for clarifications received by the stated deadline in the form of Addenda, and will distribute Addenda to all Proposers who have attended the Pre-Proposal Meeting and provided acceptable contact information.

D. The Proposer shall be responsible for ensuring it has received all Addenda prior to submitting its Proposal and shall acknowledge receipt of all Addenda by completing the Proposer’s Representation section on the Proposal Form in DIVISION 5: FORMS. All Addenda will become part of the Proposal Documents and any resulting Contract Documents. Failure to acknowledge receipt of Addenda may be grounds for rejection of a Proposal at the Owner’s sole discretion.

1.1.12 Completing the Proposal Form

A. Proposers shall complete and submit the enclosed Proposal Form with responses typewritten or written in ink. When a blank is marked "optional", the Proposer shall insert the words "No Proposal" in the space provided if the Proposer does not choose to submit a price for that item.

B. Failure to complete each blank with either a price or the words "No Proposal" may disqualify the Proposal. Failure to submit a Proposal that addresses all parts of the Work may disqualify the Proposal.

C. The Proposer, or its authorized agent or officer of the firm, shall sign the Proposal Form. Failure to sign the Proposal Form may disqualify the Proposal.

D. Owner-approved erasures, interlineations or other corrections shall be authenticated by affixing in the margin, immediately opposite the correction, the handwritten signature of each person executing the Proposal. Failure to authenticate changes may disqualify the Proposal.

E. The Owner will review the Proposals to determine that they meet the specifications set for the Work in the Proposal Documents. The Owner may disqualify any Proposals that deviate from the requirements of this Solicitation, and those that include unapproved exceptions, amendments, or erasures.

F. Failure to complete and submit all additional forms and documentation required in the Proposal Documents to accompany the Proposal Form may disqualify the Proposal.

1.1.13 Modification or Withdrawal of Proposals

A. The Proposer may modify or withdraw its Proposal at any time prior to the advertised Proposal Opening by giving written notice to the City of Wauchula, 126 South 7th Avenue, Wauchula, Florida 33873. The Owner shall not accept any modifications to Proposals after the advertised Proposal Opening. The Proposer shall not withdraw its Proposal for a period of 120 calendar days following the advertised Proposal Opening.

1.1.14 Submitting the Proposal Documents

A. The Proposer shall submit its Sealed Proposal in response to this Solicitation no later than the Proposal Due Date and Time stated in the Request for Proposals, or as may be subsequently amended via Addenda. The Proposal shall be sealed and the envelope clearly marked with the title stated in the Request for Proposals and the Proposer's name and address. The Sealed Proposal may be enclosed in another mail or courier service package.

B. The Proposer shall submit one (1) original Proposal and two (2) duplicates of the original Proposal.

C. All Proposals must be received at the location and by the date and time stated in the Request for Proposals, or as may be subsequently amended via Addenda. The Proposals from all Proposers will be publicly read at the date and time advertised for the Proposal Opening. Proposals arriving after the advertised Proposal Opening date and time and/or at an incorrect location will be returned to the Proposer unopened. Reliance upon third-party courier or delivery service is at the Proposer's risk.

D. All information marked by the Owner or the Proposer as "Confidential Information" that is included in the Solicitation or that is submitted by the Proposer as part of its Proposal shall be handled in accordance with the terms and conditions stated in DIVISION 3: TERMS AND CONDITIONS.

1.1.15 Opening of Price Proposals, Evaluation, and Posting

A. *Public Opening and Recording of Prices***.** At the date, time, and location stated in the Solicitation for the Proposal Opening, the Owner's representative will publicly open each Proposal received before the advertised deadline, except any Proposal properly withdrawn. The Owner's representative will announce the name of each Proposer and will read aloud and record the Total Base Proposal price stated on each Proposer's Proposal Form. The Owner's representative will prepare a proposal tabulation recording the Proposers and prices announced. The public opening is for the recording of prices only. No evaluation, scoring, ranking, or award determination will be made at the public opening, and the reading of a price does not waive any irregularity or signify that a Proposal is responsive, responsible, or accepted.

B. *Review for Responsiveness and Minimum Qualifications*. Following the public opening, the City's Engineer will review each Proposal to determine whether it is responsive to the Solicitation and whether the Proposer meets the minimum qualifications stated in Section 1.1.2. The City's Engineer may reject any Proposal that is nonresponsive or submitted by a Proposer that does not meet the minimum qualifications, and such a Proposal will not be scored. The City's Engineer may also deem all Proposals to be responsive and meet the minimum qualifications if it is in the Owner's best interests. Any proposal deemed to be nonresponsive or otherwise determined not to meet the minimum requirements will not be scored. The Owner will not announce whether a Proposer or Proposal has been rejected until the posting of scores and the announcement of the intended award.

C. *Committee Evaluation*. The Contract Administrator will appoint an Evaluation Committee to independently evaluate and score each responsive Proposal submitted by a qualified Proposer against the evaluation criteria and weighting set forth in Section 1.1.16. Price will be scored using the formula stated in Section 1.1.16 based on the Total Base Proposal prices recorded at the public opening. The members of the Evaluation Committee are to work independently of each other in evaluating and scoring each proposal. The members of the Evaluation Committee may confer with the City Attorney for advice and counsel on their duties and obligations, and the Evaluation Committee may confer with the Engineer of Record regarding the minimum qualifications outlined in Section 1.1.2 and results of reference checks. Evaluators shall not confer with each other concerning their evaluation and scoring, but each member is to independently evaluate and score each Proposal based upon their own judgment.

D. *Posting of Scores and Intended Award.* Upon completion of the evaluations, the Contract Administrator will tabulate each Committee member's scores to produce an aggregate score for each Proposal, which will be announced at a properly noticed, public meeting held at 126 S 7th Avenue, and by any additional means required by applicable law or local ordinance, and will post a notice of intended decision that identifies the aggregate score assigned to each responsive Proposal, and the Proposer the Evaluation Committee intends to recommend for Award. The posting of the notice of intended decision does not constitute or create any contractual obligation. The Award is made only as provided in Sections 1.1.17 and 1.1.18.

E. *Protests.* Any protest of the evaluation, scoring, or intended Award must be filed in accordance with Section 1.1.26, and the time to file such a protest runs from the posting of the notice of intended decision under Paragraph D above.

F. *Waiver of Irregularities.* The Owner reserves the right to waive any irregularities or informalities in the Proposals as provided in Section 1.1.27.

G. *Public Inspection.* Copies of all Proposals will be available for public inspection ten (10) business days after the Proposal Opening date. Proposers may review opened Proposals by contacting the designated Owner's Representative to arrange a mutually convenient time for such review at the Owner's offices.

1.1.16 Basis of Award — Evaluation Criteria and Weighting

A. Proposals will be scored on a 100-point scale:

Scoring Category/Criteria	Possible Points
1. Safety Record—EMR and TRIR	10
2. Relevant Project Experience—number, size, and comparability of completed single-pedestal elevated tank projects	20
3. Past Performance and Reputation—verified references, quality of prior work, timeliness, and conduct under prior contracts, scored against the stated reference questionnaire	20
4. Price—lowest responsive price receives maximum points; others scored proportionally by formula: (lowest price / proposer's price) × 50	50
TOTAL	100

The Evaluation Committee will score each responsive Bid independently against these criteria and will award to the Proposer with the highest aggregate score. For categories 1, 2 and 3, a Proposer or Proposal that meets the threshold requirements in Section 1.1.2 will be comparatively scored. Any Proposer or Proposal that does not meet the threshold requirements of Section 1.1.2. will not be scored.

B. Pursuant to Section 287.05701, Florida Statutes, the Owner and Evaluation Committee will not request documentation of or consider a vendor's social, political, or ideological interests when determining if the vendor is a responsible vendor

1.1.17 Award

A. The Owner, by majority vote of the City Commission, will award the Contract to the responsible and responsive Proposer whose Proposal is determined, through the evaluation criteria and weighting set forth in Section 1.1.16, as reflected in the notice of intended decision posted under Section 1.1.15(D), to have the highest aggregate score. The Owner reserves the right to reject any or all Proposals and to waive minor irregularities, as deemed to be in the Owner's best interest.

1.1.18 Notice of Award

A. The Owner intends to Award one Contract for as many items as possible to achieve maximum benefit from this Contract. The Owner may Award more than one Contract, based on certain groupings of items, which the Owner may revise or reorganize, or the Owner may exclude line items if in its best interest. In the event the Owner makes an award as a result of this Solicitation, the Owner will issue a Notice of Award, in writing and signed by an authorized Owner's Representative as notice to the Proposer that the Owner has deemed it the successful Proposer.

B. The Notice of Award will be accompanied by relevant Contract Documents for execution. Unless expressly waived by the Owner, the Successful Proposer shall execute a Contract for the Work in a form acceptable to the Owner within the timeframe stated on the Notice of Award. If the Proposer fails to execute the Contract Agreement form or associated documents, or to obtain the necessary bonds, licenses or insurances as required, or if it fails to act on an Owner-issued Purchase Order ("PO"), the Owner may cancel the Award with no further liability to the Proposer, retain the Bid Security, and Award to the Proposer submitting a proposal with the next highest aggregate score.

C. Upon receipt of the completed documents, the Owner will execute the Contract Documents and issue the Contractor one fully executed original copy. No other Owner action shall constitute acceptance of the Proposal.

1.1.19 Notice to Proceed

A. Upon receipt of the executed Contract, the required Payment Bond, Performance Bond, and compliant Certificate of Insurance, the Owner will issue a Notice to Proceed in writing and signed by an authorized Owner's Representative as authorization for the Contractor to proceed with the Work, unless otherwise stated in the Contract.

B. In the event that the Owner intends to authorize the Successful Proposer to proceed with Administrative Work only, or with only a portion of the Work, then the Owner shall state the specific limitations of such authorization in a written notice, and the Owner will issue a separate Notice to Proceed to authorize the Contractor to begin Field Work, when applicable, or to perform the remainder of the Work, or any portion thereof. The Contractor shall ensure that it is prepared to begin Field Work upon receipt of the Notice to Proceed. Any Work performed outside of this partial authorization shall be at the Contractor's risk and the Owner shall have no obligation to pay for such Work.

1.1.20 Certification and Representations of the Proposer

A. By signing and submitting a Proposal, the Proposer certifies and represents as follows:

1. That it has carefully examined all available records and conditions, including sites if applicable, and the requirements and specifications of these Proposal Documents, including but not limited to all sample Contract Documents, Technical Specifications, Drawings, exhibits and attachments thereto, prior to submitting its Proposal.

2. That every aspect of its submitted Proposal, including the Proposal Price and the detailed schedule for the execution of the Work, are based on its own knowledge and judgment of the conditions and hazards involved, and not upon any representation of the Owner. The Owner assumes no responsibility for any understanding or representation made by any of the Proposer's representatives during or prior to execution of the Contract unless such understandings or representations are expressly stated in the Contract and the Contract expressly provides that the Owner assumes the responsibility.

3. That the individual signing the proposal is a duly authorized agent or officer of the submitting firm. Proposals submitted by a corporation must be executed in the corporate name by the President or a Vice President. If an individual other than the President or a Vice President signs the proposal, satisfactory evidence of authority to sign must be submitted with the proposal. If the proposal is submitted by a partnership, the proposal must be signed by a partner whose title must appear under the signature. If an individual other than a partner signs the proposal, satisfactory evidence of authority to sign must be submitted with the proposal. The corporation or partnership must be in active status at the Florida Division of Corporations at the time of submission of the Proposal.

4. That the submitting Proposer maintains in active status any and all licenses, permits, certifications, insurance, bonds and other credentials including not limited to contractor's license and business registration tax necessary to perform the Work. The Proposer also certifies that, upon the prospect of any change in the status of applicable licenses, permits, certifications, insurances, bonds or other credentials, the Proposer shall immediately notify the Owner of any change.

5. That it has read, understands and will comply with the Article 1.1.22 of this section entitled "Ethics."

1.1.21 Conflict of Interest

A. Any Proposer bidding the construction phase of a project cannot at the time of Proposal submittal, be affiliated with or have any direct or indirect ownership interest in the architect/engineer ("Designer') of record. The Proposer will also be prohibited from bidding if the Designer has any direct or indirect ownership interest in the Proposer. Should the Owner erroneously award a contract in violation of this policy, the Owner may terminate the contract at any time with no liability to Contractor, and Contractor shall be liable to the Owner for all damages, including but not limited to the costs to rebid the Project. The purpose of this policy is to encourage open, fair and competitive bidding and to eliminate any actual or perceived advantage that one proposer may have over another. In addition to this policy, Design Build projects are governed by the provisions of Section 287.055(9)(b) Florida Statutes.

1.1.22 Ethics

A. By signing the Proposal Form, the Proposer certifies this Proposal is made without any previous understanding, agreement, or connection with any other person, firm, or corporation submitting a Proposal for the same Work other than as a Subcontractor or supplier, and that this Proposal is made without outside control, collusion, fraud, or other illegal or unethical actions. The Proposer shall comply with all Owner ordinances, policies, and procedures regarding business ethics.

B. The Proposer shall submit only one Proposal in response to this Solicitation. If the Owner has reasonable cause to believe the Proposer has submitted more than one Proposal for the same Work, other than as a Subcontractor or Supplier, the Owner may disqualify the Proposal and may pursue debarment actions.

C. The Proposer shall disclose the name(s) of any public officials who have any financial position, directly or indirectly, with this Proposal by submitting such information with its Proposal. Failure to do so will disqualify the Proposal. If the Owner has reason to believe that collusion exists among the Proposers, the Owner will reject any and all Proposals from the suspected Proposers and may proceed to debar the Proposer(s) from future Work.

D. In accordance with Section 287.133, Florida Statutes, the Owner will reject Proposals from any persons or affiliates convicted of a public entity crime as listed on the Convicted Vendors list maintained by the Florida Department of Management Services. The Owner shall not make an Award to any officer, director, executive, partner, shareholder, employee, member, or agent active in management of the Proposer listed on the Convicted Vendor list for any transaction exceeding $35,000 for a period of thirty-six (36) months from the date of being placed on the Convicted Vendor list.

E. If the Proposer violates any requirement of this Section, the Proposal may be rejected and the Owner may debar the offending companies and persons from future Work with the Owner.

1.1.23 Ex Parte Communication

A. Ex Parte Communication is strictly prohibited. Failure to adhere to this policy will disqualify the noncompliant Proposer's Proposal. The Owner's policy on Ex Parte Communication will not prohibit the following:

1. Meetings called or requested by the Owner and attended by the Proposers for the purpose of discussing this Solicitation, evaluation, or selection process including, but not limited to, substantive aspects of the Solicitation. Such meetings may include, but are not limited to, Pre-Submittal meetings, site visits to the Owner's or the Proposers' facilities, interviews/negotiation sessions as part of the selection process, and other presentations by the Proposers, all of which are requested by the Owner and will be limited to topics specified by the Owner.

2. The addressing of the Owner at public meetings advertised and conducted pursuant to Section 286.011, Florida Statutes.

3. The filing of a written protest to any proposed Award to be made pursuant to this Solicitation, evaluation and selection process, which filing and prosecution shall give notice to all Proposers. Protest proceedings shall be limited to open public meetings advertised and conducted pursuant to Section 286.011, Florida Statutes with no Ex Parte Communication outside those meetings.

4. Communications between the Owner representatives and the Proposer for routine matters arising from procurements other than this Solicitation.

5. Written communication between potential Proposers and the Engineer provided copies of written communications are provided to all Proposers.

1.1.24 Prohibition Against Contingent Fees

A. The Proposer warrants that it has not employed or retained any company or person, other than a bona fide employee working for the Proposer, to solicit or secure a contract with the Owner, and that it has not paid or agreed to pay any person, company, corporation, individual or firm, other than a bona fide employee working solely for the Proposer, any fee, commission, percentage, gift, or any other consideration, contingent upon or resulting from the Award or making of the Contract. For the breach or violation of these provisions, the Owner shall have the right to disqualify the Proposal and pursue debarment or terminate the Contract without liability and at its discretion, to deduct from the Contract Price, or otherwise recover, the full amount of such fee, commission, percentage, gift or consideration.

1.1.25 Protest of Solicitation's Terms

A. Proposers shall file any protests regarding the Solicitation's terms, including the evaluation criteria and weighting, in writing, and shall submit such to the Owner's Procurement Representative noted on the Solicitation no later than three (3) business days after the Solicitation is posted. Failure to submit a written protest within the timeframe herein will constitute a waiver of the right to challenge the Solicitation's terms.

B. The written protest shall include at minimum the following information:

1. Project or proposal number of the solicitation protested;

2. Title of solicitation protested;

3. Specific identification of issue(s) protested; and

4. Requested action for correction.

C. The Owner's Procurement Representative will review the submitted information to ensure completeness and submit the issue to a committee comprised of the Owner's designated Project Manager for the Work, the City Manager and Public Works Director ("Protest Committee").

D. The Protest Committee will review the protest and may request a presentation by the Proposer of the protested issue. The Protest Committee will issue a written decision within fourteen (14) calendar days of receipt of the written protest.

1.1.26 Protest and Award Process

A. Proposers shall file any protests regarding this Solicitation in writing, and shall submit such to the Owner's Procurement Representative noted on the Solicitation no later than three (3) business days following the posting of the notice of intended decision. Failure to submit a written protest within the timeframe herein will constitute a waiver of the right to pursue a protest.

B. The written protest shall include at minimum the following information:

1. Project or proposal number of the solicitation protested;

2. Title of solicitation protested;

3. Specific identification of issue(s) protested; and

4. Requested action for correction.

C. The Owner's Procurement Representative will review the submitted information to ensure completeness and submit the issue to a committee comprised of the Owner's designated Project Manager for the Work, the City Manager and Public Works Director ("Protest Committee").

D. The Protest Committee will review the protest and may request a presentation by the Proposer of the protested issue. The Protest Committee will issue a written decision within fourteen (14) calendar days of receipt of the written protest.

1.1.27 Owner's Reservations

A. The Proposal Documents provide potential Proposers with information to enable the submission of written offers. The receipt of Proposal Documents is not a contractual offer or commitment by the Owner to purchase products or services.

B. Proposals and Proposal Prices shall be warranted for a period of one-hundred twenty (120) days following the opening of Proposals, and no Proposal may be withdrawn during such time period.

C. The Owner reserves the right to reject any or all Proposals, or any part thereof, and/or to waive irregularities or informalities if such action is in its best interest. The Owner may reject any Proposals that it deems incomplete, obscure or irregular including, but not limited to, Proposals that omit a price on any one or more items for which prices are required, Proposals that omit Unit Prices if Unit Prices are required, Proposals for which the Owner determines that the Proposal is unbalanced, Proposals that offer Equal Items when the option to do so has not been stated, Proposals that fail to include a bid bond, where one is required, and Proposals from Proposers who have previously failed to satisfactorily complete Contracts of any nature for the Owner, or who have been the subject of negative performance reviews, ratings, or references.

D. The Owner reserves the right to cancel, postpone, modify, reissue and amend this Solicitation at its discretion. The Owner reserves the right to cancel or change the date and time of the proposal opening at any time prior to the advertised time.

E. The Owner may Award the Contract in whole or in part. In such cases whenever the Owner exercises any of these reservations, the Owner will make a reasonable effort to notify, in writing, all parties to whom Proposal Documents were issued. The Owner may award multiple or split Contracts if it is deemed to be in the Owner's best interest.

1.1.28 Documents and Forms Included in the Proposal Documents

A. The reference to and/or inclusion of the Contract Documents and other Contract related forms in the Proposal Documents shall in no way be construed as an Award of the Work, or any portion thereof, or as an intention to award the Work. The Owner reserves the right to alter, amend or delete any portion of these forms, to exclude any form, or to require additional forms not listed herein prior to execution of the Contract Documents.

SECTION 1.2: REQUIRED FORMS AND DOCUMENTS TO SUBMIT WITH PROPOSAL

1.2.1 Proposal Forms and Documents

A. To submit a Proposal in response to this Solicitation, all of the following forms and documents must be completed and submitted as part of the Proposal. Copies of the forms are contained in the Proposal Documents. Additional copies may be requested by contacting the Owner.

1. Proposal Form (form included in DIVISION 5: FORMS)

2. Bid Security (form included in DIVISION 5: FORMS)

3. Proposer’s Qualifications and supporting information (form included in DIVISION 5: FORMS)

4. Proposer’s Statement of Disputes, Litigation, Arbitration, and Surety Completion, Last Three (3) Years (form included in DIVISION 5: FORMS)

5. Drug-Free Workplace Certificate (form included in DIVISION 5: FORMS)

6. Florida Trench Safety Act Acknowledgement (form included in DIVISION 5: FORMS)

7. Non-Collusion Affidavit (form included in DIVISION 5: FORMS)

8. Public Entity Crimes Statement (form included in DIVISION 5: FORMS)

9. Tabulation of Subcontractors and Suppliers (form included in DIVISION 5: FORMS)

10. Evidence of authority to do business in the State of the Project; or a written covenant to obtain such license within the time for acceptance of Proposals;

11. Contractor's License No.: _____.

12. List of three (3) single pedestal elevated tanks of equal or greater capacity in the last seven (7) years, including location, completion date, contact names, and telephone numbers.

13. List of names and contact information for each and every project it has performed for Florida city or county governments within three (3) years of submittal of its bid.

14. Statement from insurance carrier confirming the EMR requirement, and their last three (3) years of OSHA 300 Logs to confirm the TRIR requirement.

15. Design sketch of the tank and foundation proposed to be furnished. General plan of the structure must show all major dimensions including the tank diameter, height to low- and high- water levels, sizes of all principal and secondary members, thickness of plates, arrangement of members, and size of the tank foundation, including approximate quantities of concrete and rebar.

[END OF SECTION]

DIVISION 2:
AGREEMENT

This Agreement is made and entered into on _____ ("Effective Date"), by and between THE CITY OF WAUCHULA, a Florida municipality located at 126 South 7th Avenue, Wauchula, Florida 33873 ("Owner") and _____, a [STATE OF INCORPORATION] corporation with principal offices at _____ [ADDRESS OF CONTRACTOR] ("Contractor").

Whereas, the Owner issued an Request for Proposals and all associated Proposal Documents for the Work titled "City of Wauchula –Southwest Area Elevated Tower and Water Main," and;

Whereas, the Contractor submitted a Proposal in response to such Work, which was opened and accepted by Owner on _____, 2026, and;

Whereas, the Owner has determined that the Contractor's Proposal is the responsive and responsible Proposal with the highest aggregate score for the Work and has issued the Contractor a Notice of Award to such effect;

Therefore, the Owner and the Contractor, in consideration of the mutual covenants hereinafter set forth, agree as follows:

SECTION 2.1: WORK

2.1.1 Completion of Work

A. Contractor shall complete all Work as specified or indicated in the Contract Documents. Contractor's scope of services on the Work shall not substantially differ from Contractor's Proposal unless agreed to in writing by the Parties or as otherwise. The principal features of the Work are described as:

1. Construction of a 150,000 gallon elevated water storage tank, piping, civil and electrical site work, and restoration.
2. Construction of approximately 25,000 linear feet of 6-inch and 12-inch diameter water main, including horizontal directional drills, miscellaneous fittings, valves, hydrants, testing, and restoration.

SECTION 2.2: CONTRACT PRICE

2.2.1 Contract Price

A. The Contractor shall perform the work for a not-to-exceed Contract Price of _____[CONTRACT PRICE], or as may be amended in accordance with the Contract Documents, subject to the availability of lawfully appropriated funds.

2.2.2 Quantities

A. The Contract Price includes the Contractor's Proposal Price. For items of the Work that are Unit Price, the prices shown on the Proposal Form shall be used in determining the final Contract Price. As stated in the Proposal Documents, estimated quantities provided

on the Proposal Form by the Owner are not guaranteed quantities. Actual quantities used in the Work may vary.

B. Regularly during the Work, and upon the Owner's review of the Final Application for Payment, the Owner, or its designated representative, will determine actual quantities used in the Work, and the Owner may issue a Change Order if required to alter the Contract Price.

SECTION 2.3: CONTRACT TIME

2.3.1 Time of the Essence

A. All time limits for Milestones, if any, Substantial Completion, and Final Completion and readiness for final payment as stated in the Contract Documents are of the essence.

B. As further stated in Section 3.19.20 below, the Owner's agreement to an extension of any applicable deadline for Milestones, if any, Substantial Completion, or Final Completion, among any other deadlines provided herein, shall not constitute a waiver of the Owner's right to enforce the Contractor's compliance with other deadlines as provided herein, nor shall the Owner's failure to enforce compliance with any particular deadline or event operate as acquiescence or waiver of the Owner's right to enforce the Contractor's compliance with other such deadlines.

2.3.2 Days to Achieve Substantial Completion and Final Payment

A. The Work will be required to have reached Substantial Completion within **495** calendar days after the issuance of the Notice to Proceed, and completed and ready for final payment in accordance with the Contract Documents within **540** calendar days after the date when the Contract Time commences to run.

SECTION 2.4: CONTRACT ROLES AND RESPONSIBILITIES

The Owner and the Contractor may alter or amend the individuals named herein, or name additional representatives, by promptly providing written notice to the other party of any changes.

The following individuals shall have the responsibilities set forth in the Contract Documents for their respective roles:

2.4.1 Contract Administrator:

Name: Olivia Minshew, City Manager
Agency/Company: City of Wauchula
126 South 7th Avenue
Wauchula, FL 33873
(863) 773-3131

2.4.2 Project Manager:

Name: Vaughan S. Leer, PE

Agency/Company: Chastain-Skillman | DCCM
205 East Orange Street, Suite 110
Lakeland, FL 33801
(863) 646-1402

2.4.3 SRF Funding Administrator:
Name: Mark Brewer, President
Agency/Company: Angie Brewer & Associates, LC
4214 Solutions Lane, Suite 104
Lakewood Ranch, FL 34211-4931
(941) 756-5800

2.4.4 Contractor's Representative:
Name: [TO BE COMPLETED BY OWNER PRIOR TO EXECUTION]
Agency/Company: [TO BE COMPLETED BY OWNER PRIOR TO EXECUTION]

2.4.5 Contractor's Supervisor:
Name: [TO BE COMPLETED BY OWNER PRIOR TO EXECUTION]
Agency/Company: [TO BE COMPLETED BY OWNER PRIOR TO EXECUTION]

SECTION 2.5: CONTRACT DOCUMENTS

2.5.1 Contents

A. The following shall comprise the Contract Documents. The Owner shall generally consider this order of precedence in resolving any conflicts, errors or discrepancies:

1. Executed Amendments, Change Orders and Work Change Directives
2. This executed Agreement
3. Addenda to the Proposal Documents
4. Florida Department of Environmental Protection Supplementary Conditions
5. Terms and Conditions, including the following Exhibits and Attachments thereto, and Supplemental Conditions
6. Notice of Award
7. Notice to Proceed
8. Payment Bond and Performance Bond
9. Owner issued Purchase Orders
10. Owner's Technical Specifications, Drawings, Plans, Exhibits and Attachments

11. Contractor's Proposal in response to the Request for Proposals, including the Proposal Form

B. The figure dimensions on drawings shall govern over scale dimensions. Contract and detailed drawings shall govern over general drawings. The Contractor shall perform any Work that may reasonably be inferred from the Contract as being required, whether or not it is specifically called for, at no additional cost to the Owner. Work, materials or equipment described in words that, so applied, have a well-known technical or trade meaning shall be taken as referring to such recognized standards.

C. By signing the Agreement, the Contractor represents that it has carefully examined the Contract Documents and agrees to perform the Work in accordance with the Contract Documents, as may be amended from time to time.

SECTION 2.6: NOTICES AND CORRESPONDENCE

2.6.1 Transmission Method

A. All notices required or permitted under this Contract shall be in writing and shall be deemed received if sent by one of the following means: upon receipt if delivered by hand; one day after being sent by an express courier with a reliable system for tracking delivery; three days after being sent by certified or registered first class mail, postage prepaid and return receipt requested; or upon confirmed facsimile transmission provided that a copy shall be sent by another of the foregoing means.

B. All notices shall be addressed by a party to the other party as indicated below. Either party may change its address from time to time upon prior written notice to the other specifying the effective date of the new address.

Owner
Attention: Olivia Minshew, City Manager
Address: City of Wauchula
126 South 7th Avenue
Wauchula, FL 33873

Contractor
Attention: [TO BE COMPLETED BY OWNER PRIOR TO EXECUTION]
Address: [TO BE COMPLETED BY OWNER PRIOR TO EXECUTION]

IN WITNESS WHEREOF, OWNER and CONTRACTOR have signed this Agreement in triplicate on the Effective Date first stated above.

OWNER **CONTRACTOR**

By _____ By _____

Date _____	Date _____
(Corporate Seal)	(Corporate Seal)
_____	_____
Attest	Attest

[END OF SECTION]

DIVISION 3:
TERMS AND CONDITIONS

SECTION 3.1: DEFINED TERMS

3.1.1 Definitions

A. Words and terms defined in this section shall have the same meaning throughout all parts of the Contract Documents and this Solicitation. Where intended to convey the meaning consistent with that set forth in its definition, a defined word or term is marked by initial capitalization. DIVISION 6: TECHNICAL SPECIFICATIONS may define additional words and terms where necessary to clarify the Work. Unless otherwise stated in the Contract Documents, definitions set forth in DIVISION 6: TECHNICAL SPECIFICATIONS shall apply only within DIVISION 6: TECHNICAL SPECIFICATIONS.

1. Addendum/Addenda: A change or changes to the Solicitation issued in writing by the Owner and incorporated into the Solicitation and Contract Documents.

2. Administrative Work: Actions primarily performed in an office environment and associated with preparing to perform or administer the Work including, but not limited to, preparing Work schedules, obtaining bonds, executing Contracts, securing resources and other actions specified in the Proposal Documents, or otherwise prudent to ensure a timely, safe and otherwise compliant start and performance of Field Work. Administrative Work is not performed at the Work Location.

3. Application for Payment: A document seeking payment to Contractor from Owner for all or a portion of the Work, in accordance with the Contract Documents, and including at a minimum the following items: the Contractor name and address, a description of the product(s) or service(s) rendered, a valid Owner PO number, the amount payable, the payee name and address, any associated forms and any other supporting documentation required by the Contract Documents.

4. Approved Schedule: The approved progress schedule for performance of the Work approved by the Owner or the Owner's Representative, as most recently amended.

5. Proposal, Bid, or Bidding Documents: The documents titled Instructions to Proposers, the Request for Proposals, the Proposal Form, all sample forms to be included in the Proposer's Proposal, the sample Contract Documents, including Technical Specifications and forms included to provide the Proposer with a complete understanding of the Work requirements, excluding any technical data or test results that are provided as additional information regarding Work Location conditions.

6. Bid or Proposal: The document, including all forms and information, describing the Proposer's offer and submitted in response to this Request for Proposals. Bid and Proposal shall be considered synonymous for the purpose of this Contract.

7. Bid Price: The total dollar amount of the Proposer's offer including, but not limited to, all labor, materials, overheads, profits, other expense, and any and all other cost

items incurred by the Proposer in successfully performing the Work in accordance with the Contract Documents.

8. Bidder or Proposer: The respondent to this Solicitation.

9. Bond: A financial mechanism to guarantee a contractual obligation.

10. Change Order: A written order issued by the Owner after execution of the Contract to the Contractor, as may be recommended by the Engineer, signed by the Owner and authorizing an addition, deletion, or revision of the Work, or an adjustment in the Contract Price or the Contract Time. An executed Change Order resolves all issues related to price and time for the work included in the Change Order.

11. Contract: The Agreement for the Work executed by the Owner and Contractor as included in these Contract Documents.

12. Contract Administrator: The individual assigned by Owner, who is an employee of the Owner, to have authority over the Contract, including the authority to negotiate all elements of the Contract with the Contractor, authorize Change Orders within the maximum amount awarded, terminate the Contract, seek remedies for nonperformance including termination, and otherwise act on behalf of the Owner in all matters regarding the Contract. The Contract Administrator may authorize an Engineer and/or other Owner's Representative in writing to make minor changes to Field Work with the intent of preventing Work disruption.

13. Contract Documents: Contract Documents means the documents set forth in the executed Agreement form.

14. Contract Price: The total amount payable to the Contractor under the Contract, as set forth in the Agreement form, as most recently amended.

15. Contract Time: The number of calendar days or the period of time from when the written Notice to Proceed is issued to the Contractor to the date Contractor has agreed to complete the Work, as stated in the Agreement form, as most recently amended.

16. Contractor: The legal person, firm, corporation or any other entity or business relationship with whom the Owner has executed the Contract. Where the word "Contractor" is used it shall also include permitted successors and assigns.

17. Contractor Representative: The individual responsible for representing the Contractor in all activities concerning the fulfillment and administration of the Contract.

18. Contractor Supervisor: The individual employed or contracted by the Contractor to manage the Work on a day-to-day basis and ensure the Work is performed according

to the Contract. The Contractor Supervisor may be authorized by the Contractor Representative to act on Contract matters. Such authorization shall be in writing and delivered to the Engineer and shall clearly state the limitations of any such authorization. In the event that the Contractor Supervisor and the Contractor Representative is the same person, the Contractor shall notify the Engineer of such situation.

19. Defect or Defective: When used to modify the "Work," whether in lowercase or uppercase, Work that fails to meet the requirements of any required test, inspection or approval, and any Work that meets the requirements of any test or approval, but nevertheless does not meet the requirements of the Contract Documents.

20. Engineer: The individual assigned by the Owner (either an employee or a third party), who is a licensed professional engineer in the State of Florida, to provide engineering, design review, and/or construction management including, but not limited to, overseeing and resolving engineering/design issues for the Work, and conveying the Owner's instructions to the Contractor.

    The Engineer's authority includes interpreting the technical portion of the Contract Documents, deciding on matters relating to the execution and progress of the Work and evaluating the Contractor's performance. The Engineer may stop the Work when deemed necessary by the Owner. The Engineer will receive and adjudicate any claim of ambiguity or error in the technical portion of the Contract Documents and shall reduce any determination to writing, and shall make a recommendation to the Owner. The Engineer is not a party to the Contract. The Engineer has no authority to approve changes to the Contract Price or Contract Time, or to commit the Owner to any expenditure of money except as expressly designated in writing by the Contract Administrator.

    The Engineer is also the Project Manager or Project Engineer.

21. Environmental Requirements: All laws, ordinances, statutes, codes, rules, regulations, agreements, judgments, orders, and decrees, now or hereafter enacted, promulgated, or amended, of the United States, the states, the counties, the cities, or any other political subdivisions in which the Work Location is located, and any other political subdivision, agency or instrumentality exercising jurisdiction over the Owner, the Work Location, or the use of the Work Location, relating to pollution, the protection or regulation of human health, natural resources, or the environment, or the emission, discharge, release or threatened release of pollutants, contaminants, chemicals, or industrial, toxic or hazardous substances or waste or Hazardous Materials (as defined in this Contract) into the environment (including, without limitation, ambient air, surface water, ground water or land or soil).

22. Equal Item: Item a Proposer chooses to offer in place of offering the brand name or manufacturer's item specified on the Proposal Document when the Proposal Document clearly states that the Proposer may offer such an item.

23. Ex Parte Communication: Any communication pertaining to this Solicitation between a Proposer or protester (or their respective employees, agents, or representatives, or someone otherwise acting on behalf of Proposer) and the Owner (its members, employees, agents, and representatives other than the designated Owner representatives in the Solicitation), during the Solicitation period through the Contract Award, and/or from the initiation of a protest through Contract Award or through protest resolution.

24. Field Order: An order given by the Owner's Representative, in writing or orally, to direct progress of the Work. A Field Order may authorize only minor variations to the Work as needed to ensure progress, and does not authorize the Contractor to incur additional costs, change the Contract Price or Contract Time.

25. Field Work: Actions associated with meeting the requirements of the Contract other than Administrative Work. Field Work is primarily performed at the Work Location.

26. Final Acceptance: The Owner's written notice to the Contractor that all Work as specified in the Contract has been completed to the Owner's satisfaction. Approval or recognition of the Contractor meeting a milestone or interim step does not constitute Final Acceptance of the Work. Final Acceptance is only applicable to the entirety of Work as specified in the Contract. Final Acceptance does not in any way limit the Owner's rights under the Contract or applicable laws, rules and regulations.

27. Final Completion: The point in time after which the Owner has accepted the Work, in accordance with DIVISION 3: TERMS AND CONDITIONS and the Contractor has fulfilled all requirements of the Contract Documents.

28. Hazardous Materials: Any substance which is or contains (i) any "hazardous substance" as now or hereafter defined in the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended (42 U.S.C. '9601 et seq.) ("CERCLA") or any regulations promulgated under or pursuant to CERCLA; (ii) any "hazardous waste" as now or hereafter defined in the Resource Conservation and Recovery Act (42 U.S.C. '6901 et. seq.) ("RCRA") or regulations promulgated under or pursuant to RCRA; (iii) any substance regulated by the Toxic Substances Control Act (15 U.S.C. '2601 et seq.); (iv) gasoline, diesel fuel, or other petroleum hydrocarbons; (v) asbestos and asbestos containing materials, in any form, whether friable or non-friable; (vi) polychlorinated biphenyls; (vii) radon gas; and (viii) any additional substances or materials which are now or hereafter classified or considered to be hazardous or toxic under Environmental Requirements (as hereinafter defined) or the common law, or any other applicable laws relating to the Site. Hazardous Materials shall include, without limitation, any substance, the presence of which on the Site, (A) requires reporting, investigation or remediation under Environmental Requirements; (B) causes or threatens to cause a nuisance on the Site or adjacent property or poses or threatens to pose a hazard to the health or safety of persons on the Site or adjacent

property; or (C) which, if it emanated or migrated from the Site, could constitute a trespass.

29. Holidays: The following days: New Year's Day, Good Friday, Memorial Day, Independence Day, Labor Day, Veterans Day, Thanksgiving Day, Day after Thanksgiving, Christmas Eve, and Christmas Day.

30. Instructions to Proposers: The division of the Proposal Documents labeled Instructions to Proposers.

31. Inspector: The individual(s) or company(ies) designated by the Contract Administrator to inspect and test the Contractor's performance and Contract compliance, including materials, workmanship, safety, environmental compliance, project controls, administration and accounting, and other aspects of Contract compliance. The Inspector has no authority to approve changes to the Work, the Contract Price or Contract Time, or to commit the Owner to any expenditure of money except as expressly designated in writing by the Contract Administrator. The Inspector may or may not be the same individual as the Engineer. The Contract Administrator may give the Engineer authority to appoint an Inspector.

32. Notice of Award: The issuance of a Notice of Award by the Owner to the successful Proposer notifying the Contractor that they have been authorized by the Owner to perform the work. A Notice of Award shall not be considered a Notice to Proceed.

33. Notice to Proceed: The written notice duly authorized and delivered by the Owner that authorizes the Contractor to begin Field Work. When indicated by the Owner, a PO may also serve as a Notice to Proceed.

34. Owner: The City of Wauchula.

35. Owner’s Representative: The Engineer, Inspector, Contract Administrator, and any other persons designated by the Contract Administrator as the Owner’s Representative acting in a capacity related to the Work or Contract under the authority of the Contract Administrator.

36. Overtime: Work approved in writing by the Contract Administrator that is required to be performed beyond an employee's scheduled workday or work week, including Work performed on Holidays.

37. Payment Bond: The statutory Payment Bond contemplated by Section 255.05, Florida Statutes.

38. Performance Bond: The statutory Performance Bond contemplated by Section 255.05, Florida Statutes.

39. Preconstruction Meeting: A meeting conducted after Award and prior to the start of any Field Work between the Owner and the Contractor. The purpose of the meeting may include, but is not limited to orientation, schedule, certification and permitting, and other preparatory or Work execution details.

40. Purchase Order (PO): A Work authorization document issued by the Owner with the words "Purchase Order" clearly marked across the top, a PO number used for reference shown on the front, a description of the Work or a listing of the applicable Contract Documents, an authorized Owner signature and stating the amount of lawfully authorized funds.
41. Quality Assurance: Actions that the Owner takes to assess the Contractor's performance under the Contract.

42. Quality Control: Actions that the Contractor takes to ensure it successfully completes the Work in full accordance with the Contract Documents.

43. Resident Project Representative (RPR): An employee or agent of the Engineer at the Work Location, acting as directed by and under the Engineer. The RPR's authority for this Contract is set forth in DIVISION 3: TERMS AND CONDITIONS.

44. Responsible and Responsive Proposer: a Proposer that has the capability in all respects to fully perform the Contract requirements and the integrity and reliability that will assure good-faith performance, as demonstrated by the Proposer's experience, financial capacity, equipment and facilities, past performance and conduct under other contracts, quality of prior work, and safety record.

44. Shop Drawings: Drawings, electronic and hard copy, that detail the fabrication, erection, layout and setting drawings; manufacturer's standard drawings; schedules; descriptive literature, catalogs and brochures; performance and test data; wiring and control diagrams; all other drawings and descriptive data pertaining to materials, equipment, piping, duct and conduit systems, and method of construction as may be required to show the Engineer that the proposed materials, equipment or systems and the position thereof are in compliance with the requirements of the Contract Documents.

45. Site: The Work Location.

46. Solicitation: The Request for Proposals (which may be electronic) issued by the Owner, or by a third-party on behalf of the Owner, to solicit Proposals or Proposals from Proposers that includes the Proposal Documents.

47. Specifications: The provisions contained in the Technical Specifications.

48. Standard of Care: The standards of skill and care ordinarily followed by contractors performing similar services for a project of similar scope and complexity in the same geographical area of the Work during the time in which the Work is performed.

49. Subcontractor: A provider of services or materials performing Work under contract for the Contractor.

50. Substantial Completion: The time when the Owner determines that the Work (or a specified part thereof) is sufficiently complete to be utilized for the purposes for which it is intended or ready for the Owner or other contractors to perform subsequent portions of the Work as stated in the Contract Documents. Recognition of the Work as Substantially Complete, as evidenced by issuance of a Certificate of Substantial Completion, does not represent the Owner's Final Acceptance of the Work.

51. Term: The period of time during which the Contract is in force, from formal Notice of Award to Final Completion, or termination. In some cases, and as expressly stated, some of the Contract requirements may extend beyond the Term of the Contract.

52. Technical Specifications: The division of the Contract Documents collectively labeled as the Technical Specifications, including any exhibits and attachments thereto. Technical Specifications have been prepared by the Owner or a third-party.

53. Unit Prices: The Proposer's charges, rounded to the nearest cent, to the Owner for the performance of each respective unit of Work as defined on the Proposal Form for all items required for successfully performing the Work through Final Acceptance.

54. Work: Work includes the scope set forth in the Contract Documents together with all other additional necessities that are not specifically recited in the Contract, but can be reasonably inferred as necessary to complete all obligations and fully satisfy the intent of the Contract.

55. Work Change Directive: Written authorization recommended by the Engineer and signed by the Owner and issued to the Contractor after the Contract Effective Date recommending an addition, deletion or revision in the Work. A Work Change Directive shall not change the Contract Price or Contract Time, but shall be evidence that the parties expect the change ordered or documented to be incorporated into a subsequent Change Order.

56. Work Location: The place or places where the Work is performed, excluding the properties of the Contractor and/or the Subcontractor(s).

SECTION 3.2: PRELIMINARY MATTERS

3.2.1 Payment Bond and Performance Bond

A. Within five (5) business days of receipt of Contract Documents, the Contractor shall furnish a Payment Bond and a Performance Bond in an amount equal to one-hundred percent (100%) of the amount of the Contract Price, made out to the Owner in forms and

formats approved by the Owner, as security for the faithful performance of the Work of Contract, in accordance with Section 255.05, Florida Statutes. In no case shall the date on the bonds form be prior to that of the executed Contract. The surety must be authorized and licensed to transact business in Florida.

B. A fully executed Payment Bond and Performance Bond must be recorded with the Clerk of Hardee County Court and delivered to the Owner before Work may commence. If the Contractor fails or refuses to furnish or record the required bonds, the Owner will retain the Contractor's Bid Security as liquidated damages.

3.2.2 Liquidated Damages

A. If the Contractor fails to Substantially Complete the Work on or before the substantial completion date set forth in the Contract Documents, the Contractor shall pay the Owner the sum of $500.00 per day for each and every calendar day, including Sundays and Holidays, starting on the contracted substantial completion date and continuing until the date that the Work is Substantially Completed.

B. Following Substantial Completion, if the Contractor fails to complete any remaining Work within the Contract Time, the Contractor shall pay the Owner $500.00 per day for each and every calendar day, including Sundays and Holidays, starting on the contracted final completion date and continuing until the date that the Work is completed.

C. The Contractor understands and agrees that said daily sum is to be paid not as a penalty, but as compensation to the Owner as fixed and reasonable liquidated damages for losses that the Owner will suffer because of such default, whether through increased administrative and engineering costs, interference with the Owner's normal operations, other tangible and intangible costs, or otherwise, which costs are otherwise impossible or impractical to measure or ascertain with any reasonable specificity.

D. Liquidated damages may, at the Owner's sole discretion, be deducted from any monies held by the Owner that are otherwise payable to Contractor.

E. The Contractor's responsibility for liquidated damages shall in no way relieve the Contractor of any other obligations under the Contract.

3.2.3 Preconstruction and Progress Meetings

A. Before starting field work, a preconstruction meeting will be held to: review the work; to review the work schedule; to establish procedures for submitting items including but not limited to applications for payment, the schedule of submittals, approving the applications for payment, and making payments; and, to establish a working relationship between the Owner and the Contractor.

B. The Preconstruction Meeting shall be attended by, but not limited to, the Owner, the Engineer, the Contractor Representative and the Contractor Supervisor. The Contract

Administrator will notify the Contractor in writing of the meeting time and location at least two (2) days prior to the meeting date.

C. Construction progress meetings will be held at a frequency determined by the Owner, but shall not be more often than once per week. Such meeting(s) shall be attended by, but not limited to, the Owner, the Engineer, and the Contractor's Supervisor.

3.2.4 Contractor Review of Project Requirements

A. The Contractor shall review the Work requirements and specifications prior to commencing Work. The Contractor shall immediately notify the Engineer in writing of any conflict with applicable law, or any error, inconsistency or omission it may discover. The Owner will promptly review the alleged conflicts, errors, inconsistencies or omissions, and issue a Change Order or Purchase Order, as appropriate if the Owner is in agreement with the alleged conflict, and issue revised specifications. Any Work the Contractor performs prior to receipt of approved Change Order or Purchase Order will be at the Contractor's sole risk and will not be reimbursed.

B. The Contractor agrees that it will provide sufficient personnel to perform the Work and that it will perform the Work in a manner consistent with the Standard of Care set forth above and with the Approved Schedule. The Owner shall not be responsible for any delays caused by the Contractor’s failure to adequately staff the Work.

3.2.5 Contractor's Documents at the Work Location

A. The Contractor shall maintain at the Work Location for the Owner one record copy of all Contract Documents in good order and marked currently to record all Addenda and changes made during the Contract Term. The Contractor shall include copies of all Change Orders, Work Change Directives, Field Orders, and other written clarifications or interpretations with these record documents. These shall be available to the Owner’s Representatives and shall be delivered to the Engineer upon completion of the Work or at the request of the Engineer. The Owner and the Owner’s Representatives may use such documents in reviewing the Contractor’s final Application for Payment.

B. The Contractor shall also maintain detailed records of the Work for its own files. The Contractor shall make these records available to the Owner for inspection upon request. The Contractor shall maintain such records for three years after the final completion date.

3.2.6 Contractor's Field Office

A. The Contractor shall provide its own office facilities at the Work Location, as required. Unless specifically listed herein, the Owner provides no Work Location facilities or Work Location area for the Contractor facilities of any kind such as field office and material storage. If the Contractor establishes a Work Location-based office, the Contractor shall provide and maintain adequate telephone facilities at this office during the full Term of the Contract. If the Contractor has a local business office, this office may serve as a Work

Location office for this Contract, but the Contractor must maintain an operational cellular phone at the Work Location while performing Work.

3.2.7 Commercial Activities on the Work Location

A. The Contractor shall not establish any commercial activities, or issue concessions or permits of any kind to third parties to establish commercial activities on lands owned or controlled by the Owner, or within the boundaries of the Work Location. The Contractor shall not allow its employees to engage in any commercial activities on the Work Location.

3.2.8 Compliance with Referenced Specifications

A. All Work, materials, systems or operations specified by reference to standard trade specifications or to manufacturer's published specifications shall comply with the requirements of the referenced specifications, except as modified by the requirements of this Contract. The referenced specification used shall be the latest published edition that is in effect on the effective date of this Contract unless a particular edition is specified. In case of a conflict, the specifications that contain the more stringent requirements will govern.

3.2.9 Licenses

A. The Contractor shall comply with all licensing and/or certification requirements pursuant to applicable laws, rules and regulations. The Contractor shall secure all licenses as required for the performance of the Work and shall pay all fees associated with securing them. The Contractor shall produce written evidence of licenses and other certifications immediately upon request from the Owner.

B. The Contractor shall ensure that any subcontractors or subconsultants retained to provide labor, services, or material for the Work are fully licensed and certified, as applicable.

3.2.10 Limitation of Accuracy of Informational Materials

A. For all drawings, test results, inspections, and other informational materials included as part of the Contract Documents, the Contractor understands and agrees that any existing facilities shown, including underground, overhead, and surface structures, and other delineations, and any other informational items provided as part of the Contract Documents are for reference only and are not to be used by the Contractor as the only indication of Work conditions.

B. Unless otherwise stated, the data furnished by the Owner or the Engineer to the Contractor, or by the Contractor to the Owner or the Engineer, that may be relied upon are limited to the printed copies (also known as hard copies). Files in electronic media format of text, data, graphics, or other types are furnished only for the convenience of the receiving party. Any conclusion or information obtained or derived from such

electronic files will be at the user's sole risk. If there is a discrepancy between the electronic files and the hard copies, the hard copies govern.

3.2.11 Permits

A. The Contractor shall secure, maintain, post as required, and pay for all building, plumbing, electrical, parking, roadway, railroad, shipping, freight, hazardous materials, and all other permits required for performance of the Work in full compliance with all applicable laws, rules and regulations. The Contractor shall perform all actions necessary to identify where permits are to be obtained and properly file for the permits.

B. The Contractor shall comply with all conditions of permits issued for the Work, either directly or indirectly, issued by federal, state, or local governmental agencies, which are hereby incorporated as part of these Contract Documents. The Contractor shall be solely responsible for resolving any issues and bearing all expenses including any damages suffered by the Owner that result from a finding of noncompliance during performance of the Work by any of the respective regulatory agencies including, but not limited to, all costs for delays, litigation, fines, fees of any kind, and other costs.

3.2.12 Work Information

A. In the event the Contractor requires additional information regarding the scope, technical specifications, Work Locations, personnel requirements, or other information pertinent to the Work or Contract, the Contractor shall request such information or clarifications from the Engineer in writing. Within the bounds of the Engineer's authority, the Engineer may provide the requested information to the Contractor.

3.2.13 Engineer's RPR Status During Construction

A. The RPR shall have the responsibilities set forth herein for this Contract.

B. Review the progress schedule, schedule of Shop Drawings, and Sample Submittals and Schedule of Values prepared by the Contractor and consult with the Engineer concerning acceptability.

C. Attend conferences and meetings with the Contractor, such as preconstruction conferences, progress meetings, job conferences and other project-related meetings, and prepare and circulate copies of minutes thereof.

D. Serve as the Engineer's liaison with the Contractor, working principally through the Contractor's authorized representative, assist in providing information regarding the intent of the Contract Documents. Assist the Engineer in serving as the Owner's liaison with the Contractor when the Contractor's operations affect the Owner's on-site operations. Assist in obtaining additional details or information from the Owner, when required for proper execution of the Work.

E. Report to the Engineer when clarifications and interpretations of the Contract Documents are needed and transmit to the Contractor clarifications and interpretations issued by the Engineer.

F. Record the date of receipt of Samples and approved Shop Drawings. Receive Samples which are furnished at the Site by the Contractor. Notify the Engineer of availability of Samples for examination. Notify the Engineer and the Owner if work is begun without reviewed shop drawings.

G. Consider and evaluate the Contractor's suggestions for modifications in the Drawings or Specifications and report such suggestions together with RPR's recommendations to the Engineer. Transmit in writing to the Contractor decisions as issued by Engineer.

H. Review of Work and Defective Work:

1. Conduct on–site observations of the Contractor's work in progress to assist the Engineer in determining if the Work is, in general, proceeding in accordance with the Contract Documents.

2. Report to the Engineer whenever RPR believes that any part of the Contractor's work does not conform to the Contract Documents or will imperil the integrity of the Work as indicated in the Contract Documents, or has been damaged, or does not meet the requirements of any inspection, test or approval required to be made; advise the Engineer of that part of work in progress that RPR believes should be corrected or rejected or should be uncovered for observation, or requires special testing, inspection or approval.

I. Inspections, Tests and System Startups:

1. Verify that tests, equipment and system start-ups and operating and maintenance training are conducted in the presence of appropriate the Owner's personnel and that the Contractor maintains adequate records thereof.

2. Observe, record, and report to the Engineer appropriate details relative to the test procedures and system start-ups.

J. Record names, addresses, fax numbers, e-mail addresses, web site locations, and telephone numbers of all of the Contractors, Subcontractors and materials and equipment Suppliers. Maintain records for use in preparing Work documentation.

K. Reports:

1. Furnish to the Engineer periodic reports as required of progress of the Work and of the Contractor's compliance with the Progress Schedule and Schedule of Shop Drawings and Sample Submittals.

2. Draft and recommend to the Engineer proposed Change Orders, Work Change Directives, and Field Orders. Obtain backup material from the Contractor.

3. Immediately notify the Engineer of the occurrence of any Site accidents, emergency, acts of God endangering the Work, damage to property, or discovery of Hazardous Materials.

L. Review Applications for Payment with the Contractor for compliance with the established procedure for their submission and forward with recommendations to the Engineer, noting particularity the relationship of the payment requested to the Schedule of Values, Work completed and materials and equipment delivered at the Site but not incorporated in the Work.

M. During the course of the Work, verify that materials and equipment certificates, operation and maintenance manuals and other data required by the Specifications to be assembled and furnished by the Contactor are applicable to the items actually installed and in accordance with the Contract Documents, and have these documents delivered to the Engineer for review and forwarding to the Owner prior to payment for that part of Work.

N. Completion:

1. Participate in a Substantial Completion inspection, assist in the determination of Substantial Completion and the preparation of list of items to be completed or corrected.
2. Participate in a final inspection in the company of the Engineer, the Owner and the Contractor and prepare a final list of items to be completed and deficiencies remedied.

3. Observe whether all items on final list have been completed or corrected and make recommendations to the Engineer concerning acceptance and issuance of the Notice of Acceptability of the Work.

O. Limitations of the RPR's Authority: The RPR shall not:

1. Authorize any deviation from the Contract Documents or substitute of material or equipment (including "or-equal" items).

2. Exceed limitations of the Engineer's authority as set forth in the Contract Documents.

3. Undertake any of the responsibilities of the Contractor, the Subcontractors, the Suppliers or the Contractor's Superintendent.

4. Advise on, issue directions regarding, or assume control over safety practices precautions, and programs in connection with the activities or operations of the Owner or the Contractor.

5. Participate in specialized field or laboratory tests or inspections conducted off-site by others except as specifically authorized by the Engineer.

6. Accept Shop Drawings or Sample submittals from anyone other than the Contractor.

7. Authorize the Owner to occupy the Project in whole or in part.

8. Advise on issue directions, or assume control over means, methods, techniques, sequences, or procedures for the Contractor's Work.

3.2.14 Conflict of Interest

A. No member, officer or employee of the Owner during his/her tenure or for one (1) year after shall have any interest, direct or indirect, in this contract or proceeds thereof. The Contractor shall also include this statement in all subcontracts for this work.

SECTION 3.3: SUBSTANTIAL COMPLETION AND FINAL ACCEPTANCE

3.3.1 Acceptance of Work - After Receipt, Inspection, Usage and Testing

A. The Contract Administrator will make the determination when Work is completed and there is Final Acceptance by the Owner, with consideration to the Engineer's and the Inspector's recommendations.

B. Final Acceptance will be made by the Owner only in writing, and after adequate time to ensure the Work is performed in accordance with Contract Documents in accordance with Section 255.077, Florida Statutes. The Owner will reject any items delivered by the Contractor that are not in accordance with the Contract, and shall not be deemed to have accepted any items until the Owner has had reasonable time to inspect them following delivery or, if later, within a reasonable time after any latent defects in the work have become apparent.

C. The Owner may partially accept the Work. If the Owner elects to accept nonconforming items, it may in addition to other remedies, be entitled to deduct a reasonable amount from the price as compensation for the nonconformity. Any Final Acceptance by the Owner, even if nonconditional, shall not be deemed a waiver, or settlement or acceptance of any Defect.

3.3.2 Substantial Completion

A. The Contractor shall notify the Owner in writing when a portion of the Work is ready for Substantial Completion and can be utilized for the purposes for which it was intended. The Contractor shall identify any deficiencies in the Work. Owner will inspect the Work and will give the Contractor written notice of either acceptance of that portion of the Work or additional deficiencies. The Contractor shall correct all deficiencies prior to Substantial Completion of the Work.

B. Whenever any portion of the Work is substantially complete and can be utilized for the purpose for which it was intended, the Owner may use it. Such use shall not be held in any way as a Final Acceptance of the Work or as a waiver of any provisions of the Contract.

C. Upon determination that the Work meets the requirements for Substantial Completion, the Owner will issue a Certificate of Substantial Completion.

SECTION 3.4: PRICE & PAYMENTS

3.4.1 Application for Payment and Payment Terms

A. The Contractor shall submit to the Engineer or the Engineer's RPR all Applications for Payment using the prescribed forms included in the Contract Documents and in accordance with the payment method agreed upon in these Contract Documents. The Owner will pay the Contractor the amount requested less any authorized deductions or retainage set forth in the Contract Documents within thirty (30) days after receipt of an acceptable Application for Payment from the Contractor subject to the provisions stated below.

B. The Owner may reject any Application for Payment within twenty (20) calendar days after receipt. The Owner will return the Application for Payment to the Contractor stating the reasons for rejection. Upon receipt of an acceptable revised Application for Payment, the Owner will pay the Contractor the revised amount within ten (10) calendar days.

C. The Owner may withhold payment if the Owner reasonably believes the Contractor is in violation of any conditions or terms of the Contract Documents. Reasons for withholding payment to the Contractor include, but are not limited to, a reasonable belief by the Owner that it may suffer damages as a result of potential or actual claims attributable to the Contractor; inability of the Contractor to complete the Work in a timely manner; or any failure of the Contractor to perform its obligations hereunder. If the Owner reasonably believes Contractor is in violation of any conditions or terms of the Contract Documents and the Owner wishes to withhold payment from the Contractor, the Owner shall (i) provide the Contractor at least ten (10) days written notice of the Owner's intent to withhold such amount which states the basis for such withholding; and (ii) afford the Contractor an opportunity to cure or otherwise address the Owner's concerns.

D. The Application for Payment may be subject to the review of the Owner's Representative for purposes of determining compliance with the DIVISION 4: SUPPLEMENTAL CONDITIONS.

3.4.2 Retainage

A. Pursuant to Section 255.078, Florida Statutes, additional security for the proper performance of the Work, the Owner may deduct up to five percent (5%) retainage from

the amount stipulated in the Invoice or Application for Payment and accepted by the Owner as eligible for payment. In accordance with Florida Statutes.

B. In the case of early termination of the Contract, all payments made by the Owner against the Contract Price prior to notice of termination shall be credited to the amount, if any, due the Contractor. If the parties determine that the sum of all previous payments and credits exceeds the sum due the Contractor, the Contractor shall refund the excess amount to the Owner within ten (10) calendar days of determination or written notice.

3.4.3 Payment Method - Progress Payments and Schedule of Values

A. For the purposes of this Contract, the Contractor shall refer to the DIVISION 6: TECHNICAL SPECIFICATIONS.

3.4.4 Final Application for Payment

A. After the Contractor has, in the opinion of the Engineer, satisfactorily completed all corrections identified during the final inspection and has delivered, in accordance with the Contract Documents, all maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance, certificates of inspection, marked-up as-built record documents and other documents, the Contractor shall complete and submit to the Owner the final Application for Payment with consent of surety for final payment as notice that the Work, including the correction of all deficiencies, is complete. By submitting the final Application for Payment, the Contractor certifies the following:

1. That the Work has been satisfactorily completed;

2. That no liens have attached against the property and improvements of the Owner;

3. That no notice of intention to claim liens are outstanding;

4. That no suits are pending by reason of the Work;

5. That all workers' compensation claims known to the Contractor have been reported to the Owner;

6. That the surety provides a release; and

7. That no public liability claims are pending.

B. Within ten (10) calendar days of receipt of the Contractor’s final Application for Payment, the Engineer shall review the final Application for Payment and make a recommendation to the Owner. The Owner shall make final payment to the Contractor in accordance with the Application for Payment provisions of the Contract.

3.4.5 Prompt Payment to Subcontractors and Suppliers

A. When the Contractor receives payment from the Owner for labor, services or materials furnished by Subcontractors and Suppliers that are hired by the Contractor, the Contractor shall remit payment due (less proper retainage) to those Subcontractors and Suppliers within fifteen (15) calendar days after the Contractor's receipt of payment from the Owner and the Contractor shall obtain a Release of Lien for each payment made. Nothing herein shall prohibit the Contractor from disputing, pursuant to the terms hereof, all or any portion of a payment alleged to be due to its Subcontractors and Suppliers. In the event of such dispute, the Contractor may withhold the disputed portion of any such payment only after the Contractor has provided written notice to the Owner and to the Subcontractor and Supplier whose payment is in dispute, stating the amount in dispute and specifically describing the actions required to cure the dispute. The Contractor shall deliver such notice to the Owner and to the said Subcontractor or Supplier within ten (10) calendar days following the Contractor's receipt of payment from the Owner. The Contractor shall pay all undisputed amounts due within the time frames specified herein.

B. The Contractor shall submit a Release of Lien for the prior month’s payment included in any Application for Payment as a condition of payment. Owner reserves the right to withhold payment in the event the Contractor fails to provide all Releases of Liens for the prior month’s payment.

C. The prompt payment requirements herein shall, in no way, create any contractual relationship or obligation between the Owner and any Subcontractor, Supplier, or any third-party, nor create any Owner liability for the Contractor's failure to make timely payments as required. The Contractor's failure to comply with the prompt payment requirements, however, shall constitute a material breach of its contractual obligations to the Owner.

3.4.6 Taxes

A. The Contractor shall include the cost of all applicable State and Local Sales Taxes in the submitted Bid Price. The Owner reserves the right to directly purchase any materials or equipment to reduce project costs due to State and Local Sales Taxes. A deductive Change Order will be drafted to remove any Owner Direct Purchases from the Contract.

B. The Contractor shall be responsible for the payment of any applicable State and Local taxes relating to the purchase of equipment and materials required for the completion of this project.

3.4.7 Allowances

A. When the Contract Documents indicate that the Owner has provided the Contractor with an allowance for specified portions of the Work, the Contractor shall provide such Work in a manner acceptable to the Owner.

B. Allowance items shall include all costs to the Contractor (less any applicable trade discounts), including all applicable taxes, costs for unloading and handling materials and equipment at the Site, labor, installation, overload, profit, and other expenses set forth in the Contract Documents as part of the allowances.

SECTION 3.5: INSURANCE & INDEMNITIES

3.5.1 Environmental Indemnity

A. The Contractor shall hold harmless, indemnify, and defend the Owner and the Engineer, including without limitation, its officers, directors, members, representatives, affiliates, agents and employees, successors and assigns (the "Indemnified Parties") and will reimburse the Indemnified Parties from and against any and all claims, suits, demands, judgments, losses, costs, fines, penalties, damages, liabilities and expenses (including all costs of cleanup, containment or other remediation, and all costs for investigation and defense thereof including, but not limited to, court costs, reasonable expert witness fees and attorney fees) arising from or in connection with (a) the Contractor's, including, but not limited to, its agents, affiliates or assigns ("Parties"), actions or activities that result in a violation of any environmental law, ordinance, rule, or regulation or that leads to an environmental claim or citation or to damages due to the Contractor's or other Parties' activities, (b) any environmental, health and safety liabilities arising out of or relating to the operation or other activities performed in connection with this contract by the Contractor or any Party at any time on or after the effective date of the contract, or (c) any bodily injury (including illness, disability and death, regardless of when any such bodily injury occurred, was incurred or manifested itself), personal injury, property damage (including trespass, nuisance, wrongful eviction and deprivation of the use of real property) or other damage of or to any person in any way arising from or allegedly arising from any hazardous activity conducted by the Contractor or any Party. The Owner will be entitled to control any remedial action or any proceeding relating to an environmental claim. This indemnification agreement is separate and apart from, and is in no way limited by, any insurance provided pursuant to this Contract or otherwise. This section relating to indemnification shall survive the Term of this Contract, and any holdover and/or Contract extensions thereto, whether such Term expires naturally by the passage of time or is terminated earlier pursuant to the provisions of this Contract.

3.5.2 Indemnification

A. Contractor shall, to the fullest extent permitted by law, indemnify, defend, and hold harmless the Owner from claims, suits, liability, loss, expense, or damages, including all attorneys' fees and costs, arising from the negligent acts or omissions by, the willful misconduct of, or the failure to comply with applicable laws by Contractor or those for whom the Contractor is responsible in the performance of this Agreement. The indemnification required under this Agreement will not be limited in any way by the limits, terms, or conditions of any insurance policy.

B. Contractor, for itself and on behalf of its agents, employees, subcontractors, and subconsultants, shall to the fullest extent permitted by law indemnify, and hold the Owner, its employees, agents, officers, officials, and commissioners, harmless from and against any and all losses, expenses, claims, demands, and causes of action, including attorneys' fees and costs, asserted against the Owner by any person (including without limitation, Contractor's employees, Contractor's subcontractors and subconsultants, and employees of such subcontractors and subconsultants, for injury to persons, including death, or for loss of or damage to property or failure of the completed work to perform as required by this Agreement, to the extent arising out of the negligent acts or omissions of Contractor or any entity for which it is responsible in performing the Work, or the violation by Contractor or any entity for which it is responsible of any law, regulation, ordinance, code or standard applicable to the Work. The indemnification required under this Agreement shall not be limited in any way by the limits, terms, or conditions of any insurance policy.

C. The provisions of Article 3.5.2 shall survive the completion or termination of this Agreement

3.5.3 Insurance Requirements

A. Before starting and for four years beyond Final Acceptance of the Work, and without limiting its liability under the Contract, the Contractor shall procure and maintain at its sole expense, insurance of the types and in the minimum amounts stated below:

Schedule	**Amount**
<u>Workers' Compensation</u>	
Florida Statutory Coverage and Employer's Liability (including appropriate Federal Acts)	Statutory Limits (Workers' Compensation) As required by law (Employer's Liability)
<u>Contractor's General Liability</u>	
Completed Operations and Products Liability Property damage and bodily injury	$1,000,000/occurrence, $2,000,000 annual aggregate
<u>Personal Injury Liability</u>	
Property Damage Liability insurance will provide Explosion, Collapse and Underground Hazards (XCU Coverage) as appropriate	
<u>Automobile Liability</u>	
Bodily Injury	$500,000/person, $2,000,000/accident
Property Damage	$400,000/accident
<u>Contractual Liability</u>	
Bodily Injury	$2,000,000/accident

Property Damage	$1,000,000 annual aggregate

Builder's Risk Insurance
Amount to be determined by Owner

B. The Contractor's General Liability policies shall be effective for four (4) years after the Work is complete. The above Indemnification provision is separate and is not limited by the type of insurance or insurance amounts stated above.

C. The Contractor shall specify the Owner and the Engineer as additional insureds for all coverage except Workers' Compensation and Employer's Liability. Such insurance shall be primary to any and all other insurance or self-insurance maintained by the Owner.

D. Such insurance shall be written by a company or companies licensed to do business in the State of Florida and satisfactory to the Owner. Prior to commencing any Work under this Contract, certificates evidencing the maintenance of the insurance shall be furnished to the Owner for approval.

E. The Contractor's and its Subcontractors' Certificates of Insurance shall be mailed to the Owner at City of Wauchula, 126 South 7th Avenue, Wauchula, Florida 33873.

F. The insurance certificates shall provide that no material alteration or cancellation, including expiration and non-renewal, shall be effective until thirty (30) days after receipt of written notice by the Owner.

G. Any subcontractors of the Contractor shall procure and maintain the insurance required of the Contractor hereunder during the life of the subcontract. Subcontractors' insurance may be either by separate coverage or by endorsement under insurance provided by the Contractor.

3.5.4 Title and Risk of Loss

A. Ownership, risks of damage to or loss of the Work shall pass to the Owner upon Final Acceptance of the work. The Contractor shall assume all risk of loss or damage to the Work while items are in transit and/or in the Contractor's custody until such time that the Owner issues written notice of Final Acceptance of the work.

SECTION 3.6: GENERAL PERFORMANCE OF WORK

3.6.1 Care of Property Owners

A. The Contractor agrees to provide excellent customer service throughout the execution of the Work during both scheduled Work hours and Overtime in the manner, as a minimum, as set forth below:

1. The Contractor shall notify the affected property owners prior to any planned outages, line flushing, valve simulations and driveway construction. The notification will be produced by the Contractor and approved by the Owner's Representative.

2. Within one (1) business day of receiving a concern from a property owner regarding the Work, the Contractor shall notify the Engineer in writing of each customer concern reported directly to the Contractor's personnel. Such notification shall include, as a minimum: the Contractor's name, date and time the concern was communicated to the Contractor, the name, address and phone numbers for the affected party, the nature of their concern and any action that was taken or any action currently underway to resolve the concern.

3.6.2 Workmanship

A. In addition to performing its Work in accordance with the Standard of Care, the Contractor shall perform all Work in a safe, workmanlike and professional manner, and so as to render a neat and uniform appearance. The Contractor shall handle all material in such a way as to preserve its finish and protective coatings from damage. General arrangement shall be satisfactory to the Engineer.

3.6.3 Work Location Cleanliness

A. The Contractor shall, at all times, keep the Work Location free from an accumulation of waste materials or rubbish caused by its operations. At the completion of the Work, the Contractor shall remove all waste materials and any rubbish from and about the project, as well as any tools, construction equipment, machinery and surplus materials, in accordance with applicable laws, rules and regulations. If the Contractor fails to clean up at the completion of the Work, the Owner may do so as provided elsewhere in the Contract and charge the cost thereof to the Contractor.

3.6.4 Surveying

A. Unless specifically stated in the Contract Documents as being provided by the Owner, the Contractor shall be responsible for all surveying necessary to commence and perform this Work. The Contractor shall employ a land surveyor registered in the State of Florida to reference and restore all property corners and/or monuments that may have been disturbed and to ensure accurate horizontal and vertical control during the construction of this project and for staking locations for new structures. Height and spacing of stakes are to be as specified elsewhere herein or as directed by the Engineer.

B. All Work shall be done to the lines, grades and elevations shown on the drawings. Any Work improperly located may be ordered removed and replaced at the Contractor's expense. The Contractor shall be responsible for making its own determination of water table variations and shall not assume that any water levels shown by the aforesaid boring data will necessarily be maintained at the level indicated. The Contractor shall investigate the conditions above or below the surface of the ground as it may deem necessary for the

proper and timely performance of its Work including, but not limited to, the making of borings.

SECTION 3.7: SCHEDULES

3.7.1 Preliminary Schedules

A. Within ten (10) calendar days following the Effective Date of the Agreement, the Contractor shall submit to the Engineer the following items:

1. Preliminary Progress Schedule stating days or dates for starting and completing the various stages of the Work in an orderly manner within the Contract Times, indicating any milestones specified in the Contract.

2. Preliminary Schedule of Submittals, showing a reasonable schedule for reviewing and processing required submittals

3. Preliminary Schedule of Values for all of the Work which includes quantities and prices of items which when added together equal the Contract Price and reasonably subdivides the Work into component parts in sufficient detail to serve as the basis for progress payments during performance of the Work. Prices shall include all overhead and profit.

4. Preliminary Schedule of Progress Payments (Draw Schedule).

B. No later than ten (10) calendar days prior to the date for the submittal of the first Application for Payment, the Contractor and the Engineer shall meet to review the acceptability of the Progress Schedule, the Schedule of Submittals and the Schedule of Values. The Contractor shall have an additional ten (10) calendar days following such meeting to make any adjustments and to resubmit the schedules.

C. The Engineer's approval of the any of the Schedules shall not relieve the Contractor of its sole responsibility for the Progress Schedule, the sequence and scheduling of Work, and the progress of the Work.

D. No progress payments shall be made to the Contractor until the Engineer has approved the Schedules.

E. Upon reasonable written request from the Owner, the Contractor shall furnish to the Owner such evidence as the Owner may reasonably require relating to the Contractor's ability to fully perform the Work in the manner and within the time specified by this Agreement.

3.7.2 Work Days

A. The work schedule is established on the basis of working five (5) days per week, eight (8) hours per day. The Owner may require the Contractor to base its schedule on an accelerated Work Schedule or multiple shifts. The Contractor shall not schedule work on Holidays without obtaining prior written approval from the Owner.

B. The Contractor shall, at no additional cost to the Owner, increase or supplement its working force and equipment and perform the Work on an Overtime or multiple shift basis when directed by the Owner and upon notification that the Contractor is behind schedule. The Contractor shall submit a revised schedule in writing demonstrating the Contractor's schedule recovery plans.

C. The Contractor understands and agrees that the rate of progress set forth in the Approved Schedule already allows for ordinary delays incident to the Work. No extension of the Contract Time will be made for ordinary delays, inclement weather (except as set forth in Section 19, “Force Majeure”), or accidents, and the occurrence of such events will not relieve the Contractor from the requirement of meeting the Approved Schedule.

3.7.3 Changes to the Progress Schedule

A. The Contractor may submit proposed revisions to the Progress Schedule to the Engineer for review provided that they do not change the Contract Time, and the Engineer may adjust the Progress Schedule from time to time.

B. Proposed changes to the Progress Schedule that change the Contract Time will only be made in accordance with Section 14, “Changes to Work.” Adjustments to the Contract Time shall only be made via Change Order.

C. The Contractor shall refer to the DIVISION 6: TECHNICAL SPECIFICATIONS for additional information regarding Progress Schedules.

SECTION 3.8: MATERIALS, TOOLS & EQUIPMENT

3.8.1 Temporary Utilities

A. The Contractor shall furnish and install all temporary water, electricity and other utilities required to accomplish the Work. The Contractor shall obtain the water required for carrying out the Work from fire hydrants, existing water main connections, or new connections approved by the Owner. The Contractor shall install a back flow preventer and water meter assembly if construction water is necessary. Upon Substantial Completion of Work, the Contractor shall remove all evidence of temporary connections and lines.

B. Prior to initiating any construction Work, the Contractor shall coordinate and schedule the provision of temporary utility service required during construction and arrange for the permanent installation and connection of utilities for the completed Work.

3.8.2 Material Delivery Locations

A. The Contractor shall notify, in writing, the Engineer of all planned material delivery/receiving locations. Such notification shall be prior to initiation of shipment. The Engineer will provide the Contractor with specific written approval for each delivery/receipt location, which will not be unreasonably withheld.

3.8.3 Storage of Equipment

A. The Contractor shall be responsible for all storage of materials, equipment, vehicles, tools, and all other items associated with the Work. Such storage shall comply with applicable regulations appropriate for the items being stored to ensure suitable care for items and protection from theft, vandalism, or inappropriate use. The Contractor is solely responsible for the costs for such storage, unless otherwise indicated in the Contract Documents, and any costs associated with noncompliant storage including, but not limited to, loss and damage to items. In the event that the Owner directs the Contractor to stop the Work, costs associated with storing equipment or materials will be compensated in accordance with the provisions stated herein in Section 14, "Change in Work." The Contractor shall ensure that the Engineer has access to Work-related storage on an as needed basis during regular Work Hours and Overtime.

3.8.4 Contractor Laydown Area

A. In the event the Contractor decides to utilize public or private property as a laydown area, the Contractor shall enter into a written agreement with the entity or individual who owns the property. The Owner shall have access to all laydown areas. Upon submission of the Contractor's first Invoice or application for payment to the Owner, the Contractor shall provide the Owner with a copy of such signed written agreement. The Contractor shall submit to the Owner a letter of release from the entity in connection with Contractor's final Application for Payment to the Owner.

3.8.5 Substitutions

A. Whenever materials or equipment are specified or described in the Contract by using the name of a proprietary item or the name of a particular supplier, the naming of the item is intended to establish the type, function and quality required.

B. Materials or equipment of other suppliers may be accepted by the Engineer if sufficient information is submitted by the Contractor to allow the Engineer to determine that the material or equipment proposed is equivalent or equal to that named.

C. The Contractor shall make written application to the Engineer for acceptance thereof, certifying that the proposed substitute will perform adequately the functions and achieve the results called for by the general design, be similar and of equal substance to that specified and be suited to the same use as that specified.

D. The application shall state that the evaluation and acceptance of the proposed substitute will not prejudice the Contractor's completion of the Work within the Contract Time, whether or not acceptance of the substitute for use in the Work will require a change in any of the Contract Documents (or in the provisions of any other Contract directly with the Owner for Work on the Contract) to adapt the design to the proposed substitute and whether or not incorporation or use of the substitute in connection with the Work is subject to payment of any license fees, royalties, permits or any other costs.

E. All variations of the proposed substitute from that specified shall be identified in the application and available maintenance, repair and replacement service shall be indicated.

F. The application shall also contain an itemized estimate of all costs that will result directly or indirectly from acceptance of such substitute, including costs of redesign and claims of other Companies affected by the resulting change, all of which shall be considered by the Engineer in evaluating the proposed substitute.

G. Requests for review of substitute items of material and equipment will not be accepted by the Engineer from anyone other than the Contractor.

H. The Engineer may require the Contractor to furnish, at the Contractor's expense, additional data about the proposed substitute.

I. If a specific means, method, technique, sequence or procedure of construction is indicated in or required by the Contract, the Contractor may furnish or utilize a substitute means, method, sequence, technique or procedure of construction acceptable to the Engineer, if the Contractor submits sufficient information to allow the Engineer to determine that the substitute proposed is equivalent to that indicated or required by the Contract.

J. The Engineer will be allowed a reasonable time within which to evaluate each proposed substitute; such time shall not be deemed justification for an extension of the Contractor's time for completion of the Contract.

K. The Engineer will be the sole judge of acceptability, and no substitute shall be ordered, installed or utilized without the Engineer's prior written notice, which shall be evidenced by a Change Order.

L. The Owner may require reimbursement for the cost associated with the Engineer’s evaluation of substitutions.

M. The Owner may require the Contractor to furnish, at the Contractor's expense, special performance guarantee bonds or other surety with respect to any substitution.

3.8.6 Disposition of Salvage Material

A. All material to be removed from the Work Location, relocated or salvaged, shall be inspected by the Engineer immediately prior to removal, and the Engineer's decision as to the salvageability shall be final. Such material that can be salvaged, in the opinion of the Engineer, shall be stored at the Work Location on-site by the Contractor, as and where directed by the Engineer, or delivered to a location as directed. Under no circumstances may existing structures, plant or facilities be removed or demolished without obtaining prior written approval from the Contract Administrator.

3.8.7 Tools and Equipment

A. All tools and equipment used in the performance of the Work shall be used as intended by the manufacturer and in accordance with manufacturer operating manuals and industry practices, whichever is more stringent. The Contractor shall ensure that all tools and equipment used in the performance of the Work shall be of the size and quality suitable for safe and efficient performance of the Work. If the Contractor-provided tools and equipment do not meet these requirements, or if in the sole opinion of the Owner formed after considering relevant factors, the tools or equipment are inappropriate for performance of the Work, the Contractor agrees to remove the unacceptable tools and equipment and obtain tools and equipment the Owner considers suitable. Such replacement shall be entirely at the Contractor's expense, and no change to Contract Time will be allowed.

B. The Contractor is responsible for furnishing the security of any and all tools and equipment required to perform the Work.

SECTION 3.9: SAFETY & SECURITY

3.9.1 Safety and Protection Precautions

A. The Contractor shall comply with all applicable federal, state and local laws, ordinances, all Owner procedures and policies, and orders of any public body having jurisdiction for the safety of persons or protection of property. The Contractor understands and agrees that violation of any provision of this clause is grounds for immediate termination of the Contract and the Contractor is responsible for all Owner damages associated with such termination.

B. The Contractor shall ensure that Subcontractors and their personnel have all the necessary personal protective equipment and training needed to perform the Work safely.

C. The Contractor understands and agrees that it is responsible for paying all costs associated with providing a safe work environment including, but not limited to, any costs associated with any Owner directed safety improvements. The Contractor further understands and agrees that it is solely responsible for the safety of personnel and

property associated with the Work, and that any actions taken by the Owner or the Owner's Representatives to prevent harm to persons or damage to equipment does not, in any way, relieve the Contractor of this responsibility.

D. The Contractor's Representative, or alternatively, the Contractor's Supervisor, shall be designated as the Contractor's individual responsible for the prevention of accidents.

E. The Contractor shall notify the police and fire departments as to its Work Location in order to ensure prompt response in an emergency.

3.9.2 Emergency Events

A. In the event that a system-wide emergency arises during the Term of this Contract for which the Owner requires assistance from the Contractor including, but not limited to, severe storms, large-scale fires, floods, and terrorist attacks, the Contractor acknowledges the importance of Owner infrastructure and agrees to support, with all its resources, skills and capabilities, and the maximum extent possible, all restoration efforts of the Owner. The Owner shall notify the Contractor when an emergency event occurs and the Contractor agrees to mobilize its full resources immediately. In the event conditions are such that an emergency event is likely in progress, but the Contractor has not been notified by the Owner, the Contractor shall make all efforts to contact the Owner to determine if and how it should respond. The Owner agrees to reimburse the Contractor for its actual costs incurred, plus overhead and profit, the total not exceeding twelve percent (12%), and any one-time expended cost incurred as a result of supporting the Owner during the emergency event.

3.9.3 Emergency Procedures

A. In emergencies affecting the safety of persons, the Work or property at the Work Location or any other area adjacent thereto, the Contractor, without special instructions or authorization from the Owner, is obligated to act to its best ability, to prevent threatened damage, injury or loss to the Work, any persons, or property. The Contractor shall give the Owner prompt written notice describing the emergency, its cause, actions taken, injuries and casualties, property damage, other damages, and impact on continued performance under this Contract.

3.9.4 Storm Preparedness

A. In the event of a Hurricane Warning, Tropical Storm Warning, or other large storm affecting the Work Location, the Contractor shall secure, or shall remove and store all equipment and materials at the Work Location including, but not limited to, cones, barricades, lights and signs. The Contractor shall begin taking such precautions as necessary to secure the Work Location upon official issuance of mandatory evacuation of the area of the Work Location and no later than twenty-four (24) hours prior to predicted arrival of tropical storm or hurricane force winds, or when notified by the Owner to do

so. These activities are considered a regular part of the Work, regardless of the frequency they are required.

3.9.5 Weather Protection

A. The Contractor shall provide proper facilities, take all necessary precautions and assume the entire cost for protecting the Work against weather conditions and for handling all storm, flood and ground water, sewage, or other seepage, that may be encountered during the performance of the Contract. The Contractor shall provide for such contingencies and for carrying on the Work in freezing weather by methods that meet with the approval of the Engineer. If the Contractor fails to provide such protection, or in the event of an emergency, the Owner may provide such protection at the Contractor's expense.

3.9.6 Project Security

A. The Contractor shall provide, at its expense, on-site security personnel at any time the facility's perimeter is unsecured, including but not limited to, alarms disabled, fences or gates down, traffic flows that require gates to be opened repeatedly and/or for more than one hour of the work day. The Contractor shall schedule security personnel. Where existing lighting is disabled or otherwise impacted by the Work, the Contractor shall provide temporary lighting equal to or exceeding that which exists.

3.9.7 Protection of the Environment

A. The Contractor shall immediately notify the Owner of any Hazardous Materials encountered during the Work and shall immediately cease work in the affected area until further direction is received from the Owner.

B. The Contractor and its Subcontractors and Suppliers shall comply with all applicable laws, rules and regulations including, but not limited to, all Environmental Requirements.

C. Asbestos, Lead, or Toxic Mold may be present at the Work Location. The Contractor shall notify the Engineer immediately upon discovery of asbestos, lead, toxic mold. The Contractor shall not disturb or remove known or discovered asbestos, lead, or toxic mold unless directed by the Engineer.

D. Hazardous Materials:

1. The Contractor shall bear full responsibility including, but not limited to, payment and liability for the transportation, use and disposal of any Hazardous Materials under the Contractor's control during the performance of the Work. Disposal of Hazardous Materials should only be disposed of at Owner approved facilities. The Contractor shall provide the Owner with appropriate documentation showing proper disposal of its Hazardous Materials.

2. The Owner has identified and labeled equipment known to contain PCBs. The Owner will remove and transport any equipment so identified. The Contractor shall not remove or transport any equipment containing PCBs. The Contractor shall immediately notify the Owner of any questionable or unmarked equipment and the Owner will arrange for testing and identification.

E. Toxic Substances Introduced by the Contractor:

1. The Contractor shall notify the Engineer in writing of the type, quantity and disposal method of any toxic substance used during the performance of the Work. The Contractor shall be solely responsible for the use and disposal of any such toxic substances. The Contractor shall submit cleanup procedures to the Owner for review and written approval prior to the use of the toxic substance. In the event that a toxic substance escapes into the environment, the Contractor shall immediately notify the Engineer in writing of the occurrence and the actions taken. In the event that the Contractor encounters toxic substances in the course of construction, the Contractor shall immediately notify the Engineer verbally, with a written notification to follow. The Engineer shall arrange for disposal by the Owner.
2. The Contractor will be solely responsible for all waste material including paints, lubricants, fuels, solvents, and other chemicals used in connection with the Work. The Contractor will provide proper containers for waste materials and comply with all applicable laws, rules and regulations in their disposal. The Contractor will dispose of all empty containers off-site as soon as possible. The Contractor will designate one area for transferring paints and solvents from large containers (55-gallon drums) into smaller containers for daily use.

F. The Contractor understands and agrees that the Work Location may include wetlands or other environmentally sensitive areas. The Contractor shall not enter these areas during the performance of its Work, unless specifically authorized by the Engineer and appropriate state and federal permits have been obtained.

G. The Contractor and/or Subcontractor's employees shall not endanger wildlife species or domestic animals of any kind.

H. The Contractor shall immediately cease any activity that causes or results in a violation of the Owner's or the Contractor's environmental permits or federal, state and local laws and regulations. Such violation shall immediately be reported to the Engineer verbally, with written notification to follow. All additional costs due to the Contractor's noncompliance with the applicable environmental permits or Environmental Requirements shall be paid by the Contractor.

SECTION 3.10: OTHER WORK AND OTHER PROPERTY

3.10.1 Encroachments on Rights or Property

A. The Contractor shall be solely responsible for any encroachments on public property or on the rights or property of adjoining property owners to the Work Location, and shall hold the Owner harmless because of any encroachments that may result because of the Contractor's improper layout. In this regard, the Contractor shall, without extra cost to the Owner, remove any Work or portion of any Work that encroaches on the property other than that of the Work Location, or that is built beyond legal building or setback limits. The Contractor shall rebuild the affected Work or portion of Work at the proper location and in full compliance with the Contract Documents.

3.10.2 Interference With Existing Utilities

A. The Contractor acknowledges and agrees that there is a possibility that existing the Owner or other utility facilities may cross and/or lie parallel to excavations in the area where Work will occur. Although the Owner may indicate recorded obstacles on the drawings, it does not warrant that other subsurface obstacles do not exist. The Contractor shall be responsible for verifying the data furnished by the Owner and for fully investigating and locating additional obstructions including every type below, on or above the ground. The Contractor should regard these impediments as normal to construction. All costs for performing such work shall not be paid for separately, but shall be included in the Contractor's costs on the Proposal Form.

B. The Contractor shall comply with all requirements of the Underground Facility Damage Prevention and Safety Act, Chapter 556, Florida Statutes.

C. In the event the Contractor encounters an unidentified utility during performance of the Work, the Contractor shall promptly cease Work in the affected area and shall immediately notify the Owner’s Representative in writing. The Owner will investigate the area and propose remedial actions in accordance with the provisions stated herein in the Section 14, "Changes to Work."

D. The Contractor shall work in cooperation with the Owner and representatives of existing utilities to plan and coordinate putting new Work into service so as not to interfere with the operation of the existing utilities. Such plans shall be adhered to unless deviations therefrom are expressly permitted in writing by the Contract Administrator.

E. The Contractor shall at all times conduct the Work in a manner that interferes as little as possible with the existing utilities. Any cables exposed during construction, whether energized or not, must be handled and protected as if they are energized. The Contractor shall so conduct its operations and maintain the Work in such condition that adequate drainage shall be in effect at all times. The Contractor shall not obstruct existing gutters, ditches and other runoff facilities. When working in the vicinity of overhead lines, the Contractor shall request line rubber protection and pole holding services from the Owner of the overhead lines at least ten (10) calendar days in advance of performing the work.

F. The Contractor shall be solely responsible for any damages, interferences, and interruptions of service caused to any utility's assets and services including water, sewer,

electric, telephone, gas, cable, and other utility services, that result from the Contractor's failure to fulfill the above stated requirements.

G. In the event the Contractor damages an existing utility, the Contractor shall immediately notify the property owner, the owner of the damaged utility and the Engineer. Should the damage cause an interruption of service, the Contractor shall be responsible for restoring service as soon as possible; however, the Contractor shall not make repairs, other than any required to restore safe conditions, without the approval of the property owner, or the owner of the damaged utility. The Contractor shall be responsible for coordinating any repair effort, and any associated costs should the utility owner or a licensed repair contractor be required to make the repair. The Owner reserves the right to deduct any unsettled claim amount from Contractor's invoices until such time as the claim is satisfactorily resolved.

3.10.3 Interference with Other Owner Work or Other Companies

A. The Contractor shall perform the Work in a manner that minimizes the interference with other Owner work, or with work performed by other companies. The Contractor shall coordinate the Work with other persons and companies employed by the Owner. If a difference of opinion regarding scheduling or coordination of the work arises between the Contractor and another Owner contractor(s) performing work at the Work Location, the Owner may arbitrate the matter. In such cases where the Owner makes a decision regarding the scheduling or coordination of the work, the Contractor agrees to fully abide by the Owner’s decision. Unless otherwise agreed in writing by the Owner, the Owner will not be responsible for additional costs.

B. Any claims arising against the Contractor from damages to other companies' work, equipment, machinery, tools or other property shall be settled directly between the Contractor and the other companies involved. The Owner will not, in any way, be a party to arbitrating or mediating any such disputes, nor shall the Owner be responsible for any costs associated with such disputes.

3.10.4 Interference with Railroads

A. The Contractor shall not build across, into, over or under, either temporarily or permanently, any portion of a railway or railway right-of-way without first obtaining all required permits. If the Contractor's operations render any railroad unsafe, the Contractor shall immediately notify the Engineer, and the railroad owner and take appropriate actions and such temporary safeguards as required to protect life, limb, and property, and to maintain orderly traffic.

B. The Contractor shall procure all railroad permits required for the Work beyond those procured by the Owner and the costs for such permits shall be included in the Proposal Documents. All costs associated with railroad fees for railroad flagmen, watchouts, inspectors, supervisors, any additional training of Contractor's employees that is required by applicable laws, rules and regulations when performing Work in association with

railways, any certifications required for successful completion of the Work and all other associated costs shall be included in the Proposal Form.

3.10.5 Interruption of Service

A. The Contractor shall not operate any valves, nor otherwise interrupt water and/or sewer service, without first obtaining permission from the Owner. The Owner shall be present during any interruption of service.

B. If the Contractor must shut down a main or portion of a main, thereby causing an interruption of water service, the Contractor shall provide the Owner with the following information, in writing, a minimum of five (5) business days in advance of any anticipated interruption of service:

1. Date and time of outage.

2. Purpose of the outage.

3. Map of the area to be affected by the outage.

4. Letter stating all offices, businesses, and residents have been or will be notified by the Contractor at least four (4) business days in advance of the outage (unless the Owner chooses to issue such notification).

C. The Contractor is not authorized to proceed with the requested Work without prior written notice from the Owner that such actions are approved.

D. In the event of a major emergency that endangers life or property, the Contractor may take immediate action before notifying the Owner. In all cases, however, the Owner shall be notified in writing at the earliest opportunity after addressing the emergency.

3.10.6 Protection of Existing Facilities and Grounds

A. The Contractor shall be responsible for protecting all the existing facilities including, but not limited to, buildings, lawns, landscaping, sprinkler systems, and pavements, both public and private, that are encountered during the performance of the Work. At all times, the Contractor shall cooperate with the owners of such facilities by arranging and performing the Work in and around such facilities in a manner that facilitates their preservation, relocation, and/or reconstruction. The Contractor shall be responsible for the full restoration or replacement if the Contractor damages such facilities during or resulting from performance of the Work.

B. The Contractor shall verify the existing dimensions and clearances before laying out the Work. When the Work involves the laying of utility lines across landscaped areas and grassed areas, which may include, but is not limited to, irrigation systems, streets, sidewalks, and other paved areas, the Contractor shall protect and preserve all trees,

shrubs, palms, landscaping, etc., and restore such areas and all paved areas to their original sound conditions using construction techniques and materials that are the same as existing including replacing plants and trees with those of similar size and age. In the case of planted areas, the Contractor shall maintain the restoration Work until positive growth has been acknowledged in writing by the Engineer.

C. All costs for such restoration and replacement work shall be included in the associated lines on the Proposal Form, and shall not be paid for separately.

D. The Contractor shall not (except upon written consent from the property owner and Contract Administrator) enter or occupy with workers, tools, equipment or vehicles any land outside the easements, right-of-ways, or the Owner's property.

3.10.7 Temporary Closure of Roadways

A. The Contractor shall not close or obstruct any portion of a street, road, or private way without first obtaining permits. If any street or private way is rendered unsafe by the Contractor's operations, the Contractor shall make such repairs or provide such temporary ways and guards necessary for the protection and safety of persons on the Work and the public and for the orderly maintenance of traffic. All costs associated with temporary closure of roadways shall be included in the Bid price.

B. The Contractor shall notify the police and fire departments in writing if it will be necessary to close a street. The Contractor shall copy the Owner on all correspondence relating to street closure. The Contractor shall notify the police and fire departments prior to closure of the street. The Contractor shall be responsible for maintaining proper coordination with the proper authorities.

C. Temporary closure of business entrances must be approved in writing by and coordinated with the Owner.

D. For the purposes of this Contract, the Contractor shall refer to the DIVISION 6: TECHNICAL SPECIFICATIONS.

SECTION 3.11: DRAWINGS

3.11.1 Shop Drawings

A. The Contractor shall submit all Shop Drawings according to the Schedule of Submittals approved by the Engineer and the DIVISION 6: TECHNICAL SPECIFICATIONS.

B. Shop drawings shall establish the actual quantities, dimensions, materials and specified performance and design details of all manufactured or fabricated items, services and equipment that Contractor proposes to provide for the Work; indicate proper relation to adjoining Work; amplify design details of mechanical and electrical equipment in proper relation to physical spaces in the structure; and incorporate minor changes of design or construction to suit actual conditions.

C. Shop drawings shall be complete in every detail, properly identified with the Contract name, Contract and subsection number for identification of each item, and state the qualifications, departures or deviations from the Contract, if any. Shop drawings for each section of the Work shall be numbered consecutively and the numbering system shall be retained throughout all revisions. Each drawing shall have a clear space above the title block in the lower right-hand corner for the approval stamps of the Contractor and the Engineer.

D. In checking the Shop Drawings, the Contractor shall:

1. Verify all dimensions and field conditions, and shall check and coordinate the Shop Drawings of any section or trade with the requirements of all other sections or trades whose Work is related thereto, as required for proper and complete installation of the Work.

2. Verify all rough-in and connections for utilities shall conform to approved equipment Shop Drawings

3. Review and coordinate each Shop Drawing with other Shop Drawings and the Contract Documents

4. Determine and verify all information relative to Contractor's responsibilities for means, methods, techniques, sequences, and procedures of construction, and safety programs.

E. The Engineer will review the Shop Drawings and will return them to the Contractor stamped to indicate the action taken. For planning purposes, the Contractor shall allow a minimum of two (2) weeks for review of each Shop Drawing. The stamp will indicate that the Shop Drawing is "No Exception Taken", "Make Corrections Noted", "Revise and Resubmit" or "Rejected". Only those Shop Drawings stamped "Revise and Resubmit" or "Rejected" shall be resubmitted for subsequent review. Resubmittals shall be in the same form and number of copies as original submittals, with notation indicating a revised submittal. The Shop Drawings stamped "No Exception Taken" or "Make Corrections Noted" will be returned to the Contractor, who will be responsible for obtaining prints thereof and distributing them to the field and Subcontractors.

F. At the same time the Engineer returns a reviewed submittal to the Contractor it will forward two copies of each item stamped "No Exception Taken" or "Make Corrections Noted" together with any conditions of approval, to for field and office use. The Engineer may revoke approval of Shop Drawings, should field conditions so dictate.

SECTION 3.12: INSPECTIONS, QUALITY & REPORTING

3.12.1 Contractor's Daily Reports

A. The Contractor shall complete and submit daily reports for each calendar day of the Work, starting with the date of the Notice to Proceed, and said reports shall be submitted to the Owner's Representative by noon of the following workday. The Contractor's failure to submit the daily reports as specified herein will be grounds for withholding payments.

B. Upon review of the Contractor's Daily Reports, any discrepancies in the information noted by the Owner's Representative will be provided to the Contractor. A revised Daily Report will be resubmitted within one (1) business day.

3.12.2 Reporting

A. The Contractor shall provide the reports as defined in the Contract Documents. The Contractor shall refer to DIVISION 6: TECHNICAL SPECIFICATIONS.

B. Where the reporting frequency is daily, reports shall be submitted by noon of the following workday. Where the reporting frequency is weekly, reports are due by Monday at noon, covering the prior workweek. Where Monday is a Holiday, the reports are due at noon on the next workday. Where reports are due monthly, reports are due by noon on the first business day of each month. Sample forms for reports may be included in the Contract Documents. Where they are included they are to be used. Where they are not included, the Contractor shall provide a sample of its proposed report format for each report to the Engineer at least one (1) week prior to its initial due date. The Engineer will review and either approve or reject the use of the report. Where the proposed report is rejected, the Contractor shall resubmit revised report formats, until the Engineer approves format. The Reporting Cycle shall begin on the Notice to Proceed date or the date of the purchase order, if used.

C. Where the Contract calls for reports to be submitted by the Contractor, such reports shall be in both paper and electronic format, with the electronic version submitted electronically via email to the Engineer.

3.12.3 Quality Control and Quality Assurance

A. The Contractor shall provide Quality Control to ensure the Work is performed in accordance with the Contract and in adherence with the Standard of Care. Quality Control shall be appropriate for the nature of the Work, and shall be conducted in a manner consistent with sound quality management and industrial engineering principles. The Contractor shall have only personnel trained in Quality Control techniques and experienced with the nature of the Work perform the Quality Control function.

B. The Owner may perform Quality Assurance activities. Such activities, whether performed or not, do not in any way limit or reduce the Contractor's requirements. The Owner may become aware of quality related problems during its performance of Quality Assurance, but has no obligation to notify the Contractor of its findings. The Contractor shall provide access to all areas of Work, including the Contractor's facilities, for the Owner's Quality Assurance personnel and the Owner's Representatives. The Owner will conduct Quality

Assurance activities so as not to excessively interfere with the Work, however, where the Owner Quality Assurance personnel request specific actions of the Contractor, the Contractor shall comply with the request and agrees that such compliance is included as part of its Contract Price.

C. The Contractor shall refer to DIVISION 6: TECHNICAL SPECIFICATIONS.

3.12.4 Inspections and Testing

A. The Owner, or its designated representatives, will perform inspections at the Contractor facilities during normal business hours and in a manner that minimizes disruption to the normal day-to-day work activities of the Contractor. Contractor shall provide safe and proper facilities for inspection access and observation of the Work and also for any inspection or testing by others.

B. If the Contractor has covered or concealed any Work from inspection in any way that the Engineer has not specifically requested prior to the Owner's Representative's inspection, or if the Engineer considers it necessary or advisable that covered Work be inspected or tested by others, the Contractor, at the Engineer's request, shall uncover, expose or otherwise make available the portion of the Work in question for observation, inspection or testing as the Engineer may require. The Contractor shall furnish all necessary labor, material and equipment to make such Work available.

C. The Contractor shall bear all expenses of uncovering, exposure, observation, inspection and testing and of satisfactory reconstruction, including, but not limited to, compensation for additional professional services required by the Owner, and no change in Contract Time will be considered as a result of the foregoing.

D. The Owner may, at its sole discretion, grant the Contractor an extension of the Contract Time directly attributable to such uncovering, exposure, observation, inspection, testing and reconstruction.

E. All materials and equipment used in the construction of the Contract shall be subject to adequate inspection and testing in accordance with accepted standards. The Contractor shall select the laboratory or inspection agency for making all tests required by the specifications, and shall pay for this laboratory service direct, as a part of this Contract.

G. The Contractor shall pay for all required testing of materials and equipment. Two (2) copies of each test showing certification of each test shall be furnished to the Engineer immediately after such test has been made and with the exception of concrete, prior to delivery of the materials or equipment tested to the Work Location. The Owner will not accept the materials or equipment until tests have been approved.

H. Materials of construction, particularly those upon which the strength and durability of the structure may depend, shall be subject to inspection and testing to establish conformance with specifications and suitability for uses intended. Test requirements for all materials

are set out in the detailed specifications for that particular material. All materials and equipment prior to being incorporated in the Work, and required by the Engineer to be tested, shall be tested for conformance with contractual requirements. Standard items of a uniform nature may be accepted on the manufacturer's certification. Where specific performance and/or quality is referred to, it is the Contractor's responsibility to have the necessary tests performed by qualified persons to show that the contractual requirements are being met except those tests named in the Contact Documents to be performed by the Owner. Certified test results shall be submitted promptly in quadruplicate to the Engineer for review. All tests shall be performed in accordance with referenced standards. Where no reference is made, tests shall be performed in accordance with the methods prescribed by the American Society for Testing and Materials or such other organization as would be applicable.

I. The Contractor shall pay for any retests resulting from its failure to provide Work that passes required tests.

J. The Engineer, or the Owner appointed Inspectors may inspect any and all materials and Work. Such inspection may extend to any or all parts of the Work and to the preparation and manufacture of the materials to be used. The Inspectors shall not be authorized to alter, revoke, enlarge or relax the provisions of the Contract, nor will they be authorized to approve or accept any portion of the completed Work, nor to issue instructions contrary to the Contract. The Inspector shall inform the Engineer of the progress of the Work and the manner in which it is being done, and notify the Contractor of any infringement upon the Contract Documents. The Inspectors will have the authority to reject defective materials or to suspend any Work that is being improperly done subject to the final decision of the Engineer.

3.12.5 Performance Evaluation

A. The Owner may, upon completion of the Work or at any time during the Work, issue to the Contractor a written performance evaluation of the Contractor's performance of Work under this Contract. The evaluation will be based upon the Owner’s and the Engineer’s reports, inspections, and first-hand experience in dealing with the Contractor and the Contractor’s representatives. The performance evaluation will indicate whether the Contractor’s performance has been deemed “Satisfactory,” “Unsatisfactory” or “Top Performance” with regard to the following criteria:

1. Timeliness;

2. Customer Service to Owner;

3. Care of Owner’s Customers;

4. Financial Performance;

5. Quality of Workmanship;

6. Quality of Materials & Equipment;

7. Safety;

8. Environmental;

9. Compliance with MBE/WBE Requirements; and

10. Project Administration.

SECTION 3.13: OWNER-FURNISHED ITEMS

3.13.1 Conditions of Provisioning

A. The Contractor understands and agrees that it shall be solely responsible for providing everything necessary to perform the Work and to be in full compliance with the Contract Documents, except for those items specifically listed herein as being provided by the Owner.

B. Any use of Owner-furnished items on non-Owner work is a breach of the Contract and a violation of the law. All Owner-furnished items are the property of the Owner when issued, stored by Contractor, and used in performance of the Work. The Contractor agrees that it shall use all Owner-furnished items in a manner consistent with industry practice, codes, laws, considering the condition of the Owner-furnished item, the skills of the individuals using the Owner-furnished item, and all environmental conditions. The Contractor understands and agrees that where the Owner and the Contractor shall share Owner-furnished items, Owner usage shall always have priority over Contractor usage, and the Contract Administrator shall have sole authority to resolve any usage dispute and such resolution shall not result in any claim by Contractor.

C. The Contractor agrees to return to the Owner, and to the location as established by the Engineer, any unused or salvageable items prior to final payment. The Contractor agrees that the Owner has the right to audit and investigate at any time how the Contractor is using Owner-furnished items. The Owner will bill the Contractor for unaccountable Owner-furnished material at the current Owner cost.

3.13.2 Access to Work Locations

A. The Owner will provide, as indicated in the Contract Documents, and no later than the date when needed by the Contractor, access to the Work Location, including rights-of-way or access thereto, and such other lands that are designated for the Contractor's use. The Owner will secure easements for permanent structures or permanent changes in existing facilities, unless otherwise specified in the Contract Documents.

3.13.3 Contract Documents

A. After Contract Award, the Owner will furnish a maximum of one (1) complete set of the Contract Documents, or portions requested thereof, upon request by the Contractor. Additional copies will be supplied at cost to the Contractor.

3.13.4 Site Conditions

A. The Owner will provide to Contractor test data results from field tests. Such data has been determined by the Owner to be sufficient to describe the conditions to be expected during the performance of the Work. The Contractor shall not be entitled to any claim for additional costs associated with any ground related Work, unless the actual conditions found substantially differ from those described by the test data.

B. The Contractor is responsible for verifying Site conditions and obtaining additional data as the Contractor deems necessary. The Contractor will be responsible for all costs associated with the gathering of additional Site data.

SECTION 3.14: CHANGES TO WORK

3.14.1 Unforeseen Conditions

A. The Contractor understands and agrees that it is its responsibility to conduct due diligence prior to the start of Work. Such due diligence includes, but is not limited to, verifying all Work conditions, measurements, dimensions and latent and patent obstructions, the accuracy of drawings, test results, inspections and other informational materials provided in the Contract Documents, and any other causes for existing or potential changes to the Work prior to initiating the Work. In the event that the Work must be changed due to the Contractor's failure to fulfill the above requirements, the Contractor understands and agrees that it will be responsible for all costs associated with the changed condition.

B. In the event, however, that the Contractor exercises the requisite due diligence and a change to the Work becomes necessary resulting from conditions that are clearly unforeseen and that could not have been discovered, the costs for adjusting the Work in response to such unforeseen conditions shall be addressed as stated herein in Article 3.14.2 below titled "Changes in the Work and Change Orders."

3.14.2 Changes in the Work and Change Orders

A. The Engineer may issue to the Contractor a written Field Order to authorize minor changes to the Work having no impact on Contract Price or Contract Time. If the Contractor anticipates that the Field Order work will impact the Contract Price or Contract Time the Contractor should immediately notify the Engineer.

B. In the event of an emergency endangering life or property where it is appropriate for the Contractor to take action, the Contractor shall undertake such actions to preserve life and property. The Owner and the Contractor will determine after emergency is concluded,

the extent of out-of-scope work performed by the Contractor, and the Owner will issue a Change Order or amend the Contract for such work, if any and as necessary.

C. Anything to the contrary notwithstanding, in the event that the Owner determines that a change must proceed immediately or if the Owner rejects all or a portion of the Contractor's estimated effect of a change, then the Owner may direct, and the Contractor shall commence immediately and perform until completion, the necessary services to implement the change. The Owner will issue such direction in the form of a written Work Change Directive. The Contractor shall be compensated for such change in the work, notwithstanding any objections of the Contractor, which objections shall be preserved and not waived by the Contractor's commencement or performance of the Work as directed by the Owner.

D. To request or claim any change in the Work including, but not limited to change in scope, quantities, pricing, or schedules, the Contractor shall submit a letter to the Engineer stating such request or claim. The Engineer shall review and submit a written recommendation to the Owner. The Owner shall have the right to approve or disapprove any request or claim for change as it deems necessary and in its best interests consistent with the other Contract requirements. Whether requested by the Contractor, claimed by the Contractor, or contemplated by the Owner, no change shall be authorized unless made on an Owner Change Order signed by the Contract Administrator or through a formal written amendment to this Contract.

E. All requests for changes filed by the Contractor shall be in writing delivered to the Owner’s Representative within ten (10) business days of when the event that prompted the claim was discovered or should have been discovered. The Contractor’s failure to timely submit a written claim will constitute a waiver of the right to pursue a claim. Upon receipt of the Contractor's claim notification, Owner’s Representative will provide written direction as to the procedures that will be used to address the request. The Contractor's request shall be sufficiently detailed including itemized costs, condition and work descriptions and other information necessary to evaluate the merits of the claim. A cost breakdown showing all labor, material and equipment shall be provided. The Owner’s Representative may reject requests providing insufficient supporting information. Any change in the Contract resulting from the request will be incorporated into the Contract via a Change Order or Purchase Order. Where the Engineer and the Contractor are unable to reach a mutually acceptable resolution of request, the Owner's determination will be final.

F. Where necessary, the Owner will determine the value of work covered by a change order using one of the following methods:

1. Where the work is covered by established unit prices contained in the contract, the unit price, if the Owner agrees that this is a fair and reasonable price; otherwise, a negotiated price will be applied to the quantity of work at the discretion of the Owner,

2. By mutual acceptance of lump sum price,

3. By actual cost and a mutually acceptable fixed amount for overhead and profit, or

4. Where Bid Price was based on estimated quantities, prior to making final payment, the Owner will determine actual quantities using sampling, surveying and other industry recognized means and prepare a Change Order adjusting the price to reflect actual volumes.

G. The Contractor shall immediately notify the Owner's Representative in writing of any unauthorized change in the scope of the Work or significant change in the quantities of the Work that may increase the Contract Price, require an extension of Work schedule, or negatively impact permitting or other regulatory requirements.

H. The Contractor shall submit requests or claims for a Work schedule adjustment in writing and delivered to the Engineer within five (5) business days following the discovery of the event that prompted the claim or when the event should have been discovered. Where accepted by the Owner, changes to the Approved Schedule will only adjust for critical path impacts. Failure to include the necessary critical path analysis with request shall be grounds for rejecting the claim. The path of critical events mentioned herein means the series of interdependent Work events that must be sequentially performed and that require a longer total time to perform than any other such series. Upon receipt of the Contractor's request for a change in the Work schedule, the Owner's Representative will provide any additional directions in writing detailing the procedures that will be used to resolve the request, including provision of time impact or manpower and equipment loading schedules. Where the Owner and the Contractor are unable to reach a mutually acceptable resolution of request, the Owner will make a commercially reasonable determination, made in accordance with the Owner's established policies and procedures, which shall be final.

I. All Work defined on Field Orders, Work Change Directives and Change Orders shall be subject to the conditions of the Contract, unless specifically noted on the Field Order Form, Work Change Directive Form, or Change Order.

3.14.3 Delay

A. Damage, loss, expense or delay incurred or experienced by the Contractor in the prosecution of the Work by reason of unforeseen circumstances, unanticipated difficulties and obstructions, bad weather, or other mischances that are generally considered to be a part of the usual hazards associated with Work, shall be borne entirely by the Contractor and shall not be the subject of any claim for additional compensation or change in Approved Schedule.

B. The Contractor agrees that its sole remedy for any claims, damages or losses related to any delay, disruption or hindrance alleged to be caused by the Owner or any of the Owner's agents or other contractors, shall be an extension of the Contract completion date. As such, the Contractor shall not recover any cost associated with extended

home/field office overhead, idle labor/equipment/materials, subcontractors' claims or any other miscellaneous costs.

C. Any demand for equitable time adjustment must be served in writing to the Owner within five (5) calendar days of the event giving rise to any delay, disruption or hindrance. Any request for an equitable time adjustment shall be accompanied by a logical time impact analysis, demonstrating the nature and magnitude of the event to the critical path. Any request that is not clearly shown to be an impact to the project's critical path will be denied.

D. Failure to strictly comply with these requirements shall be deemed a waiver of any right to seek equitable adjustment.

3.14.4 Notification of Surety

A. The Contractor shall notify its surety of any changes affecting the general scope of the Work or altering the Contract Price.

3.14.5 Contingency Work

A. The Owner will issue a written Change Order to incorporate cost or schedule changes into the Contract. Issuance of a Change Order is solely at the discretion of the Owner. The Change Order shall be used for increases or decreases in the Contract Price, within the contingency amount set forth in the Contract Price, or to make changes in schedule for performance of the Work.

B. The Contractor should not expect that any Change Orders for contingency work will be issued. Owner shall have no obligation to pay for contingency work unless the same is performed pursuant to a written Change Order form signed before the contingency work is commenced.

C. The Contractor and the Engineer shall mutually agree to the pricing of a Change Order for contingency work. Any negotiated increase or decrease in the Contract Price shall be based on the Contractor's costs for labor, materials and supplies directly applicable to the increase or decrease plus ten percent (10%) thereof for Contractor's supervision, overhead, bonds and profit. For any negotiated increase or decrease, the Contractor will provide a complete detailed breakdown for all labor, material, and equipment, etc. associated with the change. A lump sum figure submitted with no breakdown will be returned to the Contractor without review.

D. Cost Reimbursable (Time and Materials) Method:

1. The Owner may, at its sole discretion, implement cost reimbursable procedures in order to limit the costs for performance of contingency work. Also, whenever the Contractor and the Owner are unable to agree on costs for an increase in the Work, the Owner or Engineer shall order the Contractor to proceed with the Work on a cost

reimbursable (time and material) basis. The Owner will pay the Contractor for the contingency work in the manner hereinafter described, and the compensation thus provided shall constitute full payment for said work. The Owner shall issue the Change Order for the Contractor to perform the specific contingency work with payment determined as follows:

a. For materials purchased by the Contractor and used in the work, the Contractor shall be paid the actual cost of such materials, including sales taxes if required, and freight and delivery charges as shown by original receipted bills. A mark-up amount equal to ten percent (10%) of the sum thereof shall be added to this cost. The Owner reserves the right to select and approve, or to reject the materials to be used and the sources of supply of any materials furnished by the Contractor.

b. The Contractor will be paid the cost of wages for all labor that is engaged in the Work, plus the actual cost chargeable to the Work for workers' compensation insurance, social security taxes, unemployment compensation insurance and such additional amounts as are paid by the Contractor. A total mark-up shall be added equal to ten percent (10%) of wages and other cost listed above. In evidence of the costs of labor the Contractor shall provide a certified statement of wages actually paid, together with copies of supporting payrolls. Wage rates used in determining the amount of the payment will be the actual wage rates paid by the Contractor for Work under this Contract, except that no rate used shall exceed the rate of comparable labor currently employed on the project.

c. Payment for the services of foremen in direct charge of the specific operation will be made. Payment for the service of superintendents, timekeepers or other overhead personnel will not be made nor will payment for the services of watchmen be made unless required specifically by the contingency Work. The actual function performed by an employee rather than its payroll title will be the criterion used in determining the eligibility of an employee's services for payment under this provision.

d. The types and amounts of equipment and machinery used by the Contractor in carrying out its work under the contingency shall be made in keeping with normal practice for work of similar nature. Owner may, at its discretion, limit by specific instruction the types and amounts of equipment and machinery to be used. For all equipment and machinery used in the contingency work, the Owner will pay eighty percent (80%) of the rental value as set forth in the Blue Book value or actual cost, whichever is less, to which no mark-up percentages will be added.

e. In computing the hourly rental of such equipment, less than thirty (30) minutes shall be considered 1/2 hour except when the minimum rental time to be paid is one hour. Rental time will not be allowed while equipment is inoperative due to breakdowns. The rental time of equipment to be paid for shall be the time the equipment is in operation on the contingency work being performed. The Contractor shall be reimbursed for the time required to move the equipment to

the Work, and return it to its original location, only if the Contractor is charged this cost by the renting agency. Excess rental time of equipment due to inefficient work practices will not be reimbursed.

f. No payment will be allowed for the use of small tools and minor items of equipment, which, as used herein, are defined as individual tools or pieces of equipment having a replacement value of $500.00 or less.

g. The Contractor and the Engineer shall compare records of the Work performed on a Cost Reimbursable basis at the end of each day. These records shall be prepared by the Contractor and shall be signed by both the Owner and the Contractor's Representative. A copy of these records shall be submitted to the Owner with the invoice for the work.

h. Payment for cost reimbursable contingency work will be included in monthly progress payments.

i. The Contractor's Subcontractors will be allowed a ten percent (10%) mark-up on Work performed by their own forces. The Contractor will be allowed a five percent (5%) mark-up on the Subcontractor's costs (i.e. labor, materials and equipment) only, no mark-up on the Subcontractor's profit.

3.14.6 Suspension of Work

A. The Owner may suspend the performance of the Work rendered by providing the Contractor with five (5) business days written notice of such suspension. Schedules and compensation for performance of the Work shall be amended by mutual agreement to reflect such suspension. In the event of suspension of Work, the Contractor shall resume the full performance of the Work when the Owner gives written direction to do so. Suspension of Work caused by the Contractor's sole negligence or failure to perform shall not affect the Contractor's compensation as outlined in the Contract Documents.

3.14.7 Unauthorized Work

A. The Owner will consider any Work done without lines and grades given, Work done beyond the lines and grades shown on the Contract or as given, or any extra Work done without written authority, as unauthorized Work and will not pay the Contractor for such Work. If so ordered by the Contract Administrator, the Contractor shall remove such Work and properly replace it at the Contractor's own expense.

3.14.8 Payment of Overtime

A. Any Overtime required for the Contractor to complete the Work within the Contract Time shall be at the sole cost and expense of the Contractor.

B. If the Owner requires the Contractor to perform Overtime Work in order to complete the Work prior to the Contract Time, the Contractor shall bill the Owner for the Overtime such that only the actual costs incurred by the Contractor relating to the payment of Overtime premiums, in accordance with its labor policies and applicable laws. Such actual costs include Overtime wage premium, and additional taxes and insurance directly associated with the Overtime wage premium. The Contractor agrees that it will not charge for personnel paid a salary, or other form of compensation such that the Contractor incurs no direct costs as a result of the Overtime. The Contractor shall total the direct Overtime charges, and add the agreed upon overhead rate, but in no case, shall such overhead rate exceed ten percent (10%) of the total overtime costs.

C. Overtime may only be charged to the Owner if the Contractor was directed in writing by the Contract Administrator to incur the Overtime. Such authorization for Overtime shall be accompanied by a Change Order.

3.14.9 Scheduling of Overtime (Contractor Initiated Overtime)

A. Whenever the Contractor schedules Work beyond ten (10) hours per day, beyond fifty (50) hours per week, or on Saturdays, Sundays, or Owner Holidays, then the Contractor shall arrange, in advance, for the Engineer to inspect the Work performed during Overtime. The Contractor shall not perform Overtime Work or after-hours Work without an Owner's Representative at the Work Location or available to perform the inspections, as directed by the Contract Administrator. Except where the Owner has requested the Contractor schedule Overtime to perform additional Work, the Contractor shall reimburse the Owner for any additional costs associated with the Owner's Representatives' Overtime pay.

SECTION 3.15: LABOR

3.15.1 E-Verify Requirements.

Effective January 1, 2021, public and private employers, contractors, and subcontractors must require registration with, and use of the E-Verify system in order to verify the work authorization status of all newly hired employees. Contractor acknowledges and agrees to utilize the U.S. Department of Homeland Security's E-Verify System to verify the employment eligibility of:

(1) All persons employed by Contractor to perform employment duties within the State of Florida during the term of the Agreement; and

(2) All persons (including subcontractors/subvendors/subconsultants) assigned by Contractor to perform work pursuant to this Contract with the Owner. Contractor acknowledges and agrees that the use of the U.S. Department of Homeland Security's E-Verify System during the term of this Agreement is a condition of the Contract with the Owner.

By entering this Contract with the Owner, Contractor becomes obligated to comply with the provisions of Section 448.095, Florida Statutes, "Employment Eligibility." This includes, but is not limited to, use of the E-Verify System to verify the work authorization status of all newly hired employees, and requiring all subcontractors to provide an affidavit to Contractor attesting that the subcontractor does not employ, contract with, or subcontract with, an unauthorized alien. Contractor agrees to maintain a copy of such affidavit for the duration of this Agreement. Failure to comply with this section will result in the termination of this Contract as provided in Section 448.095, Florida Statutes, and Contractor may not be awarded a public contract for at least one (1) year after the date on which the Contract was terminated. Contractor will also be liable for any additional costs to Owner incurred as a result of the termination of this Contract in accordance with this section.

3.15.2 Contractor's Labor Relations

A. The Contractor shall negotiate and resolve any disputes between the Contractor and its employees, or anyone representing its employees. The Contractor shall immediately notify the Owner of any actual or potential labor dispute that may affect the Work and shall inform the Owner of all actions it is taking to resolve the dispute.

3.15.3 Minimum Qualifications of Contractor Personnel

A. All Contractor personnel shall be at a minimum qualified for the tasks they are assigned. All Contractor personnel shall act in a professional manner, with due sensitivity to other persons at the Work Location. If the Owner, at its sole reasonable discretion, determines that a Contractor's person is unqualified, unfit, or otherwise unsuitable for the tasks assigned, the Contractor shall immediately stop the person from performing the tasks, and replace the person with a qualified individual. The Contractor shall pay all costs associated with replacing the unqualified person including, but not limited to, termination, recruiting, training, and certification costs.

B. The Contractor personnel assigned supervisory roles, and those with increased authority shall be held to strict scrutiny of their qualifications and suitability for their positions. In addition to the other provisions of this clause, the Contractor shall provide written documentation as to experience, education, licenses, certifications, professional affiliations, and other qualifications of the individual, within one (1) day of request from the Engineer. Any changes to such personnel after approval shall require the written permission of the Engineer.

3.15.4 Nondiscrimination

A. Contractor represents that it will comply with all applicable provisions regarding equal employment requirements stated in the DIVISION 4: SUPPLEMENTAL CONDITIONS.

B. The Contractor represents that it has adopted and will maintain a policy of nondiscrimination against employees or applicants for employment on account of race, religion, sex, color, national origin, age or handicap, in all areas of employee relations, throughout the Term of this Contract. The Contractor agrees that on written request, it will allow the Owner reasonable access to the Contractor's records of employment, employment advertisement, application forms and other pertinent data and records for the purpose of investigation to ascertain compliance with the nondiscrimination provisions of this Contract; provided however, the Contractor shall not be required to produce, for inspection, records covering periods of time more than one (1) year from the effective date of this Contract.

C. The Contractor shall comply with the following executive orders, acts, and all rules and regulations implementing said orders or acts, which are by this reference incorporated herein as if set out in their entirety:

1. The provisions of section 503 of the Rehabilitation Act of 1973, as amended, and the Americans with Disabilities Act (ADA); and

2. The provisions of the Employment and Training of Veterans Act, 38 U.S.C. 4212 (formerly 2012).

D. Discriminatory Vendor List. Contractor hereby acknowledges its continuous duty to disclose to the Owner if Contractor or any of its affiliates, as defined by Section 287.134(1)(a), Florida Statutes, has been placed on the Discriminatory Vendor List. Pursuant to Section 287.134(2)(a), Florida Statutes: "An entity or affiliate who has been placed on the discriminatory vendor list may not submit a bid, 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."

E. The Contractor agrees that if any of the Work of this Contract will be performed by a Subcontractor, then the provisions of this subsection shall be incorporated into and become a part of the subcontract.

3.15.5 Show-Up Pay

A. In the event that inclement weather prevents the Contractor from performing Work, the Contractor may be obligated to pay its crew a show-up pay. The Contractor shall be solely responsible for providing this pay.

SECTION 3.16: RIGHTS, REMEDIES, AND DISPUTES

3.16.1 Intellectual Property

A. The Contractor grants to the Owner an irrevocable, perpetual, royalty free and fully paid-up right to use (and such right includes, without limitation, a right to copy, modify and create derivative works from the subject matter of the grant of the right to sublicense all, or any portion of, the foregoing rights to an affiliate or a third party service provider) the Contractor's intellectual property (including, without limitation, all trade secrets, patents, copyright and know-how) that is contained or embedded in, required for the use of, that was used in the production of or is required for the reproduction, modification, maintenance, servicing, improvement or continued operation of any applicable unit of Work.

B. If the Work contains, has embedded in, requires for the use of any third party intellectual property, or if the third party intellectual property is required for the reproduction, modification, maintenance, servicing, improvement or continued operation of the Work, the Contractor shall secure for the Owner an irrevocable, perpetual, royalty free and fully paid-up right to use all third party intellectual property. The Contractor shall secure such right at its expense and prior to incorporating any third party intellectual property (including, without limitation, all trade secrets, patents, copyright and know-how) into any Work, including, without limitation, all drawings or data provided under the Contract, and such right must include, without limitation, a right to copy, modify and create derivative works from the subject matter of the grant of the right and a right to sublicense all or any portion of the foregoing rights to an affiliate or a third party service provider.

C. Should the Owner, or any third party obtaining such work product through the Owner, use the Work or any part thereof for any purpose other than that which is specified herein, it shall be at the Owner's sole risk.

D. The Contractor will, at its expense, defend all claims, actions or proceedings against the Owner based on any allegation that the Work, or any part of the Work, constitutes an infringement of any patent or any other intellectual property right, and will pay to the Owner all costs, damages, charges, and expenses occasioned to the Owner by reason thereof. The Owner will give the Contractor written notice of any such claim, action or proceeding and, at the request and expense of the Contractor, the Owner will provide the Contractor with available information, assistance and authority for the defense.

E. If, in any action or proceeding, the Work, or any part thereof, is held to constitute an infringement, the Contractor will forthwith either secure for Owner the right to continue using the Work or will, at the Contractor's expense, replace the infringing items with noninfringing Work or make modifications as necessary so that the Work no longer infringes.

F. The Contractor will obtain and pay for all patent and other intellectual property royalties and license fees required in respect of the Work.

3.16.2 Offsets

A. If the Owner reasonably believes the Contractor is in violation of any requirement of the Contract, the Owner may withhold payments that may be due the Contractor, and may offset existing balances with any Owner incurred costs against funds due the Contractor under this and any other Contractor Contract with the Owner, as a result of the violation, or other damages as allowed by the Contract Documents and applicable law.

3.16.3 Proprietary Information

A. The Contractor shall not copy, reproduce, or disclose to third parties, except in connection with the Work, any information that the Owner furnishes to the Contractor. The Contractor shall insert in any subcontract a restriction on the use of all information furnished by the Owner. The Contractor shall not use this information on another project. All information furnished by the Owner will be returned to the Owner upon completion of the Work. The Contractor may retain a copy of such information solely for its own project records.

3.16.4 Removal of Work

A. The Contractor shall not sell, assign, mortgage, hypothecate or remove Work that has been delivered to or installed at the Work Location without the Owner’s approval.

3.16.5 Right to Audit and Financial Reporting

A. Upon the Owner's reasonable requests, the Contractor agrees to allow the Owner to audit its financial and operating records for the purpose of determining invoice accuracy, or otherwise assessing compliance with the Contract Documents. The Contractor agrees to allow Owner personnel, their qualified representative, and representatives as stated in DIVISION 4: SUPPLEMENTAL CONDITIONS access the records at Contractor's office, with three (3) business days written notice, for a reasonable period, not less than five (5) business days, in a workspace suitable for the audit provided by the Contractor. All audit work will be done on the Contractor’s premises, and no Contractor documentation will be removed from the Contractor’s offices. The Contractor agrees to have knowledgeable personnel available to answer questions for the auditors during the time they are at the Contractor's offices and for a period of two (2) weeks thereafter. The Contractor shall provide to the Owner audited financial statements for the most recent fiscal year upon the Owner's request, not later than five (5) business days after receipt of written request.

B. Contractor represents that it will comply with all applicable provisions stated in the DIVISION 4: SUPPLEMENTAL CONDITIONS.

3.16.6 Title to Materials Found

A. The Owner shall retain the title to water, mineral matter, timber and any other materials that the Contractor, or its Subcontractors, encounter during the excavation or other operations of the Work. The Contractor shall use or dispose of this material in accordance

with the Contract or written instructions from the Engineer. Any materials found in the excavation, or other operations of the Contractor, that are of archaeological or historical value shall be left in place. The Contractor shall immediately notify the Owner of the find and shall take no further action until directed by the Owner.

3.16.7 Owner's Rights for Contractor Breach

A. In the event that Contractor causes delay to Approved Schedule, performs its Work in a manner that fails to meet the Standard of Care, commits a material breach of this Agreement, or otherwise damages the Owner at law or in equity, the Owner is entitled to all remedies and damages available at law, including, but not limited to, liquidated damages, actual damages, consequential damages, attorneys' fees, and costs.

3.16.8 Limited Waiver of Consequential Damages

A. The Parties expressly agree that no Party to this Agreement shall be liable to any other Party or Parties to this Agreement for any special, consequential or exemplary damages of any kind whatsoever, whether arising in contract, warranty, tort (including but not limited to negligence), strict liability, or otherwise, including without limitation losses of use, profits, business reputation and financing, subject to the following exceptions: (i) willful misconduct, recklessness, or fraud by the Contractor or any entity for which it is legally responsible; (ii) the Contractor's third-party indemnity obligations under this Agreement or arising by operation of law, including claims for bodily injury, personal injury, or death; (iii) abandonment; (iv) Contractor's liability for liquidated damages; and (v) liability that is recoverable from Project Specific insurance.

SECTION 3.17: REPRESENTATIONS & WARRANTIES

3.17.1 Contractor's Knowledge of the Work

A. The Contractor represents that the Contract Price and the detailed schedule for the execution of the Work are based on its own knowledge and judgment of the conditions and hazards involved, and not upon any representation of the Owner. The Owner assumes no responsibility for any understanding or representation made by any of its representatives during or prior to execution of the Contract unless such understandings or representations are expressly stated in the Contract and the Contract expressly provides that the Owner assumes the responsibility.

3.17.2 Contractor's Plans and Specifications

A. All plans and specifications that the Contractor provides for any building, structure, system or equipment where required by federal, state, local laws and regulation as part of the Work shall bear the seal of a Professional Engineer duly registered in the State of Florida at no cost to the Owner.

3.17.3 Contractor's Warranties

A. The Contractor unconditionally warrants to the Owner for a period of not less than two (2) years (unless otherwise stated in DIVISION 6: TECHNICAL SPECIFICATIONS) from the earlier of Final Acceptance or Substantial Completion and beginning of normal use by the Owner, that all Work furnished under the Contract including, but not limited to, materials, equipment, workmanship, and intellectual property, including derivative works will be:

1. Performed in a safe, professional and workman like manner;

2. Free from Defects in design, material, and workmanship;

3. Fit for the use and purpose specified or referred to in the Contract;

4. Suitable for any other use or purpose as represented in writing by the Contractor;

5. In conformance with the Contract Documents; and

6. Merchantable, new and of first-class quality.

7. Performed in accordance with the Standard of Care as defined herein.

B. The Contractor warrants that the Work shall conform to all applicable standards and regulations promulgated by federal, state, local laws and regulations, standards boards, organizations of the Department of State, and adopted industry association standards. If the Work fails to conform to such laws, rules, standards and regulations, the Owner may return the Work for correction or replacement at the Contractor's expense, or return the Work at the Contractor's expense and cancel the Contract. If the Contractor performs services that fail to conform to such standards and regulations the Contractor shall make the necessary corrections at Contractor's expense. The Owner may correct services to comply with standards and regulations at the Contractor's expense if the Contractor fails to make the appropriate corrections within a reasonable time.

C. If the Work includes items covered under a manufacturer's or Subcontractor's warranty that exceeds the requirements stated herein, the Contractor shall transfer such warranty to the Owner. Such warranties, do not in any way limit the warranty provided by the Contractor to the Owner.

D. If, within the warranty period, the Owner determines that any of the workmanship or supplies are defective or exhibit signs of deterioration, in the opinion of the Owner, the Contractor, at its own expense, shall repair, adjust, or replace the defective Work to the complete satisfaction of the Owner. The Contractor shall pay all costs of removal, transportation, reinstallation, repair, and all other associated costs incurred in connection with correcting such Defects in the Work. The Contractor shall correct any Defects only at times designated by the Owner. The Contractor shall extend the warranty period an additional twelve (12) months (thirty-six (36) months total) for any portion of the Work that has undergone warranty repair or replacement.

E. When operational conditions warrant, the Owner may repair or replace any defective equipment at the Contractor's expense. The Owner may repair or replace any defective Work at the Contractor's expense when the Contractor fails to correct the Defect within a reasonable time of receiving written notification of the Defect by the Owner, when the Contractor is unable to respond in an emergency situation, or when necessary to prevent the Owner from substantial financial loss. Where the Owner makes repairs or replaces defective Work, the Owner will issue the Contractor a written accounting and invoice of all such work to correct Defects. The Contractor's liability to the Owner for the costs of removal, transportation, reinstallation, and all other associated costs incurred in connection with correcting Defects in the Work will be limited to 1.5 times the original installed purchase price of the specific Work.

F. The Contractor's warranty excludes remedy for damage or Defect caused by abuse, improper or insufficient maintenance, improper operation, or wear and tear under normal usage.

3.17.4 Competent Performance of the Work

A. The Contractor represents that it will conduct the Work in a manner and with sufficient labor, materials and equipment necessary to affect a diligent pursuance of the Work through Final Completion. If, in the sole opinion of the Owner, the Contractor fails to perform the Work as represented, the Owner may, at its sole discretion, take charge of the Work and furnish and provide the labor, materials, and equipment necessary to complete the Work as planned within the required time if the Owner deems the organization of the Contractor or its management, or the manner in which Contractor is performing the Work, to be manifestly incompetent or inadequate to complete the Work as specified. The Contractor shall pay the Owner for the cost of all such Work completed by the Owner.

3.17.5 Encroachment on Outside Property

A. The Contractor warrants that it shall not encroach on any rights or property of the public or adjoining property owners and shall hold the Owner harmless because of any encroachments that may result from the Contractor's lack of proper layout. If such an encroachment occurs, the Contractor agrees to remove any Work or portion thereof, that encroaches on the property of others, or that is built beyond legal building or setback limits, and shall rebuild the affected Work, or portion thereof, at the proper location, all without extra cost to the Owner.

3.17.6 Free and Clear Title

A. The Contractor warrants that it has title to all equipment and materials furnished under the Contract where title will pass to the Owner, and that the equipment and materials passed to the Owner are free and clear of all liens, claims, security interests and encumbrances.

3.17.7 Performance of the Work

A. The Contractor represents and warrants that it has the full corporate right, power and authority to enter into the Contract and to perform the acts required of it hereunder, and that the performance of its obligations and duties hereunder does not and will not violate any Contract to which the Contractor is a party or by which it is otherwise bound. The Contractor warrants that all items provided under the Contract shall be free from Defect and services shall be performed in a professional manner and with professional diligence and skill, consistent with the prevailing standards of the industry. The Contractor warrants that the Work will meet the functional and performance requirements defined in the Contract.

3.17.8 Safety Representation

A. The Contractor represents and warrants to the Owner that it has the capacity to train and supervise its employees, Subcontractors and Suppliers to ensure the Work complies with all safety requirements of the Contract Documents. The Contractor shall be responsible for executing the necessary safety training and supervision of its employees and Subcontractors, and acknowledges that the Owner is not responsible for training or supervising the Contractor's employees, except when noted for the purpose of enforcing compliance with these safety requirements.

SECTION 3.18: TERM & TERMINATION

3.18.1 Term of Contract (Through Work Completion)

A. The Contract shall be in force through completion of all Work, Final Acceptance and final payment, including resolution of all disputes, claims, or suits, if any. Certain provisions of this Contract may extend past termination including Warranty provisions.

3.18.2 Termination for Convenience

A. The Owner shall have the absolute right to terminate in whole or part the Contract, with or without cause, at any time after Award upon written notification of such termination.

B. In the event of termination for convenience, the Owner will pay the Contractor for all disbursements and expenses that the Contractor has incurred, or those for which it becomes obligated prior to receiving the Owner's notice of termination. Owner will also pay the Contractor costs incurred less the reasonable resale value, of materials or equipment that the Contractor has already ordered, obtained or fabricated in connection with the Contract.

C. Upon receipt of such notice of termination, the Contractor shall stop the performance of the Work hereunder except as may be necessary to carry out such termination and take any other action toward termination of the Work that the Owner may reasonably request,

including all reasonable efforts to provide for a prompt and efficient transition as directed by the Owner.

D. The Owner will have no liability to the Contractor for any cause whatsoever arising out of, or in connection with, termination (whether for convenience or default) including, but not limited to, lost profits, lost opportunities, or resulting change in business condition, except as expressly stated within these Contract Documents.

3.18.3 Termination for Default

A. Owner may give the Contractor written notice to discontinue all Work under the Contract in the event that:

1. The Contractor assigns or subcontracts the Work without prior written permission;

2. Any petition is filed or any proceeding is commenced by or against the Contractor for relief under any bankruptcy or insolvency laws;

3. A receiver is appointed for the Contractor's properties or the Contractor commits any act of insolvency (however evidenced);

4. The Contractor makes an assignment for the benefit of creditors;

5. The Contractor suspends the operation of a substantial portion of its business;

6. The Contractor suspends the whole or any part of the Work to the extent that it impacts the Contractor's ability to meet the Work schedule, or the Contractor abandons the whole or any part of the Work;

7. The Contractor, at any time, violates any of the conditions or provisions of the Contract Documents, or the Contractor fails to perform as specified in the Contract Documents, or the Contractor is not complying with the Contract Documents;

8. The Contractor attempts to willfully impose upon the Owner items or workmanship that are, in the Owner's sole opinion, defective or of unacceptable quality;

9. The Contractor breaches any of the representations or warranties contained herein;

10. The Contractor is determined, in the Owner's sole opinion, to have misrepresented the utilization of funds or misappropriated property belonging to the Owner; or

11. There is any material change in the financial or business condition of the Contractor.

B. If, within twenty-four (24) hours after service of such notice upon the Contractor, an arrangement satisfactory to the Owner has not been made by the Contractor for continuance of the Work, the Owner may terminate the Contract.

C. Once a Contractor is declared in default, the surety shall assume the Contractor's place in all respects and shall be paid by the Owner all monies, if any, due the Contractor at the time of such notice to discontinue, or any monies thereafter that may become due the Contractor in accordance with the terms of the Contract.

D. If the Contractor fails to make arrangements satisfactory to the Owner within ten (10) days after service to the Contractor of a notice to discontinue Work, and in the case where a Payment Bond and a Performance Bond are in effect, the surety has not exercised its option, then without further notice to the Contractor or the surety, the Owner may terminate the Contract and shall have the power to complete the Work herein described as it may determine. In such a case, the Owner shall have the right to take possession of and use any of the materials, plant, tools, equipment, supplies and property of any kind provided by the Contractor for the purpose of this Work.

E. The Owner will charge the expense of completing the Work to the Contractor and will deduct such expenses from monies due, or which at any time thereafter may become due, to the Contractor. If such expenses are more than the sum that would otherwise have been payable under the Contract, then the Contractor shall pay the amount of such excess to the Owner upon notice of the expenses from the Owner. The Owner shall not be required to obtain the lowest price for completing the Work under the Contract, but may make such expenditures that, in its sole judgment, shall best accomplish such completion. The Owner will, however, make reasonable efforts to mitigate the excess costs of completing the Work.

F. The Contract Documents shall in no way limit the Owner's right to all remedies for nonperformance provided under law or in equity, except as specifically set forth herein. In the event of termination for nonperformance, the Contractor shall immediately surrender all Work records to the Owner. In such a case, the Owner may offset any money owed to the Contractor against any liabilities resulting from the Contractor's nonperformance.

G. The Owner has no responsibility whatsoever to issue notices of any kind, including but not limited to deficient performance letters and scorecards, to the Contractor regarding its performance prior to default by Contractor for performance related issues.

H. The Owner shall have no liability to the Contractor for termination costs arising out of the Contract, or any of the Contractor's subcontracts, as a result of termination for default.

3.18.4 Termination for Non-Appropriation.

The Contract is expressly conditioned upon the availability of funds lawfully appropriated and available for the purposes set out herein as determined in the sole discretion of the City. If funding for the Contract is in multiple fiscal years, funds must be appropriated each year prior to costs being incurred. Nothing in this paragraph prevents the making of contracts with a term of more than 1 year, but any contract so made will be executory only for the value of

the work or services to be rendered or paid for in succeeding fiscal years. In the event funds to finance the Contract become unavailable, the City may terminate the Contract without penalty on the last day of the fiscal period for which funds were legally available. The City will be the sole and final authority as to the availability of funds.

SECTION 3.19: MISCELLANEOUS TERMS & CONDITIONS

3.19.1 Ambiguous Contract Provisions

A. The parties agree that this Contract has been the subject of meaningful analysis and/or discussions of the specifications, terms and conditions contained in this Contract. Therefore, doubtful or ambiguous provisions, if any, contained in this Contract will not be construed against the party who physically prepared this Contract. The rule commonly known as "Fortius Contra Proferentem" will not be applied to this Contract or any interpretation thereof.

3.19.2 Amendments

A. This Contract may not be altered or amended except in writing, signed by the Owner and the Contractor, or each of their duly authorized representatives.

3.19.3 Choice of Law and Waiver of Jury Trial

A. This Contract, and the rights and duties of the parties arising from or relating to this Contract or its subject matter, shall be construed in accordance with the laws of the State of Florida and the ordinances of the City of Wauchula without regard to its conflicts of provisions. Each of the parties irrevocably submits to the exclusive jurisdiction of the courts of Hardee County, Florida, and further agree that the venue for any legal action brought by or filed against the Owner relating to any matter arising under this Contract shall be exclusively in that state or federal court, in Hardee County, Florida that has jurisdiction over such legal actions.

B. WAIVER OF JURY TRIAL. BY ENTERING INTO THIS AGREEMENT, THE CONTRACTOR AND THE OWNER HEREBY EXPRESSLY WAIVE ANY RIGHTS THEY MAY HAVE TO A TRIAL BY JURY IN ANY LITIGATION ARISING OUT OF OR RELATED TO THIS AGREEMENT.

3.19.4 Authority to Practice, Compliance with Laws, Public Records, and Trade Secrets

A. The Contractor hereby represents and warrants that it has and will continue to maintain all licenses and approvals required to conduct its business, and that it will at all times conduct its business activities in a reputable manner.

B. In performing the Services, the Contractor shall comply with all applicable regulatory requirements, including federal, state, special district, and local laws, rules, regulations, orders, codes, criteria, and standards.

C. Public Records. The parties acknowledge and agree that the Owner is a public agency subject to Chapter 119, Florida Statutes. To the extent the Contractor is a company acting on behalf of the Owner pursuant to Section 119.0701, Florida Statutes, the Contractor must comply with all public records laws in accordance with Chapter 119, Florida Statutes. In accordance with Chapter 119, Florida Statutes, the Contractor agrees to:

(1) Keep and maintain all records that ordinarily and necessarily would be required by the Owner to perform the services under this Agreement.

(2) Upon request from the Owner, provide the Owner 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 costs provided in Chapter 119, Florida Statutes, or as otherwise provided by law.

(3) Ensure that public records that are exempt, or confidential and exempt, from public records disclosures are not disclosed as except as authorized by law for the duration of the Agreement term and following completion of the Agreement if the Contractor does not transfer the records to the Owner.

(4) Upon completion of the services under this Agreement, at no cost, either transfer to the Owner all public records in the Contractor's possession or keep and maintain public records required by the Owner to perform the services. If the Contractor transfers all public records to the Owner upon completion of the services, the Contractor must 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 completion of the services under this Agreement, the Contractor must meet all applicable requirements for retaining public records. All records stored electronically must be provided to the Owner, upon request from the Owner, in a format that is compatible with the information technology systems of the Owner.

(5) IF THE CONTRACTOR HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO ITS DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS AGREEMENT, CONTACT THE OWNER'S CUSTODIAN OF PUBLIC RECORDS AT: SCAMACHO@CITYOFWAUCHULA.COM

If the CONSULTANT does not comply with the provisions of this section, the Owner will enforce the Agreement provisions in accordance herewith and may unilaterally cancel this Agreement in accordance with Florida law.

D. Trade Secrets and Proprietary Confidential Business Information. Documents submitted by Contractor which it contends constitute trade secrets as defined in Sections 812.081 and

688.002, Florida Statutes, or confidential and propriety business information when held by the Owner as a utility owner, consistent with Section 119.0713(5), Florida Statutes, and which are clearly marked or stamped as confidential by the Contractor at the time of submission to the Owner, will not be subject to public access. However, should a requestor of public records challenge Contractor's claim of trade secret or confidential and proprietary business information, within five (5) calendar days of such challenge, Contractor must provide a separate written affidavit that includes an indemnification and release guarantee, as approved by the Owner's Attorney or designee, to the Owner to support its claim that the alleged trade secrets or proprietary and confidential business information actually constitutes same as defined by law. Contractor must demonstrate the need for confidentiality of the documentation by showing a business advantage or opportunity to obtain an advantage would be gained if the documentation were released. Otherwise, Contractor is required to timely seek a protective order in the Circuit Court of Hardee County to prevent the Owner's release of the requested records.

3.19.5 Cumulative Remedies

A. Except as otherwise expressly provided in this Contract, all remedies provided for in this Contract shall be cumulative and in addition to and not in lieu of any other remedies available to either party at law, in equity or otherwise.

3.19.6 Entire Agreement

A. This Contract contains all of the understandings and agreements of the parties hereto in respect of the subject matter hereof as of the Effective Date of the Contract. Any and all prior understandings and agreements, expressed or implied, between the parties hereto in respect of the subject matter hereof shall be superseded hereby. Parol or extrinsic evidence will not be used to vary or contradict the express terms of this Contract.

B. The Contract Documents are complementary; what is called for by one is binding as if called for by all. The Contractor shall, upon discovery, inform the Owner in writing of any conflict, error or discrepancy in the Contract Documents. Should the Contractor proceed with the Work prior to written resolution of the error or conflict by the Owner, all Work done is at the sole risk of the Contractor.

3.19.7 Expanded Definitions

A. Unless otherwise specified, words importing the singular include the plural and vice versa and words importing gender include all genders. The term "including" means "including without limitation", and the terms "include", "includes" and "included" have similar meanings. Any reference in this Contract to any other agreement is deemed to include a reference to that other agreement, as amended, supplemented or restated from time to time. Any reference in the Contract to "all applicable laws, rules and regulations" means

all federal, state and local laws, rules, regulations, ordinances, statutes, codes and practices.

3.19.8 Force Majeure

A. No party shall be liable for any default or delay in the performance of its obligations under this Contract due to an act of God or other event to the extent that: (a) the non-performing party is without fault in causing such default or delay; (b) such default or delay could not have been prevented by reasonable precautions; and (c) such default or delay could not have been reasonably circumvented by the non-performing party through the use of alternate sources, work-around plans or other means. Such causes include, but are not limited to: act of civil or military authority (including but not limited to courts or administrative agencies); acts of God; war; terrorist attacks; riot; insurrection; inability of the Owner to secure approval, validation or sale of bonds; inability of the Owner or the Contractor to obtain any required permits, licenses or zoning; blockades; embargoes; sabotage; epidemics; fires; hurricanes, tornados, floods; or strikes.

B. In the event of any delay resulting from such causes, the time for performance of each of the parties hereunder (including the payment of monies if such event actually prevents payment) shall be extended for a period of time reasonably necessary to overcome the effect of such delay, except as provided for elsewhere in the Contract Documents.

C. In the event of any delay or nonperformance resulting from such causes, the party affected shall promptly notify the other in writing of the nature, cause, date of commencement and the anticipated impact of such delay or nonperformance. Such written notice, including Change Orders, shall indicate the extent, if any, to which it is anticipated that any delivery or completion dates will be thereby affected.

3.19.9 Headings

A. The division of this Contract into sections, the insertion of headings and/or index numbers and the provision of a table of contents are for convenience of reference only and are not to affect the construction or interpretation of this Agreement.

3.19.10 Language and Measurements

A. All communication between the Contractor and the Owner, including all documents, notes on drawings, and submissions required under the Contract, will be in the English language. Unless otherwise specified in the Contract, the US System of Measurements shall be used for quantity measurement. All instrumentation and equipment will be calibrated in US System of Measures.

3.19.11 Nonwaiver

A. Failure by either party to insist upon strict performance of any of the provisions of the Contract will not release either party from any of its obligations under the Contract.

3.19.12 Publicity and Advertising

A. The Contractor shall not take any photographs for the purpose of making any announcements or release any information concerning the Contract or the Work to any member of the public, press or official body unless prior written consent is obtained from the Owner. The Owner is governed by the Florida Public Records Laws therefore all Contract Documents are available for public inspection, subject to certain statutory exemptions as set forth in Chapter 119, *Florida Statutes*. In addition, the Owner is governed by Florida Sunshine Laws and as such, certain meetings are required to be open to the public.

3.19.13 References

A Unless otherwise specified, each reference to a statute, ordinance, law, policy, procedure, process, document, drawing, or other informational material is deemed to be a reference to that item, as amended or supplemented from time to time. All referenced items shall have the enforcement ability as if they are fully incorporated herein.

3.19.14 Relationship of the Parties

A. The Contractor agrees that it shall perform the Work as an independent contractor and that it does not (a) have the power or authority to bind the Owner or to assume or create any obligation or responsibility, express or implied, on the Owner's part or in the Owner's name, except as may be authorized by the Owner under a separate written document, or (b) represent to any person or entity that it has such power or authority except as may be authorized by the Owner under a separate written document.

3.19.15 Severability

A. In the event that any provision of this Contract is found to be unenforceable under applicable law, the parties agree to replace such provision with a substitute provision that most nearly reflects the original intentions of the parties and is enforceable under applicable law, and the remainder of this Contract shall continue in full force and effect.

3.19.16 Subcontracting or Assigning of Contract

A. Each party agrees that it shall not subcontract, assign, delegate, or otherwise dispose of the Contract, the duties to be performed under the Contract, or the monies to become due under the Contract without the other party's prior written consent.

B. The assignment of the Contract will not relieve either of the parties of any of its obligations until such obligations have been assumed in writing by the assignee. If the Contract is assigned by either of the parties, it will be binding upon and will inure to the

benefit of the permitted assignee. The Contractor shall be liable for all acts and omissions of its assignee or its Subcontractor.

C. The Contractor agrees to retain the services of such subcontractors and subconsultants as reasonably required to provide the Work required by this Agreement. All subcontractors and subconsultants will be under contract to the Contractor. The Contractor shall supervise and coordinate all subcontractors and subconsultants and shall be responsible to the Owner for their work.

D. Any subcontractor or subconsultant retained by the Contractor shall be licensed in the State of Florida in the field applicable to such subcontractor or subconsultant's scope of work.

E. The Contractor's choice of subcontractors must be approved by the Owner. While the Owner shall have the right to approve or reject each sub-consultant, such approval shall not be unreasonably withheld.

F. In no event will the Contractor subcontract portions of the Work under this Agreement without the approval of the Owner. The Owner's approval of any subcontractor or subconsultant will not relieve the Contractor of its responsibility for the acts and omissions of such subcontractors or subconsultants. Any subcontract shall include, among other appropriate provisions, those provisions of this Agreement that by its terms are required to be provided in the subcontract agreement.

G. The Owner may reasonably request that the Contractor contract with additional subcontractors or subconsultants in order to adequately perform the Work on the Project.

3.19.17 Survival

A. The obligations of the Owner and the Contractor under this Contract that are not, by the express terms of this Contract, fully to be performed during the Term, shall survive the termination of this Contract for any reason.

3.19.18 Third Party Agreements

A. Unless otherwise agreed in writing by the Owner, the Owner shall have no obligation to enter into any third party agreements under this Contract. Such third party agreements shall include, but not be limited to: joint check agreements, and revocable or irrevocable letters of direction with sureties. In the event the Owner agrees to execute any such agreement(s), then such agreement(s) shall incorporate additional language as required by the Owner.

3.19.19 Time and Date

A. Unless otherwise specified, references to time of day or date mean the local time or date in Wauchula, Florida. If under this Contract any payment or calculation is to be made, or any other action is to be taken, on or as of a day that is not a regular business day for the Owner, that payment or calculation is to be made, and that other action is to be taken, as applicable, on or as of the next day that is a regular business day. Where reference is made to day or days, it means calendar days. Where reference is made to workday, workdays, business day, or business days, it means regular working days for the Owner.

3.19.20 Waiver of Claims

A. A delay or omission by the Owner hereto to exercise any right or power under this Contract shall not be construed to be a waiver thereof. A waiver by the Owner under this Contract shall not be effective unless it is in writing and signed by the party granting the waiver. A waiver by a party of a right under, or breach of, this Contract shall not be construed to operate as a waiver of any other or successive rights under, or breaches of, this Contract.

B. The Contractor's obligations to perform and complete the Work in accordance with the Contract shall be absolute. None of the following will constitute a waiver of any of the Owner's rights under the Contract: approval or payment of any progress payments or any other payments, including final payment; issuance of the Certificate of Substantial Completion or Certificate of Contract Completion; any use or occupancy of the Work by the Owner; nor any correction of faulty or defective work by the Owner.

3.19.20 Attorneys' Fees

A. If any action or other proceeding is brought for the enforcement of this Agreement or due to any uncured dispute, breach, default, or misrepresentation in connection with any of the provisions of this Agreement, or to interpret this Agreement, the prevailing Party shall be entitled to recover from the other Party reasonable attorney's fees and other costs incurred in the prosecution of the action or proceeding.

3.19.21 Conflict of Interest

A. This Contract is subject to Chapter 112, Florida Statutes, and Contractor shall disclose the name of any officer, director, employee, or other agent who is also an employee of the Owner or the City of Wauchula. The Contractor shall also disclose the name of any Owner or City of Wauchula employee who owns, directly or indirectly, more than a 5% interest in Contractor's, or its affiliates, business entity.

3.19.22 Public Entity Crimes

A. A person or affiliate who has been placed on the convicted contractor list, following a conviction for public entity crime, may not submit a proposal on a contract to provide any goods or services to a public entity; may not submit a proposal on a contract with a public entity for the construction or repair of a public building or public work; may not submit proposals on leases of real property to any 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, Florida Statutes, in CATEGORY TWO, for a period of thirty-six (36) months from the date of being placed on the convicted contractor list. By signing the attached form, the Proposer certifies that it is qualified to do business with the Owner in accordance with all Florida Statutes.

3.19.23 Scrutinized Companies, Section 287.135, Florida Statutes.

A. The Proposer certifies, by submission of a signed proposal and execution of a contract or contract renewal, that it is not on the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List and that it does not have business operations in Cuba or Syria, and that the Proposer is not participating in a boycott of Israel. Proposer shall immediately notify the Owner if its certification set forth in this paragraph changes at any point during the proposal process or term of any contract. The Owner may terminate any contract if Proposer is found to have submitted a false certification or has been placed on the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, or been engaged in business operations in Cuba or Syria or is found to have been placed on the Scrutinized Companies that Boycott Israel List or is engaged in a boycott of Israel.

3.19.24 Drug Free Workplace

Contractor shall comply with the applicable provisions of the Drug-Free Work Place Act of 1988 (Public Law 100-690, Title V, Subtitle D; 41 USC § 701 et seq.) and maintain a drug-free work environment; and the final rule, government-wide requirements for drug-free work place issued by the Office of Management and Budget to implement the provisions of the Drug-Free Work Place Act of 1988 is incorporated by reference and the Contractor shall comply with the relevant provisions thereof, including any amendments, which are made part of this Agreement.

3.19.25 ACKNOWLEDGEMENT OF COMPLIANCE WITH SECTION 255.0993, FLORIDA STATUTES

The Contractor acknowledges to and for the benefit of the Owner that it understands that the products to be installed as a part of this contract must be in compliance with 255.0993, Florida Statutes, Public works projects; United States-produced iron and steel products.

(1) DEFINITIONS.— As used in this section, the term:

(a) “Governmental entity” means the state, or any office, board, bureau, commission, department, branch, division, or institution thereof, or a separate agency or unit of local government created or established by law or ordinance and the officers thereof. The term includes, but is not limited to, a county; a city, a town, or other municipality; or a department, a commission, an authority, a school district, a taxing district, a water management district, a board, a public corporation, an institution of higher education, or other public agency or body thereof authorized to expend public funds for the construction, maintenance, repair, renovation, remodeling, or improvement of public works.

(b) “Iron or steel product” means any product made primarily of iron or steel, including, but not limited to, lined or unlined pipes and fittings; bars and rods; wire, wire ropes, and link chains; forgings; grating and drainage products; access covers, hatches, manhole covers, and other castings; hydrants; electric transmission and distribution poles; tanks; flanges; pipe clamps and restraints; valves; structural steel and other steel mill products; materials made primarily of iron and steel within precast concrete; and other construction materials made primarily of iron or steel.

(c) “Manufacturing process” means the application of a process to alter the form or function of materials or elements of a product in a manner that adds value and transforms the materials or elements into a new finished product functionally different from a finished product produced merely from assembling materials or elements into a product without applying such a process.

(d) “Produced in the United States” means that, with respect to iron and steel, all manufacturing processes, from initial melting through application of coatings, occur in the United States, other than metallurgical processes to refine steel additives.

(e) “Public works project” means an activity paid for with any state-appropriated funds or state funds administered by a governmental entity which consists of the construction, maintenance, repair, renovation, remodeling, or improvement of a building, road, street, sewer, storm drain, water system, site development, irrigation system, reclamation project, gas or electrical distribution system, gas or electrical substation, or other facility, project, or portion thereof owned in whole or in part by any governmental entity.

(2) UNITED STATES-PRODUCED IRON AND STEEL REQUIREMENT.

(a) Notwithstanding any other law, a governmental entity entering into a contract for a public works project or for the purchase of materials for a public works project must include in the contract a requirement that any iron or steel product permanently incorporated in the project be produced in the United States.

(b) Paragraph (a) does not apply if the governmental entity administering the funds for a public works project or the purchase of materials for a public works project solely determines that any of the following applies:

1. Iron or steel products produced in the United States are not produced in sufficient quantities, reasonably available, or of satisfactory quality.

2. The use of iron or steel products produced in the United States will increase the total cost of the project by more than 20 percent.

3. Complying with paragraph (a) is inconsistent with the public interest.

(c) When steel and iron materials are used in a public works project, paragraph (a) does not prevent a minimal use of foreign steel and iron materials if:

1. Such materials are incidental or ancillary to the primary product and are not separately identified in the project specifications; and

2. The cost of such materials does not exceed one-tenth of 1 percent of the total contract cost or $2,500, whichever is greater. For purposes of this subparagraph, the cost of such materials is that shown to be the value of the iron or steel products as they are delivered to the project.

(d) Electrical components, equipment, systems, and appurtenances, including supports, covers, shielding, and other appurtenances related to an electrical system, necessary for operation or concealment, except transmission and distribution poles, are not considered iron or steel products and are exempt from the requirements of paragraph (a).

(3) INTERNATIONAL AGREEMENTS.—This section shall be applied in a manner consistent with, and may not be construed to impair, the state's obligations under any international agreement.

(4) RULEMAKING.—The Department of Management Services shall develop guidelines and procedures by rule to implement this section.

(5) APPLICABILITY.—This section does not apply to contracts procured by the Department of Transportation subject to the Buy America requirements of 23 C.F.R. s. 635.410.

[END OF SECTION]

DIVISION 4:
SUPPLEMENTAL CONDITIONS

Florida Department of Environmental Protection

State Revolving Fund Program

Supplementary Conditions

for

Formally Advertised

Construction Procurement

Revised September 2026

TABLE OF CONTENTS FOR THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION SUPPLEMENTARY CONDITIONS

Article Number	Article Title	Page
1	DEFINITIONS	FDEP-1
2	PRIVITY OF AGREEMENT/CONTRACT	FDEP-2
3	PROCUREMENT REQUIREMENTS	FDEP-2
4	RESOLUTION OF PROTESTS AND CLAIMS/DISPUTES	FDEP-2
5	CHANGES TO THE BIDDING AND CONTRACT DOCUMENTS	FDEP-3
6	BONDS AND INSURANCE	FDEP-3
7	AWARD OF AGREEMENT/CONTRACT	FDEP-4
8	ITEMIZED CONSTRUCTION COST BREAKDOWN; CONSTRUCTION AND PAYMENT SCHEDULES	FDEP-4
9	FDEP/USEPA ACCESS TO RECORDS AND PROJECT SITE	FDEP-4
10	DISADVANTAGED BUSINESS ENTERPRISES (FEDERAL CAP GRANT PROJECTS ONLY)	FDEP-4
11	DEBARMENT AND SUSPENSION (EXECUTIVE ORDER 12549)	FDEP-5
12	EMPLOYEE ELIGIBLITY	FDEP-6
13	ENVIRONMENTAL COMPLIANCE	FDEP-6
14	FEDERAL LABOR STANDARDS PROVISION	FDEP-6
15	AMERICAN IRON AND STEEL PROVISION	FDEP-6
16	PROHIBITED LOCAL GOVERNMENT CONSTRUCTION PREFERENCES	FDEP-6
17	BUILD AMERICA, BUY AMERICA PROVISION (FEDERAL CAP GRANT PROJECTS ONLY)	FDEP-7
18	UNITED STATES-PRODUCED IRON AND STEEL IN PUBLIC WORKS PROJECTS	FDEP-7
19	CIVIL RIGHTS LAWS	FDEP-7
20	PROHIBITION ON CERTAIN TELECOMMUNICATIONS AND VIDEO SURVEILLANCE SERVICES OR EQUIPMENT	FDEP-7
21	UNIFORM RELOCATION ASSISTANCE AND REAL PROPERTY ACQUISITION POLICIES ACT	FDEP-7

Appendix	Title	Page
A	CERTIFICATION OF COMPLIANCE WITH THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION SUPPLEMENTARY CONDITIONS	FDEP-8
B	FEDERAL LABOR STANDARDS PROVISION	FDEP-9
C	AMERICAN IRON AND STEEL PROVISION	FDEP-17
D	BUILD AMERICA, BUY AMERICA PROVISION (FEDERAL CAP GRANT PROJECTS ONLY)	FDEP-18
E	UNITED STATES-PRODUCED IRON AND STEEL IN PUBLIC WORKS PROJECTS	FDEP-19

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
SUPPLEMENTARY CONDITIONS

The intent of the Florida Department of Environmental Protection (FDEP) Supplementary Conditions is to complement and supplement other provisions of the Bidding Documents. However, if there is any conflict between the FDEP Supplementary Conditions and other provisions of the Bidding Documents, the FDEP Supplementary Conditions shall take precedence over the other provisions except when the other provisions are similar to, but more stringent than, the FDEP Supplementary Conditions. When other provisions of the Bidding Documents are similar to, but more stringent than, the FDEP Supplementary Conditions, the more stringent provisions shall apply.

ARTICLE 1 - DEFINITIONS

Wherever used in these Supplementary Conditions (except in the appendices to these Supplementary Conditions), the following terms have the meanings indicated, which are applicable to both the singular and plural thereof.

1.1 Addendum -A written or graphic instrument that is issued prior to the opening of bids and that clarifies, corrects, or changes the Bidding Documents.

1.2 Agreement or Contract - The written agreement between the Owner and the Contractor covering the Work to be performed and furnished; these Supplementary Conditions and other Contract Documents are attached to the Agreement/Contract and made a part thereof as provided therein.

1.3 Bid - The offer or proposal of a bidder submitted on the prescribed form and setting forth the price(s) for the Work to be performed and furnished.

1.4 Bidder - Any person, firm, or corporation that submits a bid directly to the Owner.

1.5 Bidding Documents - The Advertisement for Bids or the Invitation to Bid, the Instructions to Bidders or the Information for Bidders, the Bid Form, the proposed Contract Documents, and all addenda.

1.6 Bond - An instrument of security.

1.7 Change Order - A document that is recommended by the Engineer and signed by the Contractor and the Owner; that authorizes an addition, deletion, or revision in the Work or an adjustment in the Contract Price or the Contract Time; and that is issued on or after the Effective Date of the Agreement/Contract.

1.8 Contract Documents - The Agreement/Contract; the Contractor's Bid when attached as an exhibit to the Agreement/Contract; the Performance and Payment Bond(s); the General Conditions; the Supplementary Conditions (including these Supplementary Conditions); the Specifications (written technical descriptions of material, equipment, construction systems, standards, and workmanship as applied to the Work and certain administrative details applicable thereto); the Drawings (drawings that show the character and scope of the Work to be performed and furnished); all addenda that pertain to the Contract Documents; and all change orders.

1.9 Contract Time - The number of days or the date stated in the Contract Documents for completion of the Work.

1.10 Contractor - The person, firm, or corporation with whom or which the Owner enters into the Agreement/Contract.

1.11 Effective Date of the Agreement/Contract - The date indicated in the Agreement/Contract on which the Agreement/Contract becomes effective, or if no such date is indicated in the Agreement/Contract, the date on which the Agreement/Contract is signed and delivered by the last of the two parties to sign and deliver the Agreement/Contract.

1.12 Engineer - The person, firm, or corporation named as such in the Contract Documents.

1.13 Minority Business Enterprise (MBE) - A historically Black college or university or a business that is (a) certified as socially and economically disadvantaged by the Small Business Administration, (b) certified as an MBE by a state or federal agency, or (c) an independent business concern which is at least 51-percent owned and controlled by minority group members. (A minority group member is an individual who is a citizen of the United States and one of the following: [i] Black American; [ii] Hispanic American [with origins from Puerto Rico, Mexico, Cuba, or South or Central America]; [iii] Native American [American Indian, Eskimo, Aleut, or native Hawaiian]; or [iv] Asian-Pacific American

[with origins from Japan, China, the Philippines, Vietnam, Korea, Samoa, Guam, the U.S. Trust Territories of the Pacific, Northern Marianas, Laos, Cambodia, Taiwan, or the Indian Subcontinent].)

1.14 Notice to Proceed -The written notice given by the Owner to the Contractor fixing the date on which the Contract Time will commence to run and on which the Contractor shall start to perform its obligations under the Contract Documents.

1.15 Owner - The local government (municipality, county, district, or authority; or any agency thereof; or a combination of two or more of the foregoing acting jointly) with which the Florida Department of Environmental Protection (FDEP) may execute, or has executed, a State Revolving Fund loan agreement and for which the Work is to be provided.

1.16 Project - The total construction or facilities described in a State Revolving Fund loan agreement between the FDEP and the Owner, of which the Work to be provided under the Contract Documents may be the whole or a part.

1.17 Sponsor – The recipient of the State Revolving Fund loan agreement that provides funds for the project.

1.18 Subcontract - A direct contract between a subcontractor and the Contractor, or any other subcontractor at any tier, for the furnishing of goods (material and equipment) or the performance of services (including construction) necessary to complete the Work.

1.19 Subcontractor - A person, firm, or corporation having a direct contract with the Contractor, or any other subcontractor at any tier, for the furnishing of goods (material and equipment) or the performance of services (including construction) necessary to complete the Work.

1.20 Successful Bidder - The lowest responsive, responsible bidder to whom or which the Owner intends to award the Agreement/Contract.

1.21 Women's Business Enterprise (WBE) - A business that is (a) certified as a WBE by a state or federal agency or (b) an independent business concern which is at least 51-percent owned and controlled/operated by women. (Determination of whether a business is at least 51-percent owned by women shall be made without regard to community property laws [e.g., an otherwise qualified WBE that is 51-percent owned by a married woman in a community property state will not be disqualified because the married woman's husband has a 50-percent interest in the married woman's share of the business; similarly, a business that is 51-percent owned by a married man and 49-percent owned by women will not become a qualified WBE by virtue of the married man's wife having a 50-percent interest in the married man's share of the business].)

1.22 Work - The entire completed construction or the various separately identifiable parts thereof required to be performed and furnished under the Contract Documents; Work is the result of performing services, furnishing labor, furnishing material and equipment, and incorporating material and equipment into the construction as required by the Contract Documents.

ARTICLE 2 - PRIVITY OF AGREEMENT/CONTRACT

2.1. The Owner expects to finance this Agreement/Contract with assistance from the FDEP, which administers a State Revolving Fund loan program supported in part with funds directly made available by grants from the United States Environmental Protection Agency (USEPA). Neither the State of Florida nor the United States (nor any of their departments, agencies, or employees) will be a party to this Agreement/Contract or any lower-tier subcontract.

ARTICLE 3 - PROCUREMENT REQUIREMENTS

3.1. This Agreement/Contract and the Owner's solicitation and award of this Agreement/Contract are subject to requirements contained in Chapter 62-503 (Revolving Loan Program) and/or Chapter 62-552, Florida Administrative Code as applicable.

ARTICLE 4 - RESOLUTION OF PROTESTS AND CLAIMS/DISPUTES

Resolution of Protests Concerning the Owner's Solicitation and/or Award of this Agreement/Contract:

4.1. Protests concerning the Owner's solicitation and/or award of this Agreement/Contract must be filed in writing with the Owner to be considered.

4.2. All timely written protests concerning the Owner's solicitation and/or award of this Agreement/Contract are to be resolved in accordance with the Owner's dispute resolution process. A copy of the ordinance(s), resolution(s), or written policy (policies) that set forth the Owner's dispute resolution process is included elsewhere in the Bidding Documents or is to be made available by the Owner upon request.

4.3. Neither the (FDEP) nor the USEPA will become a party to, or have any role in resolving, protests concerning the Owner's solicitation and/or award of this Agreement/Contract. Protest decisions made by the Owner cannot be appealed to the FDEP or the USEPA.

Resolution of Claims and Disputes Between the Owner and the Contractor:

4.4. Unless otherwise provided in the Contract Documents, all claims and disputes between the Owner and the Contractor arising out of, or relating to, the Contract Documents or the breach thereof are to be decided by arbitration (if the Owner and the Contractor mutually agree) or in a court of competent jurisdiction within the State of Florida.

4.5. Neither the FDEP nor the USEPA will become a party to, or have any role in resolving, claims and disputes between the Owner and the Contractor.

ARTICLE 5 - CHANGES TO THE BIDDING AND CONTRACT DOCUMENTS

5.1. All changes to the Bidding Documents made subsequent to the FDEP's acceptance of the Bidding Documents and prior to the opening of bids are to be documented via addendum (addenda) to the Bidding Documents; all changes to the Contract Documents made after the opening of bids are to be documented by change order(s) to the Contract Documents. The Owner shall submit all addenda and change orders to the FDEP.

ARTICLE 6 - BONDS AND INSURANCE

Bid Guarantees:

6.1. Each bidder's bid is to be accompanied by a bid guarantee made payable to the Owner in an amount at least equal to five percent of the bidder's maximum bid price and in the form of a certified check or bid bond.

Performance and Payment Bond(s):

6.2. The Contractor shall furnish a combined performance and payment bond in an amount at least equal to 100 percent of the Contract Price (or, if required elsewhere in the Contract Documents, the Contractor shall furnish separate performance and payment bonds, each in an amount at least equal to 100 percent of the Contract Price) as security for the faithful performance and payment of all the Contractor's obligations under the Contract Documents. This(these) bond(s) are to be delivered to the Owner by the Contractor along with the executed Agreement/Contract. The Owner shall forward a copy of this (these) bond(s) to the FDEP.

Insurance:

6.3. The Owner and/or the Contractor (as required elsewhere in the Contract Documents) shall purchase and maintain, during the period of construction, such liability insurance as is appropriate for the Work being performed and furnished and as will provide protection from claims that may arise out of, or result from, the Contractor's performance and furnishing of the Work (whether the Work is to be performed or furnished by the Contractor or any subcontractor at the Work site) and the Contractor's other obligations under the Contract Documents. This insurance is to include workers' compensation insurance, comprehensive general liability insurance, comprehensive automobile liability insurance, and contractual liability insurance applicable to the Contractor's indemnification obligations and is to be written for not less than the limits of liability and coverages determined by the Owner or required by law, whichever is greater.

6.4. The Owner and/or the Contractor (as required elsewhere in the Contract Documents) shall purchase and maintain, during the period of construction, property insurance upon the Work at the Work site in an amount equal to the full replacement cost of the Work or the full insurable value of the Work. This insurance is to include the interests of the Owner, the Contractor, and all subcontractors at the Work site (all of whom are to be listed as insured or additional insured parties); is to insure against the perils of fire and extended coverage; and is to include "all-risk" insurance for physical loss or damage due to theft, vandalism and malicious mischief, collapse, water damage, and/or all other risks against which coverage is obtainable.

6.5. Before any Work at the Work site is started, the Contractor shall deliver to the Owner certificates of insurance that the Contractor is required to purchase and maintain in accordance with Paragraphs 6.3 and 6.4 of this Article and other provisions of the Contract Documents, and the Owner shall deliver to the Contractor certificates of insurance that the Owner is required to purchase and maintain in accordance with Paragraphs 6.3 and 6.4 of this Article and other provisions of the Contract Documents.

ARTICLE 7 - AWARD OF AGREEMENT/CONTRACT

7.1. If this Agreement/Contract is awarded, it is to be awarded to the lowest responsive, responsible bidder. A fixed price (lump sum or unit price or both) agreement/contract is to be used. A clear explanation of the method of evaluating bids and the basis for awarding this Agreement/Contract are included elsewhere in the Bidding Documents. All bids may be rejected when in the best interest of the Owner. After the contract has been awarded, the Owner shall give the Contractor a notice to proceed fixing the date on which the Contract Time will commence to run. The Owner shall forward a copy of this notice to proceed to the FDEP.

ARTICLE 8 - ITEMIZED CONSTRUCTION COST BREAKDOWN; CONSTRUCTION AND PAYMENT SCHEDULES

8.1. The Contractor shall submit to the Owner, within ten calendar days after the Effective Date of this Agreement/Contract, an itemized construction cost breakdown and construction and payment schedules.

8.1.1. The itemized construction cost breakdown, or schedule of values, is to include quantities and prices of items aggregating the Contract Price and is to subdivide the Work into component parts in sufficient detail to serve as the basis for progress payments during construction. Such prices are to include an appropriate amount of overhead and profit applicable to each item of Work.

8.1.2. The construction, or progress, schedule is to indicate the Contractor's estimated starting and completion dates for the various stages of the Work and is to show both the projected cost of Work completed and the projected percentage of Work completed versus Contract Time.

8.1.3. The payment schedule is to show the Contractor's projected payments cumulatively by month.

ARTICLE 9 – FDEP/USEPA ACCESS TO RECORDS AND PROJECT SITE

9.1. Authorized representatives of the Owner, the FDEP, and the USEPA shall have access to, for the purpose of inspection, the Work site(s), any books, documents, papers, and records of the Contractor that are pertinent to this Agreement/Contract at any reasonable time. The Contractor shall retain all books, documents, papers, and records pertinent to this Agreement/Contract for a period of five years after receiving and accepting final payment under this Agreement/Contract.

NOTE: ARTICLE 10 ONLY APPLIES TO FEDERAL CAP GRANT PROJECTS

ARTICLE 10 - DISADVANTAGED BUSINESS ENTERPRISES

If bidders or prospective contractors (including the Contractor) intend to let any lower-tier goods or services (including construction) subcontracts for any portion of the Work, they shall take good faith efforts to assure that MBEs and WBEs are utilized, when possible, as sources of goods and services.

Good faith efforts are to include the following:

10.1.1. Require Disadvantaged Business Enterprises (DBEs) are made aware of contracting opportunities to the fullest extent practicable through outreach and recruitment activities. For Indian Tribal, State and Local and Government recipients, this will include placing DBEs on solicitation lists and soliciting them whenever they are potential sources.

10.1.2. Make information on forthcoming opportunities available to DBEs and arrange time frames for contracts and establish delivery schedules, where the requirements permit, in a way that encourages and facilitates participation by DBEs in the competitive process. This includes, whenever possible, posting solicitations for bids or proposals for a minimum of 30 calendar days before the bid or proposal closing date.

10.1.3. Consider in the contracting process whether firms competing for large contracts could subcontract with DBEs. For Indian Tribal, State and local Government recipients, this will include dividing total requirements when economically feasible into smaller tasks or quantities to permit maximum participation by DBEs in the competitive process.

10.1.4. Encourage contracting with a consortium of DBEs when a contract is too large for one of these firms to handle individually.

10.1.5. Use the services and assistance of the Small Business Administration and the Minority Business Development Agency of the Department of Commerce.

10.1.6. If the prime contractor awards subcontracts, require the prime contractor to take the steps in paragraphs 10.1.1 through 10.1.5 of this section.

10.2. Within ten calendar days after being notified of being the apparent Successful Bidder, the apparent Successful Bidder shall submit to the Owner documentation of the affirmative steps it has taken to utilize Minority and Women's Business Enterprises (MBEs and WBEs) in the Work and documentation of its intended use of MBEs and WBEs in the Work. The Owner shall keep this documentation on file and shall forward to the FDEP a copy of the apparent Successful Bidder's documentation concerning its intended use of MBEs and WBEs in the Work.

ARTICLE 11 - DEBARMENT AND SUSPENSION (EXECUTIVE ORDER 12549)

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transactions

11.1. The bidder certifies, by submission of this proposal, that neither the bidder nor its principals, nor the bidder's subcontractors nor their principals, are presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any federal department or agency.

11.2. Where the bidder is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

11.3. The bidder also certifies that it and its principals and the bidder's subcontractors and their principals:

11.3.1. Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (federal, state or local) transaction or contract under a public transaction; violation of federal or state anti-trust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

11.3.2. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (federal, state or local) with commission of any of the offenses enumerated in paragraph 11.3.1 of this certification; and

11.3.3. Have not within a three-year period preceding this proposal had one or more public transactions (federal, state or local) terminated for cause or default. Where the bidder is unable to certify to any of the above, such owner shall attach an explanation to this proposal.

11.3.4. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the federal government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

11.3.5. The bidder shall incorporate the foregoing requirements 11.1 through 11.3 in all subcontracts.

ARTICLE 12 – EMPLOYEE ELIGIBLITY

The Contractor is required to use the U.S. Department of Homeland Security's E-Verify system to verify the employment eligibility of all employees used by the Contractor under this Contract, pursuant to Section 448.095, F.S. Also, the Contractor shall include in related subcontracts, if authorized under this Contract, a requirement that subcontractors performing work or providing services pursuant to this Contract utilize the E-Verify system to verify employment eligibility of all employees used by the subcontractor for the performance of the Work. The subcontractor must provide the Contractor with an affidavit stating that the subcontractor does not employ, contract with, or subcontract with an unauthorized alien. The Contractor shall maintain a copy of such affidavit for a period of five years from the SRF execution date of the Final Amendment, and shall allow the Owner; the Department, or its designee; the Chief Financial Officer; or the Auditor General, access to such records upon request. If the Owner or the Department has a good faith belief that a subcontractor knowingly violated §448.095(1), F.S. and notifies the Contractor of such, but the Contractor otherwise complied with this statute, the Contractor shall immediately terminate the contract with the subcontractor.

ARTICLE 13 – ENVIRONMENTAL COMPLIANCE

The Contractor, and all subcontractors at any tier, shall comply with all applicable standards, orders, or requirements issued under Section 306 of the Clean Air Act (42 U.S.C. 1857[h]), Section 508 of the Clean Water Act (33 U.S.C. 1368), Executive Order 11738 (Administration of the Clean Air Act and the Federal Water Pollution Control Act with Respect to Federal Contracts, Grants, or Loans).

ARTICLE 14 – FEDERAL LABOR STANDARDS PROVISION

Contracts being constructed with assistance from the State Revolving Fund Program are currently required to comply with the Federal Labor Standards Provisions as provided in Appendix B. Signing Appendix A certifies compliance with these provisions.

ARTICLE 15 – AMERICAN IRON AND STEEL PROVISION

Contracts being constructed with assistance from the State Revolving Fund Program are currently required to comply with The American Iron and Steel Provision as provided in Appendix C. Signing Appendix A certifies compliance with these provisions.

ARTICLE 16 - PROHIBITED LOCAL GOVERNMENT CONSTRUCTION PREFERENCES

A. Pursuant to Section 255.0991, F.S., for a competitive solicitation for construction services in which 50 percent or more of the cost will be paid from state-appropriated funds which have been appropriated at the time of the competitive solicitation, a state, college, county, municipality, school district, or other political subdivision of the state may not use a local ordinance or regulation that provides a preference based upon:

1. The contractor's maintaining an office or place of business within a particular local jurisdiction;
2. The contractor's hiring employees or subcontractors from within a particular local jurisdiction; or
3. The contractor's prior payment of local taxes, assessments, or duties within a particular local jurisdiction.

B. For any competitive solicitation that meets the criteria in Paragraph A., a state college, county, municipality, school district, or other political subdivision of the state shall disclose in the solicitation document that any applicable local ordinance or regulation does not include any preference that is prohibited by Paragraph A.

NOTE: ARTICLE 17 ONLY APPLIES TO FEDERAL CAP GRANT PROJECTS

ARTICLE 17 – BUILD AMERICA, BUY AMERICA PROVISION

Contracts being constructed with assistance from the State Revolving Fund Program are currently required to comply with The Build America, Buy America provision as provided in Appendix D. Signing Appendix A certifies compliance with the Build America, Buy America provision if the project is a Federal Cap Grant project.

ARTICLE 18 – UNITED STATES-PRODUCED IRON AND STEEL IN PUBLIC WORKS PROJECTS

Contracts being constructed with assistance from the State Revolving Fund Program are currently required to comply with The United States-Produced Iron and Steel in Public Works Projects provision as provided in Appendix E. Signing Appendix A certifies compliance with these provisions.

ARTICLE 19 – CIVIL RIGHTS LAWS

The Contractor, and all subcontractors at any tier, shall comply with the Age Discrimination Act of 1975, Section 13 of the Federal Water Pollution Control Act Amendments of 1972 [Clean Water State Revolving Fund program], Section 504 of the Rehabilitation Act of 1973, and Title VI of the Civil Rights Act of 1964. These four laws prohibit discrimination in the provision of services or benefits, on the basis of race, color, national origin, sex, handicap or age.

ARTICLE 20 – PROHIBITION ON CERTAIN TELECOMMUNICATIONS AND VIDEO SURVEILLANCE SERVICES OR EQUIPMENT

The Contractor, and all subcontractors at any tier, shall comply with the Prohibition on Certain Telecom and Video Surveillance Services or Equipment as specified by Section 889 of Public Law 115-232 (National Defense Authorization Act 2019), 2 CFR 200.216, and 2 CFR 200.471. This law and regulations prohibit the expending of funds to procure or obtain; extending or renewing a contract to procure or obtain; or entering into a contract (or extending or renewing a contract) to procure or obtain equipment, services, or systems that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system.

ARTICLE 21 – UNIFORM RELOCATION ASSISTANCE AND REAL PROPERTY ACQUISITION POLICIES ACT

The Contractor, and all subcontractors at any tier, shall comply with the Uniform Relocation Assistance and Real Property Acquisition Policies Act. This Act establishes a uniform policy for fair and equitable treatment of persons who are displaced from their homes, farms, or businesses to make way for federal or federally assisted projects. It provides basic guidelines for negotiating the acquisition of real property by the federal government. The Act also requires agencies to reimburse individuals for actual and reasonable expenses incident to relocation, such as moving costs, direct loss of tangible personal property associated with moving or discontinuing a business, and expenses involved in searching for a replacement home or business site. Pursuant to the Safe Drinking Water Act Section 1452(a)(2), any land acquired through the Drinking Water State Revolving Fund program must be from a willing seller.

APPENDIX A TO THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION SUPPLEMENTARY CONDITIONS

CERTIFICATION OF COMPLIANCE WITH THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION SUPPLEMENTARY CONDITIONS

This certification relates to a construction contract proposed by _____,
(insert the name of the Owner)
which expects to finance the proposed construction contract with assistance from the Florida Department of Environmental Protection (which administers a State Revolving Fund loan program supported in part with funds directly made available by grants from the United States Environmental Protection Agency). I am the undersigned prospective construction contractor or subcontractor.

I certify that I have read the Florida Department of Environmental Protection's Supplementary Conditions and agree to incorporate the following articles into the bid and/or contract:

ARTICLE 11 DEBARMENT AND SUSPENSION (EXECUTIVE ORDER 12549)
ARTICLE 12 EMPLOYEE ELIGIBILTY
ARTICLE 13 ENVIRONMENTAL COMPLIANCE
ARTICLE 14 FEDERAL LABOR STANDARDS PROVISION
ARTICLE 15 AMERICAN IRON AND STEEL PROVISION
ARTICLE 17 BUILD AMERICA, BUY AMERICA PROVISION – IF A FEDERAL CAP GRANT PROJECT
ARTICLE 18 UNITED STATES-PRODUCED IRON AND STEEL IN PUBLIC WORKS PROJECTS
ARTICLE 19 CIVIL RIGHTS LAWS
ARTICLE 20 PROHIBITION ON CERTAIN TELECOMMUNICATIONS AND VIDEO SURVEILLANCE SERVICES OR EQUIPMENT
ARTICLE 21 UNIFORM RELOCATION ASSISTANCE AND REAL PROPERTY ACQUISITION POLICIES ACT

I agree that I will obtain identical certifications from prospective lower-tier construction subcontractors prior to the award of any lower-tier construction subcontracts with a price exceeding $2,000. I also agree that I will retain such certifications in my files.

_____ _____
(Signature of Authorized Official) (Date)

_____
(Name and Title of Authorized Official [Print or Type])

_____
(Name of Prospective Construction Contractor or Subcontractor [Print or Type])

_____
(Address and Telephone Number of Prospective Construction Contractor or Subcontractor [Print or Type])

_____
(Employer Identification Number of Prospective Construction Contractor or Subcontractor)

APPENDIX B TO THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION SUPPLEMENTARY CONDITIONS

Davis-Bacon Requirements

FEDERAL LABOR STANDARDS PROVISIONS
(Davis-Bacon Act, Copeland Act, and Contract Works Hours & Safety Standards Act)

The Project to which the construction work covered by this contract pertains is being assisted by the United States of America and the following Federal Labor Standards Provisions are included in this Contract pursuant to the provisions applicable to such federal assistance.

1 Minimum Wages.

(i) All laborers and mechanics employed or working upon the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project), will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act, 29 CFR Part 3, the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. Contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of 29 CFR 5.5(a)(1)(iv); also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs, which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period.

Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR Part 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein; provided, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under 29 CFR Part 5.5(a)(1)(ii) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

(ii) (a) The sponsor, on behalf of EPA, shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The FDEP shall approve a request for an additional classification and wage rate and fringe benefits; therefore, only when the following criteria have been met:

(1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(2) The classification is utilized in the area by the construction industry; and

(3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(b) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the sponsor(s) agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the sponsor to the FDEP. The FDEP will transmit the request to the Administrator of the Wage and Hour Division, employment Standards Administration, U. S. Department of Labor. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional

classification action within 30 days of receipt and so advise the FDEP or will notify FEDP within the 30-day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB control number 1215-0140.)

(c) In the event that the Contractor, the laborers or mechanics to be employed in the Classification or their representatives, and the sponsor do not agree on the proposed classification and wage rate (including the amount designed for fringe benefits, where appropriate), the FDEP shall refer the request and the local wage determination, including the views of all interested parties and the recommendation of FDEP, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt of the request and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB Control Number 1215-0140.)

(d) The wage rate (including fringe benefits where appropriate) determined pursuant to subparagraphs (1)(b) or (c) of this paragraph, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(iv) If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program. Provided, that the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account, assets for the meeting of obligations under the plan or program. (Approved by the Office of Management and Budget under OMB Control Number 1215-0140.)

2. Withholding.

The sponsor shall, upon written request of the EPA or an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract or any other federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees and helpers employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee or helper, employed or working on the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project), all or part of the wages required by the contract, EPA may, after written notice to the contractor, sponsor, applicant, or owners, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

3. Payrolls and Basic Records.

(i) Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work (or under the United States Housing Act of 1937, or under the Housing Act of 1949, in the construction or development of the project). Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in Section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in Section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs. (Approved by the Office of Management and Budget under OMB Control Numbers 1215-0140 and 1215-0017).

(ii) (a) The contractor shall submit weekly for each week in which any contract work is performed, a copy of all payrolls to the sponsor. Such documentation shall be available upon request by FDEP. As to each payroll copy received, the sponsor shall provide a certification that the project is in compliance with the requirements of 29 CFR 5.5(a)(1) with each disbursement request. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR Part 5.5(a)(3)(I), except that full social security numbers and home addresses shall not be included on the weekly payrolls. Instead, the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site http://www.dol.gov/whd/forms/wh347instr.htm or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current addresses of each covered worker, and shall provide them upon request to the sponsor for transmission to the FDEP or EPA if requested by EPA, the FDEP, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the sponsor. (Approved by the Office of Management and Budget under OMB Control Number 1215-0149).

(b) Each payroll submitted shall be accompanied by a Statement of Compliance, signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(1) That the payroll for the payroll period contains the information required to be provided under 29 CFR Part 5.5(a)(3)(ii), the appropriate information is being maintained under 29 CFR Part 5.5 (a)(3)(I), and that such information is correct and complete;

(2) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in 29 CFR Part 3;

(3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(c) The weekly submission of a properly executed certification set forth on the reverse side of Option Form WH-347 shall satisfy the requirement for submission of the Statement of Compliance required by paragraph A. 3(ii)(b) of this section.

(d) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Section 231 of Title 31 of the United States Code.

(iii) The contractor or subcontractor shall make the records required under paragraph A.3(I) of this section available for inspection, copying, or transcription by authorized representatives of the FDEP or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FDEP may, after written notice to the contractor, or sponsor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request to make such records available may be grounds for debarment action pursuant to 29 CFR Part 5.12.

4. Apprentices and Trainees.

(i) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U. S. Department of Labor, the Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio

of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program, shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with the determination. In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(ii) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U. S. Department of Labor, the Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program the contract will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(iii) Equal Employment Opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR Part 30.

5. Compliance with Copeland Act Requirements.

The contractor shall comply with the requirements of 29 CFR Part 3 which are incorporated by reference in this contract.

6. Subcontracts.

The contractor or subcontractor will insert in any subcontracts the clauses contained in 29 CFR 5.5(a)(1) through (10) and such other clauses as EPA determines may be appropriate, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR Part 5.5.

7. Contract Termination, Debarment.

A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act Requirements.

All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR Parts 1, 3 and 5 are herein incorporated by referenced in this contract.

9. Disputes Concerning Labor Standards.

Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR Parts 5, 6 and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the sponsor, FDEP, EPA, the U. S. Department of Labor, or the employees or their representatives.

10. Certification of Eligibility.

(i) By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded government contracts by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1) or to be awarded EPA contracts or participate in EPA programs pursuant to Executive Order 12549.

(ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a government contract by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1) or to be awarded EPA contracts or participate in EPA programs pursuant to Executive Order 12549.

(iii) The penalty for making false statements is prescribed in the U. S. Criminal Code, 18 U. S. C. 1001. Additionally, U. S. Criminal Code, Section 1010, Title 18, U. S. C., Federal Housing Administration transactions, provides in part "Whoever, for the purpose of . . . influencing in any way the action of such Administration . . . makes, utters or publishes any statement, knowing the same to be false . . . shall be fined not more than $5,000 or imprisoned not more than two years, or both".

11. Complaints, Proceedings, or Testimony by Employees.

A. No laborer or mechanic to whom the wage, salary, or other labor standards provisions of this contract are applicable shall be discharged or in any other manner discriminated against by the contractor or any subcontractor because such employee has filed any complaint or instituted or caused to be instituted any proceeding or has testified or is about to testify in any proceeding under or relating to the labor standards applicable under this contract to his employer.

B. Contract Work Hours and Safety Standards Act. The sponsor shall insert the following clauses set forth in paragraphs B.(1), (2), (3), and (4) of this section in full in any contract in an amount in excess of $100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by item 3 above or 29 CFR 4.6. As used in the paragraph, the terms laborers and mechanics include watchmen and guards.

(1) Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

(2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in subparagraph (1) of this paragraph, the contractor and any subcontractor responsible therefore shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in subparagraph (1) of this paragraph, in the sum of $10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in subparagraph (1) of this paragraph.

(3) Withholding for unpaid wages and liquidated damages. The sponsor, upon written request of the FDEP or an authorized representative of the Department of Labor, may withhold or cause to be withheld, from any moneys payable on

account of work performed by the contractor or subcontractor under any such contract or any other federal contract with the same prime contract, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in subparagraph (2) of this paragraph.

(4) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in subparagraph (1) through (4) of this paragraph and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in subparagraphs (1) through (4) of this paragraph.

C. Health and Safety

(1) No laborer or mechanic shall be required to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous to his health and safety as determined under construction safety and health standards promulgated by the Secretary of Labor by regulation.

(2) The contractor shall comply with all regulations issued by the Secretary of Labor pursuant to Title 29 Part 1926 (formerly part 1518) and failure to comply may result in imposition of sanctions pursuant to the Contract Work Hours and Safety Standards Act (Public Law 91-54.83 State 96).

(3) The contractor shall include the provisions of this Article in every subcontract so that such provisions will be binding on each subcontractor. The contractor shall take such action with respect to any subcontract as the Secretary of Housing and Urban Development or the Secretary of Labor shall direct as a means of enforcing such provisions.

12. Guidance to Contractor for Compliance with Labor Standards Provisions

a) Contracts with Two Wage Decisions

If the contract includes two wage decisions, the contractor, and each subcontractor who works on the site, must submit either two separate payrolls (one for each wage decision) or one payroll which identifies each worker twice and the hours worked under each wage decision. One single payroll, reflecting each worker once, may be submitted provided the Contractor uses the higher rate in the wage decisions for each identical job classification. However, where a job classification is not listed in a wage decision and is needed for that portion of the work, the classification **must** be added to the wage decision. A worker may not be paid at the rate for a classification using the hourly rate for that same classification in another wage decision. After the additional classification is approved, the contractor may pay the higher of the two rates and submit one payroll, if desired.

b) Complying with Minimum Hourly Amounts

1) The minimum hourly amount due to a worker in each classification is the total of the amounts in the Rates and Fringe Benefits (if any) columns of the applicable wage decision.

2) The contractor may satisfy this minimum hourly amount by any combination of cash and bona fide fringe benefits, regardless of the individual amounts reflected in the Rates and Fringe Benefits columns.

3) A contractor payment for a worker which is required by law is not a fringe benefit in meeting the minimum hourly amount due under the applicable wage decision. For example, contractor payments for FICA or unemployment insurance are not a fringe benefit; however, contractor payments for health insurance or retirement are a fringe benefit. Generally, a fringe benefit is bona fide if (a) it is available to most workers and (b) involves payments to a third party.

4) The hourly value of the fringe benefit is calculated by dividing the contractor's annual cost (excluding any amount contributed by the worker) for the fringe benefit by 2080. Therefore, for workers with overtime, an additional payment may be required to meet the minimum hourly wages since generally fringe benefits have no value for any time worked over 40 hours weekly. (If a worker is paid more than the minimum rates required by the wage decision, this should not be a problem. As long as the total wages received by a worker for straight time equals the hours worked times the minimum hourly rate in the wage decision, the requirement of the Davis-Bacon and Related Acts has been satisfied.)

c) Overtime

For any project work over 40 hours weekly, a worker generally must be paid 150% of the actual hourly cash rate received, not the minimum required by the wage decision. (The Davis-Bacon and Related Acts only establishes minimum rates and does not address overtime. The Contract Work Hours Act contains the overtime requirement and uses basic rate of pay as the base for calculation, not the minimum rates established by the Davis-Bacon and Related Acts.)

d) Deductions

Workers who have deductions, not required by law, from their pay must authorize these deductions in writing. The authorization must identify the purpose of each deduction and the amount, which may be a specific dollar amount or a percentage. A copy of the authorization must be submitted with the first payroll containing the deduction. If deducted amounts increase, another authorization must be submitted. If deducted amounts decrease, no revision to the original authorization is needed. Court-ordered deductions, such as child support, may be identified by the responsible payroll person in a separate document. This document should identify the worker, the amount deducted and the purpose. A copy of the court order should be submitted.

e) Classifications Not Included in the Wage Decision

If a classification not in the wage decision is required, please advise the owner's representative in writing and identify the job classification(s) required. In some instances, the state agency may allow the use of a similar classification in the wage decision.

Otherwise, the contractor and affected workers must agree on a minimum rate, which cannot be lower than the lowest rate for any trade in the wage decision. Laborers (including any subcategory of the laborer classification) and truck drivers are not considered a trade for this purpose. If the classification involves a power equipment operator, the minimum cannot be lower than the lowest rate for any power equipment operator in the wage decision. The owner will provide forms to document agreement on the minimum rate by the affected workers and contractor.

The U.S. Department of Labor (USDOL) must approve the proposed classification and rate. The contractor may pay the proposed rate until the USDOL makes a determination. Should the USDOL require a higher rate, the contractor must make wage restitution to the affected worker(s) for all hours worked under the proposed rate.

f) Supervisory Personnel

Foremen and other supervisory personnel who spend at least 80% of their time supervising workers are not covered by the Davis-Bacon and Related Acts. Therefore, a wage decision will not include such supervisory classifications and their wages are not subject to any minimums under the Davis-Bacon and Related Act or overtime payments under the Contract Work Hours and Safety Standards Act. However, foremen and other supervisory personnel who spend less than 80% of their time engaged in supervisory activities are considered workers/mechanics for the time spent engaged in manual labor and must be paid at least the minimum in the wage decision for the appropriate classification(s) based on the work performed.

g) Sole Proprietorships / Independent Contractors / Leased Workers

The nature of the relationship between a prime contractor and a worker does not affect the requirement to comply with the labor standards provisions of this contract. The applicability of the labor standards provisions is based on the nature of the work performed.

If the work performed is primarily manual in nature, the worker is subject to the labor standards provisions in this contract. For example, if John Smith is the owner of ABC Plumbing and performs all plumbing work himself, then Mr. Smith is subject to the labor standards provisions, including minimum wages and overtime. His status as owner is irrelevant for labor standards purposes.

If a worker meets the IRS standards for being an independent contractor, and is employed as such, this means that the worker must submit a separate payroll as a subcontractor rather than be included on some other payroll. The worker is still subject to the labor standards provisions in this contract, including minimum wages and overtime.

If a contractor or subcontractor leases its workers, they are subject to the labor standards provisions in this contract, including minimum wages and overtime. The leasing firm must submit payrolls and these payrolls must reflect information required to determine compliance with the labor standards provisions of this contract, including a classification for each worker based on the nature of the work performed, number of regular hours worked, and number of overtime hours worked.

h) Apprentices / Helpers

A worker may be classified as an apprentice **only if participating in a federal or state program**. Documentation of participation must be submitted. Generally, the apprentice program specifies that the apprentice will be compensated at a percentage of journeyman rate. For Davis-Bacon Act purposes, the hourly rate cannot be lower than the percentage of the hourly rate for the classification in the applicable wage decision.

If the worker does not participate in a federal or state apprentice program, then the worker must be classified according to duties performed. This procedure may require classification in the trade depending on tools used, or as a laborer if specialized tools of the trade are not used. The contractor may want to consult with the Wage and Hour Division of the U.S. Department of Labor located in most large cities regarding the appropriate classification.

Presently, no worker may be classified as a helper. As with apprentices not participating in a formal apprentice program, the worker must be classified according to duties performed and tools used.

APPENDIX C TO THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION SUPPLEMENTARY CONDITIONS

American Iron and Steel Requirement

The Contractor acknowledges to and for the benefit of the _____ ("Owner") and the State of Florida (the "State") that it understands that iron and steel products to be installed as a part of this contract must be in compliance with the requirements in H.R. 3547, "Consolidated Appropriations Act, 2014," (Appropriations Act). H.R. 3547 includes the following language in Division G, Title IV, Sec. 436, under the heading, "Use of American Iron and Steel,":

(a) (1) None of the funds made available by a State water pollution control revolving fund as authorized by title VI of the Federal Water Pollution Control Act (33 U.S.C. 1381 et seq.) or made available by a drinking water treatment revolving loan fund as authorized by section 1452 of the Safe Drinking Water Act (42 U.S.C. 300j-12) shall be used for a project for the construction, alteration, maintenance, or repair of a public water system or treatment works unless all of the iron and steel products used in the project are produced in the United States.

(2) In this section, the term "iron and steel products" means the following products made primarily of iron or steel: lined or unlined pipes and fittings, manhole covers and other municipal castings, hydrants, tanks, flanges, pipe clamps and restraints, valves, structural steel, reinforced precast concrete, and construction materials.

(b) Subsection (a) shall not apply in any case or category of cases in which the Administrator of the Environmental Protection Agency (in this section referred to as the "Administrator") finds that--

(1) applying subsection (a) would be inconsistent with the public interest;

(2) iron and steel products are not produced in the United States in sufficient and reasonably available quantities and of a satisfactory quality; or

(3) inclusion of iron and steel products produced in the United States will increase the cost of the overall project by more than 25 percent.

(c) If the Administrator receives a request for a waiver under this section, the Administrator shall make available to the public on an informal basis a copy of the request and information available to the Administrator concerning the request, and shall allow for informal public input on the request for at least 15 days prior to making a finding based on the request. The Administrator shall make the request and accompanying information available by electronic means, including on the official public Internet Web site of the Environmental Protection Agency.

(d) This section shall be applied in a manner consistent with United States obligations under international agreements.

Notwithstanding any other provision of this Agreement, any failure to comply with this paragraph by the Contractor shall permit the Purchaser or State to recover as damages against the Contractor any loss, expense, or cost (including without limitation attorney's fees) incurred by the Purchaser or State resulting from any such failure (including without limitation any impairment or loss of funding, whether in whole or in part, from the State or any damages owed to the State by the Purchaser). While the Contractor has no direct contractual privity with the State, as a lender to the Purchaser for the funding of its project, the Purchaser and the Contractor agree that the State is a third-party beneficiary and neither this paragraph (nor any other provision of this Agreement necessary to give this paragraph force or effect) shall be amended or waived without the prior written consent of the State.

APPENDIX D TO THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION SUPPLEMENTARY CONDITIONS (Federal Cap Grant Projects Only)

Build America, Buy America Requirement

The Contractor acknowledges to and for the benefit of the _____ ("Owner") and the State of Florida (the "State") that it understands that the products to be installed as a part of this contract must be in compliance with the Infrastructure Investment and Jobs Act ("IIJA"), Pub. L. No. 117-58, which includes the Build America, Buy America Act ("the Act"). Pub. L. No. 117-58, §§ 70901-52. The Act requires the following Buy America preference:

1. All iron and steel used in the project are produced in the United States. This means all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States.
2. All manufactured products used in the project are produced in the United States. This means the manufactured product was manufactured in the United States, and the cost of the components of the manufactured product that are mined, produced, or manufactured in the United States is greater than 55 percent of the total cost of all components of the manufactured product, unless another standard for determining the minimum amount of domestic content of the manufactured product has been established under applicable law or regulation.
3. All construction materials are manufactured in the United States. This means that all manufacturing processes for the construction material occurred in the United States.

The Contractor hereby presents and warrants to and for the benefit of the Owner and State that (a) the Contractor has reviewed and understands the Build America, Buy America Requirement, (b) all of the products used in the project will be and/or have been produced in the United States in a manner that complies with the Build America, Buy America Requirement, unless a waiver of the requirement is approved, and (c) the Contractor will provide any further verified information, certification or assurance of compliance with this Acknowledgement, or information necessary to support a waiver of the Build America, Buy America Requirement, as may be requested by the Owner or the State.

Notwithstanding any other provision of this Agreement, any failure to comply with this paragraph by the Contractor shall permit the Purchaser or State to recover as damages against the Contractor any loss, expense, or cost (including without limitation attorney's fees) incurred by the Purchaser or State resulting from any such failure (including without limitation any impairment or loss of funding, whether in whole or in part, from the State or any damages owed to the State by the Purchaser). While the Contractor has no direct contractual privity with the State, as a lender to the Purchaser for the funding of its project, the Purchaser and the Contractor agree that the State is a third-party beneficiary and neither this paragraph (nor any other provision of this Agreement necessary to give this paragraph force or effect) shall be amended or waived without the prior written consent of the State.

APPENDIX E TO THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION SUPPLEMENTARY CONDITIONS

UNITED STATES-PRODUCED IRON AND STEEL IN PUBLIC WORKS PROJECTS

The Contractor acknowledges to and for the benefit of the _____ ("Owner") and the State of Florida (the "State") that it understands that iron and steel products to be installed as a part of this contract must be in compliance with the requirements in 60D-16 Florida Administrative Code (F.A.C.), which includes the following language:

(1) Contract Requirement. Unless waived in accordance with subsection 60D-16.002(3), F.A.C., a Governmental Entity entering into a contract for a Public Works Project or for the purchase of materials for a Public Works Project must include in the contract a requirement that any Iron or Steel Product Permanently Incorporated in the Project be Produced in the United States, as provided in section 255.0993, F.S., and Chapter 60D-16, F.A.C.

(2) Minimal Use. Subsection 60D-16.002(1), F.A.C., does not prevent a minimal use of foreign steel and iron materials Permanently Incorporated in the Project if:

(a) Such materials are incidental or ancillary to the primary product and are not separately identified in the Project specifications; and

(b) The cost of such materials does not exceed one-tenth of 1 percent of the Total Contract Cost or $2,500, whichever is greater. For purposes of this subparagraph, the cost of such materials is that shown to be the value of the Iron or Steel Products as they are delivered to the Project.

(3) Waiver.

(a) The Administering Entity for a Project may waive the requirement set forth in subsection 60D-16.002(1), F.A.C., with respect to such Project if it solely determines that any of the following apply to the Project:

1. Iron or Steel Products Produced in the United States are not produced in sufficient quantities.
2. Iron or Steel Products Produced in the United States are not reasonably available.
3. Iron or Steel Products Produced in the United States are not of satisfactory quality.
4. The use of Iron or Steel Products Produced in the United States will increase the Total Cost of the Project by more than 20 percent.
5. Complying with subsection 60D-16.002(1), F.A.C., is inconsistent with the public interest.

(b) Prior to making a determination that a Waiver applies to a Project, the Administering Entity shall complete the "U.S.-Produced Iron & Steel Waiver Form," effective 6/2025, hereby incorporated by reference and available at https://flrules.org/gateway/reference.asp?No=Ref-18066. To aid the Administering Entity in making a determination under paragraph 60D-16.002(3)(a), F.A.C., the Administering Entity may utilize the "U.S.-Produced Iron & Steel Sample Waiver Checklist," effective 6/2025, hereby incorporated by reference and available at https://flrules.org/gateway/reference.asp?No=Ref-18067. The Admnistering Entity is responsible for maintaining any records associated with its determination that a Waiver applies to a Project in accordance with applicable law.

(c) If the Administering Entity for a Project waives the requirement set forth in subsection 60D-16.002(1), F.A.C., but later determines, prior to completion of the Project, that the Waiver no longer applies (e.g., Iron or Steel Products Produced in the United States become reasonably available), then the Administering Entity shall comply with subsection 60D-16.002(1), F.A.C., with respect to any contracts for the Project or for the purchase of materials for the Project entered into after the date the Adminstering Entity determines that the Waiver no longer applies.

(d) The governing body of the Adminstering Entity may designate by resolution, order, or written delegation one or more officers or employees of the Administering Entity to carry out the Administering Entity's respoinsibilities under this Chapter 60D-16, F.A.C., on behalf of the Administering Entity.

(4) In accordance with section 255.0993(5), F.S., this rule does not apply to contracts procured by the Department of Transportation subject to the Buy America requirements of 23 C.F.R. s. 635.410.

Notwithstanding any other provision of this Agreement, any failure to comply with this paragraph by the Contractor shall permit the Purchaser or State to recover as damages against the Contractor any loss, expense, or cost (including without limitation attorney's fees) incurred by the Purchaser or State resulting from any such failure (including without limitation any impairment or loss of funding, whether in whole or in part, from the State or any damages owed to the State by the Purchaser). While the Contractor has no direct contractual privity with the State, as a lender to the Purchaser for the funding of its project, the Purchaser and the Contractor agree that the State is a third-party beneficiary and neither this paragraph (nor any other provision of this Agreement necessary to give this paragraph force or effect) shall be amended or waived without the prior written consent of the State.

"General Decision Number: FL20260101 05/18/2026

State: Florida

Construction Types: Heavy

Counties: Florida Counties of
De Soto, Hardee, Hendry and Okeechobee

Modification Number	Publication Date
0	01/02/2026
1	05/18/2026

PAIN0088-009 06/01/2021

	Rates	Fringes
PAINTER: BRUSH AND SPRAY (DE SOTO AND HARDEE COUNTIES)	$ 20.21	12.38

PAIN0452-010 08/01/2025

	Rates	Fringes
PAINTER: BRUSH AND SPRAY (HENDRY AND OKEECHOBEE COUNTIES)	$ 27.00	14.78

SUFL2009-140 06/24/2009

	Rates	Fringes
TRUCK DRIVER: DISTRIBUTOR, DUMP, LOWBOY AND TANDEM	$ 14.00	0.00
OPERATOR: LOADER	$ 14.13	1.94
OPERATOR: BULLDOZER	$ 13.30	1.92
OPERATOR: BACKHOE/EXCAVATOR	$ 12.25	1.33
LABORER: PIPELAYER	$ 11.58	0.00
LABORER: COMMON OR GENERAL	$ 9.34	1.85

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is

like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at https://www.dol.gov/agencies/whd/government-contracts.

Note: Executive Order 13658 generally applies to contracts subject to the Davis-Bacon Act that were awarded on or between January 1, 2015 and January 29, 2022, and that have not been renewed or extended on or after January 30, 2022. Executive Order 13658 does not apply to contracts subject only to the Davis-Bacon Related Acts regardless of when they were awarded. If a contract is subject to Executive Order 13658, the contractor must pay all covered workers at least $13.65 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract from May 11, 2026, through December 31, 2026. The applicable Executive Order minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under Executive Order 13658 is available at www.dol.gov/whd/govcontracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (iii)).

The body of each wage determination lists the classifications and wage rates that have been found to be prevailing for the type(s) of construction and geographic area covered by the wage determination. The classifications are listed in alphabetical order under rate identifiers indicating whether the particular rate is a union rate (current union negotiated rate), a survey rate, a weighted union average rate, a state adopted rate, or a supplemental classification rate.

Union Rate Identifiers

A four-letter identifier beginning with characters other than "SU", "UAVG", "SA", or "SC" denotes that a union rate was prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2024. PLUM is an identifier of the union whose collectively bargained rate prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. The date, 07/01/2024 in the example, is the effective date of the most current negotiated rate.

Union prevailing wage rates are updated to reflect all changes over time that are reported to WHD in the rates in the collective bargaining agreement (CBA) governing the classification.

Union Average Rate Identifiers

The UAVG identifier indicates that no single rate prevailed for those classifications, but that 100% of the data reported for the classifications reflected union rates. EXAMPLE: UAVG-OH-0010 01/01/2024. UAVG indicates that the rate is a weighted union average rate. OH indicates the State of Ohio. The next number, 0010 in the example, is an internal number

used in producing the wage determination. The date, 01/01/2024 in the example, indicates the date the wage determination was updated to reflect the most current union average rate.

A UAVG rate will be updated once a year, usually in January, to reflect a weighted average of the current rates in the collective bargaining agreements on which the rate is based.

Survey Rate Identifiers

The "SU" identifier indicates that either a single non-union rate prevailed (as defined in 29 CFR 1.2) for this classification in the survey or that the rate was derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As a weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SUFL2022-007 6/27/2024. SU indicates the rate is a single non-union prevailing rate or a weighted average of survey data for that classification. FL indicates the State of Florida. 2022 is the year of the survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 6/27/2024 in the example, indicates the survey completion date for the classifications and rates under that identifier.

"SU" wage rates typically remain in effect until a new survey is conducted. However, the Wage and Hour Division (WHD) has the discretion to update such rates under 29 CFR 1.6(c)(1).

State Adopted Rate Identifiers

The "SA" identifier indicates that the classifications and prevailing wage rates set by a state (or local) government were adopted under 29 C.F.R 1.3(g)-(h). Example: SAME2023-007 01/03/2024. SA reflects that the rates are state adopted. ME refers to the State of Maine. 2023 is the year during which the state completed the survey on which the listed classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 01/03/2024 in the example, reflects the date on which the classifications and rates under the "SA" identifier took effect under state law in the state from which the rates were adopted.

WAGE DETERMINATION APPEALS PROCESS

1) Has there been an initial decision in the matter? This can be:

a) a survey underlying a wage determination
b) an existing published wage determination
c) an initial WHD letter setting forth a position on a wage determination matter
d) an initial conformance (additional classification and rate) determination

On survey related matters, initial contact, including requests for summaries of surveys, should be directed to the WHD Branch of Wage Surveys. Requests can be submitted via email to davisbaconinfo@dol.gov or by mail to:

Branch of Wage Surveys
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

Regarding any other wage determination matter such as conformance decisions, requests for initial decisions should be directed to the WHD Branch of Construction Wage Determinations. Requests can be submitted via email to BCWD-Office@dol.gov or by mail to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2) If an initial decision has been issued, then any interested party (those affected by the action) that disagrees with the decision can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Requests for review and reconsideration can be submitted via email to dba.reconsideration@dol.gov or by mail to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210.

==========

END OF GENERAL DECISION

"

DIVISION 5:
FORMS

SECTION 5.1: FORMS TO SUBMIT WITH PROPOSAL

The following forms must be completed and included in the Proposer's response to this Solicitation. This list represents the forms only and does not include all information and items necessary to be responsive to the Proposal Solicitation.

5.1.1 Proposal Form

5.1.2 Bid Security

5.1.3 Proposer's Qualifications

5.1.4 Proposer's Statement of Disputes, Litigation, Arbitration, and Surety Completion

5.1.5 Drug-Free Workplace Certificate

5.1.6 Florida Trench Safety Act Acknowledgement

5.1.7 Non-Collusion Affidavit

5.1.8 Public Entity Crimes Statement

5.1.9 Tabulation of Subcontractors and Suppliers

SECTION 5.2: FORMS FOR CONVENIENCE

The following forms are included for convenience in the Proposal Documents. The Owner may require additional forms during the performance of the Work:

5.2.1 Certificate of Final Completion Form

5.2.2 Certification of Substantial Completion Form

5.2.3 Change Order Form

5.2.4 Contractor's Application for Payment Form

5.2.5 Field Order Form

5.2.6 Notice of Award Form

5.2.7 Notice to Proceed Form

5.2.8 Payment Bond Form

5.2.9 Performance Bond Form

5.2.10 Work Change Directive Form

5.1.1 Proposal Form

PROJECT: City of Wauchula Southwest Area Elevated Tower and Water Line
Project No. 10371.03

A. Proposal Recipient

1. This Proposal is submitted to:

   City of Wauchula
   Attn: City Manager
   126 South 7th Street
   Wauchula, FL 33873

2. The undersigned Proposer proposes and agrees, if this Proposal is accepted, to enter into an Agreement with the Owner in the form included in the Proposal Documents to perform all Work as specified or indicated in the Proposal Documents for the prices and within the times indicated in this Proposal and in accordance with the other terms and conditions of the Proposal Documents.

B. Proposer's Acknowledgements

1. The Proposer accepts all of the terms and conditions of DIVISION 1: INSTRUCTIONS TO PROPOSERS, including without limitation those dealing with the disposition of the Bid Security. The Proposal will remain subject to acceptance for 120 days after the Proposal Opening, or for such longer period of time that Proposer may agree to in writing upon request of Owner.

C. Proposer's Representations

1. In submitting this Proposal, the Proposer represents that:

   a. The Proposer has received from the Issuing Office a complete set of Proposal Documents and other related data identified in the Proposal Documents, and the following Addenda, receipt of which is hereby acknowledged:

Addendum No.	Addendum Date
_____	_____
_____	_____
_____	_____

   b. The Proposer has examined and carefully studied the Proposal Documents, Addenda, and the other related data identified in the Proposal Documents, and provided the information to Subcontractors and Suppliers who have provided quotations to the Proposer for the Work.

c. The Proposer has visited the Site and become familiar with and is satisfied as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.

d. The Proposer is familiar with and is satisfied as to all Laws and Regulations that may affect cost, progress, and performance of the Work.

e. The Proposer has carefully studied all: (1) reports of explorations and tests of subsurface conditions at or contiguous to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities) that have been identified in DIVISION 1: INSTRUCTIONS TO PROPOSERS, and (2) reports and drawings of Hazardous Environmental Conditions, if any, at the Site that have been identified in DIVISION 1: INSTRUCTIONS TO PROPOSERS.

f. The Proposer has obtained and carefully studied (or accepts the consequences for not doing so) all additional or supplemental examinations, investigations, explorations, tests, studies and data concerning conditions (surface, subsurface, and Underground Facilities) at or contiguous to the Site which may affect cost, progress, or performance of the Work or which relate to any aspect of the means, methods, techniques, sequences, and procedures of construction to be employed by the Proposer, including applying the specific means, methods, techniques, sequences, and procedures of construction expressly required by the Proposal Documents to be employee by the Proposer, and safety precautions and programs incident thereto.

g. The Proposer does not consider that any further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of this Proposal for performance of the Work at the price(s) bid and within the times and in accordance with the other terms and conditions of the Proposal Documents

h. The Proposer is aware of the general nature of the Work to be performed by the Owner and others at the Site that relates to the Work as indicated in the Proposal Documents.

i. The Proposer has correlated the information known to the Proposer, information and observations obtained from visits to the Site, reports and drawings identified in the Proposal Documents, and all additional examinations, investigations, explorations, tests, studies, and data with the Proposal Documents.

j. The Proposer has given the Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that the Proposer has discovered in the Proposal Documents, and the written resolution thereof by the Engineer is acceptable to the Proposer.

k. The Proposal Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance of the Work for which this Proposal is submitted.

l. Proposer certifies Proposer's authority and qualification to do business in the state where the Project is located, that the Proposer is a state-certified Contractor in good standing and holds current registration with the Florida Construction Industry Licensing Board of the Florida Department of Professional Regulation, that the type of license is in a class that authorizes the Proposer to perform the general nature of the construction to be performed on this project, and that the Proposer's State Contractor's license number for the state of the project is shown on the Proposal Form.

m. Proposer certifies to the greatest extent practicable, all equipment and products purchased with funds made available under this award should be American-made. To support the efforts, any non American-made equipment proposed must be accompanied by proof of good-faith efforts to utilize American-made equipment such as written quotes, solicitations, advertisements, etc.

D. Proposer's Certification

1. Proposer certifies that:

a. This Proposal is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any collusive agreement or rules of any group, association, organization, or corporation;

b. The Proposer has not directly or indirectly induced or solicited any other Proposer to submit a false or sham Proposal;

c. The Proposer has not solicited or induced any individual or entity to refrain from bidding; and

d. The Proposer has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this Paragraph:

i. "corrupt practice" means the offering, giving, receiving, or soliciting of any thing of value likely to influence the action of a public official in the bidding process;

ii. "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process to the detriment of the Owner, (b) to establish Proposal Prices at artificial non-competitive levels, or (c) to deprive the Owner of the benefits of free and open competition;

iii. "collusive practice" means a scheme or arrangement between two or more Proposers, with or without the knowledge of the Owner, a purpose of which is to establish Proposal Prices at artificial, non-competitive levels; and

iv. "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

E. Basis of Proposal

1. The Proposer has reviewed DIVISION 6: TECHNICAL SPECIFICATIONS; and will complete the Work in accordance with the Contract Documents for the following price(s):

a. BASE BID

Item No.	Description	Units	Quantity	Unit Price	Total Price
1	PVC Water Main				
a	6" PVC	LF	84		
b	12" PVC	LF	14,920		
2	HDPE Water Main (HDD)				
a	6" HDPE HDD	LF	450		
b	12" HDPE HDD	LF	9,530		
3	Service Connections				
a	2" Temporary Poly Service Lines	LF	200		
4	Fittings				
a	6" 11.25 degree Bend	EA	1		
b	6" 45 degree Bend	EA	1		
c	6" 90 degree Bend	EA	1		
d	12" 11.25 degree Bend	EA	43		
e	12" 22.5 degree Bend	EA	1		
f	12" 45 degree Bend	EA	12		
g	12" 90 degree Bend	EA	15		
h	12" Tee	EA	1		
i	12" x 6" Tee	EA	14		
j	12" x 6" Reducer	EA	1		
5	Valves & Appurtenances				
a	6" Gate Valve	EA	13		
b	12" Gate Valve	EA	10		
6	2" Air Release Valve & Enclosure	EA	18		
7	Tapping Sleeve & Valve (Wet Tap)				
a	6" Tapping Sleeve & Valve	EA	2		
b	12" Tapping Sleeve & Valve	EA	1		
8	Fire Hydrant Assembly	EA	13		

9	Concrete Driveway Restoration	SY	670		
10	Unpaved Driveway Restoration	LF	160		
11	Asphalt Driveway Restoration	SY	170		
12	Asphalt Mill & Resurface	SY	75		
13	Elevated Water Utility Storage Tank	LS	1		
14	Seeding & Mulch	LF	5,700		
15	Sodding	LF	8,920		
16	Water Service Lines				
a	Single Service Short Side	EA	4		
b	Single Service Long Side	EA	3		
17	Removal & Disposal of 2" Water Service Lines	LF	190		
18	Maintenance of Traffic	LS	1		
19	Trench Safety Measures	LS	1		
20	Prevention, Control, & Abatement of Erosion/Water Pollution	LS	1		
21	Public Construction Bond	LS	1		
22	Mobilization	LS	1		

TOTAL BASE BID:

_____ ($_____)
(words) (numerals)

The Proposer acknowledges that estimated quantities are not guaranteed, and are solely for the purpose of comparison of Proposals, and final payment for all Unit Price Bid items will be based on actual quantities, determined as provided in the Contract Documents.

F. Time of Completion

1. The Proposer agrees that the Work will be substantially complete within **495** calendar days after the issuance of the Notice to Proceed, and completed and ready for final payment in accordance with the Contract Documents within **540** calendar days after the date when the Contract Time commences to run.

2. The Proposer accepts the provisions of the Agreement as to liquidated damages.

G. Attachments to This Proposal

1. The following documents are submitted with and made a part of this Proposal:

a. DIVISION 5: FORMS – Proposal Form

b. DIVISION 5: FORMS – Bid Security

c. DIVISION 5: FORMS – Proposer's Qualifications

d. DIVISION 5: FORMS – Proposer's Statement of Disputes, Litigation, Arbitration, and Surety Completion, Last Three (3) Years

e. DIVISION 5: FORMS – Drug-Free Workplace Certificate

f. DIVISION 5: FORMS – Florida Trench Safety Act Acknowledgement

g. DIVISION 5: FORMS – Non-Collusion Affidavit

h. DIVISION 5: FORMS – Public Entity Crimes Statement

i. DIVISION 5: FORMS – Tabulation of Subcontractors and Suppliers

j. Evidence of authority to do business in the State of the Project; or a written covenant to obtain such license within the time for acceptance of Proposals;

k. Contractor's License No.: _____.

l. List of three (3) single pedestal elevated tanks of equal or greater capacity in the last seven (7) years, including location, completion date, contact names, and telephone numbers.

m. List of names and contact information for each and every project it has performed for Florida city or county governments within three (3) years of submittal of its bid.

n. Statement from insurance carrier confirming the EMR requirement, and their last three (3) years of OSHA 300 Logs to confirm the TRIR requirement.

o. Design sketch of the tank and foundation proposed to be furnished. General plan of the structure must show all major dimensions including the tank diameter, height to low- and high-water levels, sizes of all principal and secondary members, thickness of all plates, arrangement of members, and size of the tank foundation, including approximate quantities of concrete and rebar

H. Defined Terms

1. The terms used in this Proposal with initial capital letters have the meanings stated in DIVISION 1: INSTRUCTIONS TO PROPOSERS and DIVISION 4: SUPPLEMENTAL CONDITIONS.

I. Proposal Submittal

1. This Proposal is submitted by:

If Proposer is:

An Individual

Name (typed or printed): _____

By: _____ (SEAL)

(Individual's signature)

Doing business as: _____

A Partnership

Partnership Name: _____

By: _____ (SEAL)

(Signature of general partner – attach evidence of authority to sign)

Name (typed or printed): _____

State Contract License No. _____

A Corporation

Corporation Name: _____

_____ (SEAL)

State of Incorporation: _____

Type (General Business, Professional, Service, Limited Liability):_____

By: _____

(Signature – attach evidence of authority to sign)

Name (typed or printed): _____

Title: _____

(Corporate Seal)

Attest _____

(Signature of Corporate Secretary)

Date of Qualification to do business in Florida is _____/_____/_____.

State Contractor License No. _____.

A Joint Venture

Name of Joint Venture: _____

First Joint Venturer Name: _____ (SEAL)

By: _____

(Signature of first joint venture partner – attach evidence of authority to sign)

Name (typed or printed): _____

Title: _____

Second Joint Venturer Name: _____(SEAL)

By: _____

(Signature of first joint venture partner – attach evidence of authority to sign)

Name (typed or printed): _____

Title: _____

(Each joint venturer must sign. The manner of signing for each individual, partnership, and corporation that is a party to the joint venture should be in the manner indicated above.)

Proposer's Business Address _____

_____

Phone No. _____ Fax No. _____

E-mail _____

SUBMITTED on _____, 20_____.

State Contractor License No. _____.

5.1.2 Bid Security Form

Any singular reference to Proposer, Surety, Owner, or other party shall be considered plural where applicable.

PROPOSER (Name and Address):

SURETY (Name and Address of Principal Place of Business):

OWNER (Name and Address):

BID

Bid Due Date:

Project (Brief Description Including Location):

BOND

Bond Number:

Date (Not later than Bid due date):

Penal sum _____ _____
(Words) (Figures)

Surety and Proposer, intending to be legally bound hereby, subject to the terms printed on the reverse side hereof, do each cause this Bid Bond to be duly executed on its behalf by its authorized officer, agent, or representative.

PROPOSER	**SURETY**
_____ (Seal)	_____ (Seal)
Proposer's Name and Corporate Seal	Surety's Name and Corporate Seal
By: _____	By: _____
Signature and Title	Signature and Title (Attach Power of Attorney)
Attest: _____	Attest: _____
Signature and Title	Signature and Title

Note: Above addresses are to be used for giving required notice.

A. Proposer and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to pay to the Owner upon default of the Proposer the penal sum set forth on the face of this Bond. Payment of the penal sum is the extent of Surety's liability.

B. Default of Proposer shall occur upon the failure of the Proposer to deliver within the time required by the Proposal Documents (or any extension thereof agreed to in writing by the Owner) the executed Agreement required by the Proposal Documents and any performance and payment bonds required by the Proposal Documents.

C. This obligation shall be null and void if:

   i. The Owner accepts the Proposer's Proposal and the Proposer delivers within the time required by the Proposal Documents (or any extension thereof agreed to in writing by the Owner) the executed Agreement required by the Proposal Documents and any performance and payment bonds required by the Proposal Documents, or

   ii. All Proposals are rejected by the Owner, or

   iii. The Owner fails to issue a Notice of Award to the Proposer within the time specified in the Proposal Documents (or any extension thereof agreed to in writing by the Proposer and, if applicable, consented to by Surety when required by Paragraph E hereof).

D. Payment under this Bond will be due and payable upon default by the Proposer and within 30 calendar days after receipt by the Proposer and the Surety of written notice of default from the Owner, which notice will be given with reasonable promptness, identifying this Bond and the Project and including a statement of the amount due.

E. The Surety waives notice of any and all defenses based on or arising out of any time extension to issue the Notice of Award agreed to in writing by the Owner and the Proposer, provided that the total time for issuing the Notice of Award including extensions shall not in the aggregate exceed 120 days from the Proposal Due Date without the Surety's written consent.

F. No suit or action shall be commenced under this Bond prior to 30 calendar days after the notice of default required in Paragraph D above is received by the Proposer and the Surety and in no case later than one year after the Proposal Due Date.

G. Any suit or action under this Bond shall be commenced only in a court of competent jurisdiction located in the state in which the Project is located.

H. Notices required hereunder shall be in writing and sent to the Proposer and the Surety at their respective addresses shown on the face of this Bond. Such notices may be sent by personal delivery, commercial courier, or by United States Registered or Certified Mail, return receipt requested, postage pre-paid, and shall be deemed to be effective upon receipt by the party concerned.

I. The Surety shall cause to be attached to this Bond a current and effective Power of Attorney evidencing the authority of the officer, agent, or representative who executed this Bond on behalf of Surety to execute, seal, and deliver such Bond and bind the Surety thereby.

J. This Bond is intended to conform to all applicable statutory requirements. Any applicable requirement of any applicable statute that has been omitted from this Bond shall be deemed to be included herein as if set forth at length. If any provision of this Bond conflicts with any applicable statute, then the provision of said statute shall govern and the remainder of this Bond that is not in conflict therewith shall continue in full force and effect.

K. The term “Bid” as used herein includes a Bid, offer, or proposal as applicable.

5.1.3 Proposer's Qualifications

The Proposer warrants the truth and accuracy of all statements and answers herein contained.
(Include additional sheets if necessary.)

THIS QUESTIONNAIRE MUST BE COMPLETED AND SUBMITTED WITH YOUR PROPOSAL.

A. LICENSE # and COMPANY'S NAME:_____

B. CO. PHYSICAL ADDRESS:_____

C. TELEPHONE NUMBER: (_____)_____ D. FAX: (_____)_____

E. Bidding as an; individual:_____; a partnership:___; a corporation:___; a joint venture:___.

F. If a partnership: list names and addresses of partners; if a corporation: list names of officers, directors, shareholders, and state of incorporation; if joint venture: list names and addresses of venturers and the same if any venturer is a corporation for each such corporation, partnership, or joint venture:

_____

_____

G. Your organization has been in business (under this firm's name) as a _____

_____for how many years? _____

H. Describe and give the date and owner of the last three government projects you've completed which are similar in cost, type, size, and nature as the one proposed (for a public entity). Include contact name and phone number:

_____

_____

I. Have you ever been awarded additional time to complete work awarded to you during the past five (5) years? If so, state when, where (contact name, address, and phone number) and why.

_____

_____

J. Have you ever been assessed liquidated damages under a contract during the past five (5) years? If so, state when, where (contact name, address, and phone number) and why.

_____

_____

K. Have you ever failed to complete work awarded to you? If so, state when, where (contact name, address, phone number) and why?

L. Have you ever been debarred or prohibited from bidding on a governmental entity's construction project? If yes, name the entity and describe the circumstances:

M. List at least three (3) single pedestal elevated tanks of equal or greater capacity in the last seven (7) years (attach additional sheets as necessary). Include Owner name, date of completion, contact name and phone number:

N. List of names and contact information for each and every project it has performed for Florida city or county governments within three (3) years of submittal of its bid (attach additional sheets as necessary).

O. What specific steps have you taken to examine the physical conditions at or contiguous to the site, including but not limited to, the location of existing underground facilities?

P. What specific physical conditions, including but not limited to, the location of existing underground facilities have you found which will, in any manner, affect cost, progress, performance, or finishing of the work?

Q. Will you subcontract any part of this Work? If so, describe which major portion(s):

i. If any, list (with contract amount) MBE/WBE's to be utilized:

_____

_____

R. What equipment do you own to accomplish this Work?

_____

_____

S. What equipment will you purchase/rent for the Work? (specify which)

_____

_____

T. List the following in connection with the Surety which is providing the Bond(s):

Surety's Name: _____

Surety's Address: _____

Name, address and phone number of Surety's resident agent for service of process in Florida:

_____

_____

_____

Phone: (___) _____

5.1.4 Proposer's Statement of Disputes, Litigation, Arbitration, and Surety Completion – Last Three (3) Years

Project	Name and Address of Owner or Engineer	Name and Phone Number of Owner or Engineer Representative	Date of Contract	Amount	Status

5.1.5 Drug-Free Workplace Certificate

I, the undersigned, in accordance with 287.087, Florida Statutes hereby certify that

_____

(Print or Type Name of Firm)

☐ Publishes a written statement notifying that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the workplace named above and specifying actions that will be taken against violations of such prohibition.

☐ Informs employees about the dangers of drug abuse in the workplace; the firm's policy of maintaining a drug-free working environment and available drug counseling, rehabilitation, and employee assistance programs; and the penalties that may be imposed upon employees for drug-use violations.

☐ Gives each employee engaged in providing commodities or contractual services that are under bid or proposal a copy of the statement specified above.

☐ Notifies the employees that as a condition of working on the commodities or contractual services under bid or proposal, the employees will abode 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 Chamber 1893 or any controlled substance law of the State of Florida or the United States for a violation occurring in the workplace, no later than 5 days after such conviction, and requires employees to sign copies of such written statement to acknowledge their receipt.

☐ Imposes a sanction on or requires 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.

☐ Makes a good faith effort to continue to maintain a drug-free workplace through the implementation of the drug-free workplace program.

"As a person authorized to sign this statement, I certify that the business, firm, or corporation named above complies fully with the requirements set forth herein."

_____ _____

Authorized Signature Date Signed

State of: _____

County of: _____

Sworn to and subscribed before me this _____ day of _____, 20 _____.

Personally known _____ or Produced Identification _____

Specify Type of Identification

_____

Signature of Notary

My Commission Expires: _____

5.1.6 Certificate of Compliance with the Florida Trench Safety Act

The Proposer acknowledges sole responsibility for complying with the Florida Trench Safety Act (Act) and Occupational Safety and Health Administration's excavation safety standard 29 CFR 1926.650 (Subpart P as amended). The Proposer further acknowledges that included in the various items of the Proposal and in the Total Base Bid Price are costs for complying with the Florida Trench Safety Act (90-96, Laws of Florida) effective October 1, 1990. The Proposer further identifies the costs to be summarized below:

	Trench Safety Method (Description)	Units of Measure (LF, SY)	Unit (Quantity)	Extended Cost	Unit Extended Cost
A.	_____	_____	_____	_____	_____
B.	_____	_____	_____	_____	_____
C.	_____	_____	_____	_____	_____
D.	_____	_____	_____	_____	_____
				Total:	

Failure to complete the above may result in the Proposal being declared non-responsive. The costs indicated above are provided to comply with the Act and shall not constitute grounds for any additional compensation to that listed for the separate line items of the Proposal Form.

By: _____

Proposer: _____

_____

Date: _____

Authorized Signature: _____

State of: _____

County of: _____

Sworn to and subscribed before me this _____ day of _____, 20 _____.

Personally known _____ or Produced Identification _____
Specify Type of Identification

_____
Signature of Notary

My Commission Expires: _____

5.1.7 Non-Collusion Affidavit of Prime Proposer

State of _____

County of _____

_____, being first duly sworn, deposes and says that:
Name

1. He/She is _____ of _____, the
   Title Company
   Proposer that has submitted the attached proposal;

2. He/She is fully informed respecting the preparation and contents of the attached Proposal and of all pertinent circumstances respecting such Proposal;

3. Such Proposal is genuine and is not a collusive or sham Proposal;

4. Neither the said Proposer not any of his/her officers, partners, owners, agents, representatives, employees or parties in interest, including this affiant, has in any way colluded, conspired, connived or agreed, directly or indirectly with any other Proposer, firm or person to submit a collusive or sham Proposal in connection with the Contract for which the attached Proposal has been submitted or has refrained from bidding in connection with such Contract; nor in any manner, directly or indirectly, sought by agreement or collusion or communication or conference with any other Proposer, firm or person to fix the price or prices in the attached Proposal or if any other Proposer; not has fixed any overhead, profit or cost element of the Bid Price, or the Bid Price of any other Proposer; not has secured through any collusion, conspiracy, connivance or unlawful agreement, any advantage against the City of Wauchula, Florida or any person interested in the proposed Contract; and

5. The price or prices quoted in the attached proposal are fair and proper and are not tainted by any collusion, conspiracy, connivance or unlawful agreement on the part of the Proposer or any of its agents, representatives, owners, employees, or parties in interest, including this affiant.

(Signed) _____
Name

_____
Title

Subscribed and sworn to before me this _____ day of _____, 20_____

_____
Signature

_____
Title

My commission expires _____

5.1.8 Sworn Statement Pursuant to Section 287.133(3)(A), Florida Statues, on Public Entity Crimes

THIS FORM MUST BE SIGNED AND SWORN TO IN THE PRESENCE OF A NOTARY PUBLIC OR OTHER OFFICIAL AUTHORIZED TO ADMINISTER OATHS.

1. This sworn statement is submitted to the City of Wauchula, Florida by

   _____
   (print individual's name and title)

   for _____
   (print name of entity submitting sworn statement)

   whose business address is _____

   _____

   And (if applicable) its Federal Employer Identification Number (FEIN) is _____.
   (If the entity has no FEIN, include the Social Security of the individual signing this sworn statement: _
   _____.)

2. I understand that a "public entity crime" as defined in Section 287.133 (1)(g), Florida Statues means a violation of any state or federal law by a person with respect to and directly related to the transaction of business with any public entity or with an agency or political subdivision of any other state or of the United States, including, but not limited to, any proposal or contract for goods or services to be provided to any public entity or such an agency or political subdivision of any other state or of the United States and involving anti-trust, fraud, theft, bribery, collusion, racketeering, conspiracy, or material misrepresentation.

3. I understand that "convicted" or "conviction" as defined in Section 287.133(1)(b), Florida Statutes, means a finding of guilt or a conviction of a public entity crime, with or without an adjudication of guilt, in any federal or stated trial court of record relating to charges brought by indictment or information after July 1. 1989, as a result of a jury verdict, nonjury trial, or entry of a plea of guilty or nolo contendere.

4. I understand that "affiliate" as defined in Section 287.133(1)(a), Florida Statutes, means:

   1. A predecessor or successor of a person convicted of a public entity crime: or

   2. An entity under the control of any natural person who is active in the management of the entity and who has been convicted of a public entity crime. The term "affiliate" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in the management of an affiliate. The ownership by one person of shares constituting a controlling interest in another person, or a pooling of equipment or income among persons when not for fair market value under an arm's length agreement, shall be a prima facie case that one person controls another person. A person who knowingly enters in to a joint venture with a person who has been convicted of a public entity crime in Florida during the preceding 36 months shall be considered an affiliate.

5. I understand that a "person" as defined in Section 287.133 (1)(e), Florida Statutes, means any natural person or entity organized under the laws of any state or of the United States with the legal power to enter into a binding contract and which proposals or applies to bid on contracts for the provision of goods or services let by a public entity, or which otherwise transacts or applies to transact business with a public entity. The term "person" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in management of an entity.

6. Based on information and belief, the statement which I have marked below is true in relation to the entity submitting this sworn statement. (indicate which statement applies).

___ Neither the entity submitting this sworn statement, nor any of its officers, directors, executives, partners, shareholders, employees, members, or agents who are active in the management of the entity, nor any affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July 1, 1989.

___ The entity submitting this sworn statement, or one or more of its officers, directors, executives, partners, shareholders, employees, members, or agents who are active in management of the entity, or an affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July 1, 1989.

___ The entity submitting this sworn statement, or one or more of the officers, directors, executives, partners, shareholders, employees, members, or agents who are active in the management of the entity, or an affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July 1, 1989. However, there has been a subsequent proceeding before a Hearing Officer of the State of Florida, Division of Administrative Hearings and the Final Order entered by the Hearing Officer determined that it was not in the public interest to place the entity submitting this sworn statement on the convicted vendor list. (attach a copy of the final order)

I UNDERSTAND THAT THE SUBMISSION OF THIS FORM TO THE CONTRACTING OFFICER FOR THE PUBLIC ENTITY IDENTIFIED IN PARAGRAPH 1 (ONE) ABOVE IS FOR THAT PUBLIC ENTITY ONLY AND, THAT THIS FORM IS VALID THROUGH DECEMBER 31 OF THE CALENDAR YEAR IN WHICH IT IS FILED. I ALSO UNDERSTAND THAT I AM REQUIRED TO INFORM THE PUBLIC ENTITY PRIOR TO ENTERING INTO A CONTRACT IN EXCESS OF THE THRESHOLD AMOUNT PROVIDED IN SECTION 287.017, FLORIDA STATUES, FOR CATEGORY TWO OF ANY CHANGE IN THE INFORMATION CONTAINED IN THIS FORM.

_____
(Signature)

Sworn to and subscribed before me this _____ day of _____, 20_____.

Personally known _____

OR Produced Indentification_____ Notary Public-State of _____

_____ My commission expires_____
(Type of Indentification)

_____
(Printed, Typed or Stamped
Commissioned Name of Notary Public)

5.1.9 Tabulation of Subcontractors and Suppliers

The Undersigned states that the following is a full and complete list of the proposed Subcontractors and Suppliers on this Project and the class of work to be performed by each and that such list will not be added to nor altered without written consent to the Owner through the Engineer.

	SUBCONTRACTOR OR SUPPLIER AND ADDRESS	MBE/WBE STATUS	CLASS OF WORK OR MATERIAL
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			

PROPOSER: _____

By: _____

Name: _____

Title: _____

Date: _____

5.2.1 Certificate of Final Completion

Project: Southwest Area Elevated Tower and Water Line	Owner: City of Wauchula	Owner's Contract No.:
Contract:		Date of Contract:
Contractor:		Engineer's Project No.: 10371.03

This Certificate of Final Completion applies to:

☐ All Work under the Contract Documents: ☐ The following specified portions:

_____

_____

_____

_____
Date of Final Completion

The Work to which this Certificate applies has been inspected by authorized representatives of the Owner, the Contractor and the Engineer, and found to be complete and final. The Date of Final Completion of the Project or portion thereof designated above is hereby declared.

_____ _____
Executed by Engineer Date

_____ _____
Accepted by Contractor Date

_____ _____
Accepted by Owner Date

5.2.2 Certificate of Substantial Completion

Project: Southwest Area Elevated Tower and Water Line	Owner: City of Wauchula	Owner's Contract No.:
Contract:		Date of Contract:
Contractor:		Engineer's Project No.: 10371.03

This [tentative] [definitive] Certificate of Substantial Completion applies to:
☐ All Work under the Contract Documents: ☐ The following specified portions:

_____

_____

_____
Date of Substantial Completion

The Work to which this Certificate applies has been inspected by authorized representatives of Owner, Contractor and Engineer, and found to be substantially complete. The Date of Substantial Completion of the Project or portion thereof designated above is hereby declared and is also the date of commencement of applicable warranties required by the Contract Documents, except as stated below.

A [tentative] [revised tentative] [definitive] list of items to be completed or corrected, is attached hereto. This list may not be all-inclusive, and the failure to include any items on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents.

The responsibilities between OWNER and CONTRACTOR for security, operation, safety, maintenance, heat, utilities, insurance and warranties shall be as provided in the Contract Documents except as amended as follows:

☐ Amended Responsibilities ☐ Not Amended

Owner's Amended Responsibilities:

_____

_____

Contractor's Amended Responsibilities:

_____

_____

The following documents are attached to and made part of this Certificate:

_____

_____

This Certificate does not constitute an acceptance of Work not in accordance with the Contract Documents nor is it a release of Contractor's obligation to complete the Work in accordance with the Contract Documents.

_____ _____
Executed by Engineer Date

_____ _____
Accepted by Contractor Date

_____ _____
Accepted by Owner Date

5.2.3 Change Order Form

No. _____

Date of Issuance: _____ Effective Date: _____

Project: Southwest Area Elevated Tower and Water Line	**Owner:** City of Wauchula	**Owner's Contract No.:**
Contract:		**Date of Contract:**
Contractor:		**Engineer's Project No.:** 10371.03

The Contract Documents are modified as follows upon execution of this Change Order:
Description:

_____

_____

Attachments: (List documents supporting change):

_____

_____

CHANGE IN CONTRACT PRICE:

Original Contract Price:

$ _____

[Increase] [Decrease] from previously approved Change Orders No. _____ to No. _____

$ _____

Contract Price prior to this Change Order:

$ _____

[Increase] [Decrease] of this Change Order:

$ _____

Contract Price incorporating this Change Order:

$ _____

CHANGE IN CONTRACT TIMES:

Original Contract Times: ☐ Working days ☐ Calendar days
Substantial completion (days or date): _____
Ready for final payment (days or date): _____

[Increase] [Decrease] from previously approved Change Orders No. _____ to No. _____
Substantial completion (days): _____
Ready for final payment (days): _____

Contract Times prior to this Change Order:
Substantial completion (days or date): _____
Ready for final payment (days or date): _____

Increase] [Decrease] of this Change Order:
Substantial completion (days or date): _____
Ready for final payment (days or date): _____

Contract Times with all approved Change Orders:
Substantial completion (days or date): _____
Ready for final payment (days or date): _____

RECOMMENDED:	**ACCEPTED:**	**ACCEPTED:**
By: _____	By: _____	By: _____
Engineer (Authorized Signature)	Owner (Authorized Signature)	Contractor (Authorized Signature)
Date: _____	Date: _____	Date: _____
Approved by Funding Agency (if applicable): _____		Date: _____

Prepared by the Engineers' Joint Contract Documents Committee and endorse by the
Associated General Contractors of America and the Construction Specifications Institute

5.2.4 Contractor's Application for Payment

Application for Payment No:._____

	Application Period:	Application Date:
To (Owner): City of Wauchula	From (Contractor):	Via (Engineer):
Project: Southwest Area Elevated Tower and Water Line	Contract:	
Owner's Contract No.:	Contractor's Project No.:	Engineer's Project No.: 10371.03

APPLICATION FOR PAYMENT

Change Order Summary

Approved Change Orders		
Number	Additions	Deductions
TOTALS		
NET CHANGE BY CHANGE ORDERS		

CONTRACTOR'S CERTIFICATION

The undersigned Contractor certifies that: (1) all previous progress payments received from Owner on account of Work done under the Contract have been applied on account to discharge Contractor's legitimate obligations incurred in connection with Work covered by prior Applications for Payment; (2) title of all Work, materials and equipment incorporated in said Work or otherwise listed in or covered by this Application for Payment will pass to Owner at time of payment free and clear of all Liens, security interests and encumbrances (except such as are covered by a Bond acceptable to Owner indemnifying Owner against any such Liens, security interest or encumbrances); and (3) all Work covered by this Application for Payment is in accordance with the Contract Documents and is not defective.

By:	Date:

1. ORIGINAL CONTRACT PRICE ..... $_____
2. Net change by Change Orders ..... $_____
3. CURRENT CONTRACT PRICE (Line 1 ± 2) ..... $_____
4. TOTAL COMPLETED AND STORED TO DATE
   (Column F on Progress Estimate) ..... $_____
5. RETAINAGE:
   a. _____ % x $_____ Work Completed ..... $_____
   b. _____ % x $_____ Stored Material ..... $_____
   c. Total Retainage (Line 5a + Line 5b) ..... $_____
6. AMOUNT ELIGIBLE TO DATE (Line 4 - Line 5c) ..... $_____
7. LESS PREVIOUS PAYMENTS (Line 6 from prior Application) ..... $_____
8. AMOUNT DUE THIS APPLICATION ..... $_____
9. BALANCE TO FINISH, PLUS RETAINAGE
   (Column G on Progress Estimate + Line 5 above) ..... $_____

Payment of: $_____ _____
(Line 8 or other - attach explanation of other amount)

is recommended by: _____ _____
(Engineer) (Date)

Payment of: $_____
(Line 8 or other - attach explanation of other amount)

is approved by: _____ _____

(Owner)

(Date)

Approved by:

Funding Agency (if applicable)

(Date)

Progress Estimate **Contractor's Application**

For (contract):					Application Number:			
Application Period:					Application Date:			
A		B	Work Completed		E	F		G
Item Specification Section No.	Description	Scheduled Value	C From Previous Application (C + D)	D This Period	Materials Presently Stored (not in C or D)	Total Completed and Stored to Date (C + D + E)	% (F) B	Balance to Finish (B - F)
	Totals							

Progress Estimate **Contractor's Application**

For (contract):					Application Number:			
Application Period:					Application Date:			
A		B	Work Completed		E	F		G
Item Specification Section No.	Description	Scheduled Value	C From Previous Application (C + D)	D This Period	Materials Presently Stored (not in C or D)	Total Completed and Stored to Date (C + D + E)	% (F) B	Balance to Finish (B - F)
	Totals							

Progress Estimate **Contractor's Application**

For (contract):					Application Number:		
Application Period:					Application Date:		
A		B	Work Completed		E	F	G
Item Specification Section No.	Description	Scheduled Value	C From Previous Application (C + D)	D This Period	Materials Presently Stored (not in C or D)	Total Completed and Stored to Date (C + D + E)	% (F) B	Balance to Finish (B - F)
	Totals							

5.2.5 Field Order Form

No. _____

Date of Issuance: _____ Effective Date: _____

Project: Southwest Area Elevated Tower and Water Line	**Owner:** City of Wauchula	**Owner's Contract No.:**
Contract:		**Date of Contract:**
Contractor:		**Engineer's Project No.:** 10371.03

Attention:
You are hereby directed to promptly execute this Field Order for minor changes in the Work without changes in Contract Price or Contract Times. If you consider that a change in Contract Price or Contract Times is required, please notify the Engineer immediately and before proceeding with this Work.

Reference: _____ _____
(Specification Section(s)) (Drawing(s) / Detail(s))

Description:

Attachments:

Engineer:	Date:
Receipt Acknowledged by (Contractor):	Date:

Copy to Owner

5.2.6 Notice of Award

Dated _____

Project: Southwest Area Elevated Tower and Water Line	**Owner:** City of Wauchula	**Owner's Contract No.:**
Contract:		**Date of Contract:**
Contractor:		**Engineer's Project No.:** 10371.03

Proposer:

Proposer's Address: (send Certified Mail, Return Receipt Requested)

You are notified that your Proposal dated _____for the above Contract has been considered. You are the Successful Proposer and are awarded a Contract for Water System Main Line Connections.

The Contract Price of your Contract is _____

_____ copies of each of the proposed Contract Documents (except Drawings) accompany this Notice of Award.

3 _____ sets of the Drawings will be delivered separately or otherwise made available to you immediately.

You must comply with the following conditions precedent within five (5) days of the date you receive this Notice of Award.

1. Deliver to the Owner fully executed counterparts of the Contract Documents.
2. Deliver with the executed Contract Documents the Contract Security [Bonds].
3. Other conditions precedent:

_____

_____

_____

Failure to comply with these conditions within the time specified will entitle Owner to consider you in default, annul this Notice of Award and declare your Bid security forfeited.

Within ten days after you comply with the above conditions, Owner will return to you one fully executed counterpart of the Contract Documents.

City of Wauchula
Owner

By: _____
Authorized Signature

_____
Title

Copy to Engineer

5.2.7 Notice to Proceed

Dated _____

Project: Southwest Area Elevated Tower and Water Line	**Owner:** City of Wauchula	**Owner's Contract No.:**
Contract:		**Date of Contract:**
Contractor:		**Engineer's Project No.:** 10371.03

Contractor:

Contractor's Address: (send Certified Mail, Return Receipt Requested)

You are notified that the Contract Times under the above contract will commence to run on _____. On or before that date, you are to start performing your obligations under the Contract Documents. The date of Substantial completion is _____ and the date of readiness for final payment is _____ _____ [(or) the number of days to achieve Substantial Completion is _____ and the number of days to achieve readiness for final payment is_____].

Before you may start any Work at the Site, you and Owner must each deliver to the other (with copies to Engineer and other identified additional insureds) certificates of insurance which each is required to purchase and maintain in accordance with the Contract Documents.

Also, before you may start any Work at the Site, you must [add other requirements]:

_____

_____

_____

_____ _____

Contractor Owner

Received by:_____ Given By: _____

Authorized Signature

_____ _____

Title Title

_____ _____

Date Date

Copy to Engineer

5.2.8 Payment Bond

Any singular reference to Contractor, Surety, Owner, or other party shall be considered plural where applicable.

CONTRACTOR (Name and Address):

SURETY (Name and Address of Principal Place of Business):

OWNER (Name and Address):

CONTRACT
Date:
Amount:
Description (Name and Location):

BOND
Bond Number:
Date (Not earlier than Contract Date):
Amount:
Modifications to this Bond Form:

Surety and Contractor, intending to be legally bound hereby, subject to the terms printed on the reverse side hereof, do each cause this Payment Bond to be duly executed on its behalf by its authorized officer, agent, or representative.

CONTRACTOR AS PRINCIPAL
Company:

Signature: _____(Seal)
Name and Title:

(Space is provided below for signatures of additional parties, if required.)

SURETY

_____(Seal)
Surety's Name and Corporate Seal

By: _____
Signature and Title
(Attach Power of Attorney)

Attest: _____
Signature and Title

CONTRACTOR AS PRINCIPAL SURETY
Company:
Signature: _____(Seal)
Name and Title:

_____(Seal)
Surety's Name and Corporate Seal

By: _____
Signature and Title
(Attach Power of Attorney)

Attest: _____
Signature and Title:

Originally prepared through the joint efforts of the Surety Association of America, Engineers Joint Contract Documents Committee, the Associated General Contractors of America, the American Institute of Architects, the American Subcontractors Association, and the Associated Specialty Contractors.

1. Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to Owner to pay for labor, materials, and equipment furnished by Claimants for use in the performance of the Contract, which is incorporated herein by reference.

2. With respect to Owner, this obligation shall be null and void if Contractor:
   2.1. Promptly makes payment, directly or indirectly, for all sums due Claimants, and

   2.2. Defends, indemnifies, and holds harmless Owner from all claims, demands, liens, or suits alleging non-payment by Contractor by any person or entity who furnished labor, materials, or equipment for use in the performance of the Contract, provided Owner has promptly notified Contractor and Surety (at the addresses described in Paragraph 12) of any claims, demands, liens, or suits and tendered defense of such claims, demands, liens, or suits to Contractor and Surety, and provided there is no Owner Default.

3. With respect to Claimants, this obligation shall be null and void if Contractor promptly makes payment, directly or indirectly, for all sums due.

4. Surety shall have no obligation to Claimants under this Bond until:

   4.1. Claimants who are employed by or have a direct contract with Contractor have given notice to Surety (at the addresses described in Paragraph 12) and sent a copy, or notice thereof, to Owner, stating that a claim is being made under this Bond and, with substantial accuracy, the amount of the claim.

   4.2. Claimants who do not have a direct contract with Contractor:

      1. Have furnished written notice to Contractor and sent a copy, or notice thereof, to Owner, within 90 days after having last performed labor or last furnished materials or equipment included in the claim stating, with substantial accuracy, the amount of the claim and the name of the party to whom the materials or equipment were furnished or supplied, or for whom the labor was done or performed; and

      2. Have either received a rejection in whole or in part from Contractor, or not received within 30 days of furnishing the above notice any communication from Contractor by which Contractor had indicated the claim will be paid directly or indirectly; and

      3. Not having been paid within the above 30 days, have sent a written notice to Surety and sent a copy, or notice thereof, to Owner, stating that a claim is being made under this Bond and enclosing a copy of the previous written notice furnished to Contractor.

5. If a notice by a Claimant required by Paragraph 4 is provided by Owner to Contractor or to Surety, that is sufficient compliance.

6. When a Claimant has satisfied the conditions of Paragraph 4, the Surety shall promptly and at Surety's expense take the following actions:

   6.1. Send an answer to that Claimant, with a copy to Owner, within 45 days after receipt of the claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed.

   6.2. Pay or arrange for payment of any undisputed amounts.

7. Surety's total obligation shall not exceed the amount of this Bond, and the amount of this Bond shall be credited for any payments made in good faith by Surety.

8. Amounts owed by Owner to Contractor under the Contract shall be used for the performance of the Contract and to satisfy claims, if any, under any performance bond. By Contractor furnishing and Owner accepting this Bond, they agree that all funds earned by Contractor in the performance of the Contract are dedicated to satisfy obligations of Contractor and Surety under this Bond, subject to Owner's priority to use the funds for the completion of the Work.

9. Surety shall not be liable to Owner, Claimants, or others for obligations of Contractor that are unrelated to the Contract. Owner shall not be liable for payment of any costs or expenses of any Claimant under this Bond, and shall have under this Bond no obligations to make payments to, give notices on behalf of, or otherwise have obligations to Claimants under this Bond.

10. Surety hereby waives notice of any change, including changes of time, to the Contract or to related Subcontracts, purchase orders and other obligations.

11. No suit or action shall be commenced by a Claimant under this Bond other than in a court of competent jurisdiction in the location in which the Work or part of the Work is located or after the expiration of one year from the date (1) on which the Claimant gave the notice required by Paragraph 4.1 or Paragraph 4.2.3, or (2) on which the last labor or service was performed by anyone or the last materials or equipment were furnished by anyone under the Construction Contract, whichever of (1) or (2) first occurs. If the provisions of this paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.

12. Notice to Surety, Owner, or Contractor shall be mailed or delivered to the addresses shown on the signature page. Actual receipt of notice by Surety, Owner, or Contractor, however accomplished, shall be sufficient compliance as of the date received at the address shown on the signature page.

13. When this Bond has been furnished to comply with a statutory requirement in the location where the Contract was to be performed, any provision in this Bond conflicting with said statutory requirement shall be deemed deleted herefrom and provisions conforming to such statutory requirement shall be deemed incorporated herein. The intent is that this Bond shall be construed as a statutory Bond and not as a common law bond.

14. Upon request of any person or entity appearing to be a potential beneficiary of this Bond, Contractor shall promptly furnish a copy of this Bond or shall permit a copy to be made.

15. DEFINITIONS

   15.1. Claimant: An individual or entity having a direct contract with Contractor, or with a first-tier subcontractor of Contractor, to furnish labor, materials, or equipment for use in the performance of the Contract. The intent of this Bond shall be to include without limitation in the terms "labor, materials or equipment" that part of water, gas, power, light, heat, oil, gasoline, telephone service, or rental equipment used in the Contract, architectural and engineering services required for performance of the Work of Contractor and Contractor's Subcontractors, and all other items for which a mechanic's lien may be asserted in the jurisdiction where the labor, materials, or equipment were furnished.

   15.2. Contract: The agreement between Owner and Contractor identified on the signature page, including all Contract Documents and changes thereto.

   15.3. Owner Default: Failure of Owner, which has neither been remedied nor waived, to pay Contractor as required by the Contract or to perform and complete or comply with the other terms thereof.

FOR INFORMATION ONLY (*Name, Address and Telephone)*
Surety Agency or Broker:
Owner's Representative (*Engineer or Other Party*):

Originally prepared through the joint efforts of the Surety Association of America, Engineers Joint Contract Documents Committee, the Associated General Contractors of America, the American Institute of Architects, the American Subcontractors Association, and the Associated Specialty Contractors.

5.2.9 Performance Bond

Any singular reference to Contractor, Surety, Owner, or other party shall be considered plural where applicable.

CONTRACTOR (*Name and Address*):

SURETY (*Name, and Address of Principal Place of Business*):

OWNER (*Name and Address*):

CONTRACT
Effective Date of Agreement:
Amount:
Description (*Name and Location*):

BOND
Bond Number:
Date (*Not earlier than Effective Date of Agreement*):
Amount:
Modifications to this Bond Form:

Surety and Contractor, intending to be legally bound hereby, subject to the terms set forth below, do each cause this Performance Bond to be duly executed by an authorized officer, agent, or representative.

CONTRACTOR AS PRINCIPAL	SURETY
_____(Seal)	_____(Seal)
Contractor's Name and Corporate Seal	Surety's Name and Corporate Seal
By: _____	By: _____
Signature	Signature (Attach Power of Attorney)
_____	_____
Print Name	Print Name
_____	_____
Title	Title
Attest: _____	Attest: _____
Signature	Signature
_____	_____
Title	Title

Note: Provide execution by additional parties, such as joint venturers, if necessary.

Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to Owner for the performance of the Contract, which is incorporated herein by reference.

1. If Contractor performs the Contract, Surety and Contractor have no obligation under this Bond, except to participate in conferences as provided in Paragraph 2.1.

2. If there is no Owner Default, Surety's obligation under this Bond shall arise after:
   2.1 Owner has notified Contractor and Surety, at the addresses described in Paragraph 9 below, that Owner is considering declaring a Contractor Default and has requested and attempted to arrange a conference with Contractor and Surety to be held not later than 15 days after receipt of such notice to discuss methods of performing the Contract. If Owner, Contractor, and Surety agree, Contractor shall be allowed a reasonable time to perform the Contract, but such an agreement shall not waive Owner's right, if any, subsequently to declare a Contractor Default; and
   2.2 Owner has declared a Contractor Default and formally terminated Contractor's right to complete the Contract. Such Contractor Default shall not be declared earlier than 20 days after Contractor and Surety have received notice as provided in Paragraph 2.1; and
   2.3 Owner has agreed to pay the Balance of the Contract Price to:
      1. Surety in accordance with the terms of the Contract; or
      2. Another contractor selected pursuant to Paragraph 3.3 to perform the Contract.

3. When Owner has satisfied the conditions of Paragraph 2, Surety shall promptly, and at Surety's expense, take one of the following actions:
   3.1 Arrange for Contractor, with consent of Owner, to perform and complete the Contract; or
   3.2 Undertake to perform and complete the Contract itself, through its agents or through independent contractors; or
   3.3 Obtain bids or negotiated proposals from qualified contractors acceptable to Owner for a contract for performance and completion of the Contract, arrange for a contract to be prepared for execution by Owner and contractor selected with Owner's concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Contract, and pay to Owner the amount of damages as described in Paragraph 5 in excess of the Balance of the Contract Price incurred by Owner resulting from Contractor Default; or
   3.4 Waive its right to perform and complete, arrange for completion, or obtain a new contractor, and with reasonable promptness under the circumstances:
      1. After investigation, determine the amount for which it may be liable to Owner and, as soon as practicable after the amount is determined, tender payment therefor to Owner; or
      2. Deny liability in whole or in part and notify Owner citing reasons therefor.

4. If Surety does not proceed as provided in Paragraph 3 with reasonable promptness, Surety shall be deemed to be in default on this Bond 15 days after receipt of an additional written notice from Owner to Surety demanding that Surety perform its obligations under this Bond, and Owner shall be entitled to enforce any remedy available to Owner. If Surety proceeds as provided in Paragraph 3.4, and Owner refuses the payment tendered or Surety has denied liability, in whole or in part, without further notice Owner shall be entitled to enforce any remedy available to Owner.

5. After Owner has terminated Contractor's right to complete the Contract, and if Surety elects to act under Paragraph 3.1, 3.2, or 3.3 above, then the responsibilities of Surety to Owner shall not be greater than those of Contractor under the Contract, and the responsibilities of Owner to Surety shall not be greater than those of Owner under the Contract. To the limit of the amount of this Bond, but subject to commitment by Owner of the Balance of the Contract Price to mitigation of costs and damages on the Contract, Surety is obligated without duplication for:

5.1 The responsibilities of Contractor for correction of defective Work and completion of the Contract;
5.2 Additional legal, design professional, and delay costs resulting from Contractor's Default, and resulting from the actions of or failure to act of Surety under Paragraph 3; and
5.3 Liquidated damages, or if no liquidated damages are specified in the Contract, actual damages caused by delayed performance or non-performance of Contractor.

6. Surety shall not be liable to Owner or others for obligations of Contractor that are unrelated to the Contract, and the Balance of the Contract Price shall not be reduced or set off on account of any such unrelated obligations. No right of action shall accrue on this Bond to any person or entity other than Owner or its heirs, executors, administrators, or successors.

7. Surety hereby waives notice of any change, including changes of time, to Contract or to related subcontracts, purchase orders, and other obligations.

8. Any proceeding, legal or equitable, under this Bond may be instituted in any court of competent jurisdiction in the location in which the Work or part of the Work is located, and shall be instituted within two years after Contractor Default or within two years after Contractor ceased working or within two years after Surety refuses or fails to perform its obligations under this Bond, whichever occurs first. If the provisions of this paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.

9. Notice to Surety, Owner, or Contractor shall be mailed or delivered to the address shown on the signature page.

10. When this Bond has been furnished to comply with a statutory requirement in the location where the Contract was to be performed, any provision in this Bond conflicting with said statutory requirement shall be deemed deleted herefrom and provisions conforming to such statutory requirement shall be deemed incorporated herein. The intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

11. Definitions.
11.1 Balance of the Contract Price: The total amount payable by Owner to Contractor under the Contract after all proper adjustments have been made, including allowance to Contractor of any amounts received or to be received by Owner in settlement of insurance or other Claims for damages to which Contractor is entitled, reduced by all valid and proper payments made to or on behalf of Contractor under the Contract.
11.2 Contract: The agreement between Owner and Contractor identified on the signature page, including all Contract Documents and changes thereto.
11.3 Contractor Default: Failure of Contractor, which has neither been remedied nor waived, to perform or otherwise to comply with the terms of the Contract.
11.4 Owner Default: Failure of Owner, which has neither been remedied nor waived, to pay Contractor as required by the Contract or to perform and complete or otherwise comply with the other terms thereof.

FOR INFORMATION ONLY (*Name, Address and Telephone)*
Surety Agency or Broker:
Owner's Representative (*Engineer or Other Party*):

5.2.10 Work Change Directive Form

No._____

Date of Issuance: _____ Effective Date: _____

Project: Southwest Area Elevated Tower and Water Line	**Owner:** City of Wauchula	**Owner's Contract No.:**
Contract:		**Date of Contract:**
Contractor:		**Engineer's Project No.:** 10371.03

You are directed to proceed promptly with the following change(s):

Item No.	Description

Attachments (list documents supporting change):

_____

_____

Purpose for Work Change Directive:

- □ Authorization for Work described herein to proceed on the basis of Cost of the Work due to:
  - □ Nonagreement on pricing of proposed change.
  - □ Necessity to expedite Work described herein prior to agreeing to changes on Contract Price and Contract Time

Estimated change in Contract Price and Contract Times:

Contract Price $_____ (increase/decrease) Contract Time _____ (increase/decrease) days

If the change involves an increase, the estimated amounts are not to be exceeded without further authorization.

Recommended for Approval by Engineer:	Date:
Authorized for Owner by:	Date:
Accepted for Contractor by:	Date:
Approved by Funding Agency (if applicable):	Date:

DIVISION 6:
TECHNICAL SPECIFICATIONS

SECTION 01 10 00
SUMMARY

PART 1 - GENERAL

1.01 SECTION INCLUDES

A. Work by Contractor

B. Work by Owner

C. Owner Furnished Items

D. Contractor use of Site

E. Work sequence

1.02 WORK BY CONTRACTOR

A. The work of this contract consists of constructing:
   1. 150,000-gallon elevated water storage tank, piping, civil and electrical site work, and restoration.
   2. Approximately 25,000 linear feet of 6-inch and 12-inch diameter water main, including horizontal directional drills, miscellaneous fittings, valves, hydrants, testing, and restoration.

B. Contractor will be responsible for complying with NPDES Stormwater Program. Contractor shall prepare a Stormwater Pollution Prevention Plan (SWPPP) and filing a Notice of Intent (NOI) to use a general permit with FDEP. The NOI must be filed 48 hours prior to the start of construction activity. Contractor shall be responsible for maintaining erosion control and other devices to comply with the SWPPP. The Contractor shall provide two (2) copies of the NOI and SWPPP to the Owner and Engineer prior to the start of construction.

1.03 WORK BY OWNER

A. Owner will obtain permits listed in the Supplementary Conditions that affect the installation of the Work.

B. Copies of all permits obtained by the Owner are provided. All provisions and restrictions in these permits shall be part of the Contract requirements.

1.04 OWNER FURNISHED ITEMS

A. Contractor shall supply all materials. There are no Owner furnished items.

1.05 CONTRACTOR USE OF SITE

A. Nothing in this Contract shall imply that the Contractor shall have exclusive use of roadways on public and private lands of the execution to the work.

B. All other lands including temporary construction easements deemed necessary by the Contractor for construction operations, temporary facilities, the storage of materials and equipment and other facilities required for the execution of the work shall be obtained by the Contractor.

C. Limit use of site for work and for construction operations.

D. Schedule work activities at the site during daylight hours on regular week days, except as described in Section 1.02(B) above. Any scheduled work activities outside this period shall be approved in writing by both the Owner and the Engineer.

E. Contractor shall not limit ingress and egress of adjacent public and private properties.

1.06 WORK SEQUENCE

A. Contractor shall follow a sequence of work activity that minimizes disturbances of the public and adjacent property owners and minimizes damage to components of the new work.

B. Where installation of pipes is allowed by open cutting trenches in streets and driveways, the Contractor shall maintain alternative ingress and egress at all times of all such open-cut activities. Affected parties shall be notified at least 48 hours in advanced.

PART 2 - PRODUCTS

Not Used

PART 3 - EXECUTION

Not Used

END OF SECTION

SECTION 01 20 00
PRICE AND PAYMENT PROCEDURES

PART 1 - GENERAL

1.01 SECTION INCLUDES

A. Procedure for Measurement.

B. Incidental Work.

D. Unit Prices.

E. Substitution Procedures.

F. Schedule of Values.

G. Application for Progress Payments.

H. Contract Modification Procedures.

I. Application for Final Payment.

1.02 RELATED SECTIONS

A. Section 01 30 00 – Submittal Procedures.

1.03 PROCEDURE FOR MEASUREMENT

A. For lump sum items, payment shall be made based on the lump sum prices set forth in the Bid Form based on level of completed Work as determined by the accepted Schedule of Values.

B. For field measure unit-price items, payment shall be based on the actual amount of Work accepted and for the actual amount of materials in place, as shown by the final measurements.

1. All units of measurement shall be standard United States convention as applied by the specific items of work by tradition and as interpreted by the Engineer.

2. After the Work is completed and before final payment is made, the Engineer will make final field measurements to determine the quantities of various items of Work accepted as the basis for final settlement.

1.04 INCIDENTAL WORK

A. Incidental work items are items, specifically identified or not, that are an integral part of the completed project as required under the Contract Documents for which separate payment is not made. These items may include but are not limited to the following:

1. Pre-construction photographs and videos.
2. Schedules, bonds, insurance, shop drawings, warranties, and other submittals required.
3. Permits not obtained by the Owner.
4. Project identification signs.
5. Pigging, pressure testing, and bacteriological clearance of water mains.
6. Temporary service taps.
7. Density testing.
8. Horizontal and vertical survey control and construction staking.
9. Clearing, grubbing, stripping, and disposal of vegetation.
10. Providing additional fill material.
11. Transport and disposal of excess material and debris.
12. Storage and laydown yard.
13. Containment, clean-up, and disposal of water from existing mains and water used for pipeline and tank flushing and testing.
14. Dust and erosion control, including the cost of implementing and maintaining controls in accordance with the Stormwater Pollution Prevent Plan for the project.
15. Utility crossings and minor relocations unless payment is otherwise made.
16. Materials, labor, and equipment necessary to protect the structural integrity of existing paved roadways. Incidental damage to paved roadways, including damage to the existing subbase, base, and/or asphalt concrete pavement, shall be restored/repaired at the Contractor's sole expense to the satisfaction of the Owner.
17. Materials, labor, and equipment necessary to protect the integrity and operation of existing utilities. Any damage to existing utilities shall be repaired/replaced at the Contractor's sole expense to the satisfaction of the Owner.
18. Temporary utility service.
19. Temporary barriers and fences for the protection and security of the work site and adjoining properties.
20. Final or temporary right-of-way restoration. All materials and Work for right-of-way restoration shall be in accordance with FDOT Standard Specifications for Road and Bridge Construction, latest edition.
21. Repair and restoration of property, including the removal and replacement of stabilized roadway and driveways, guard rails, curbs, drainage structures and pipes, signs, traffic loop detectors, pavement markings, utility poles, mailboxes, landscaping and irrigation, and other items impacted by construction.

22. On-going and final cleanup.
23. Project record documentation, including the provision of "as-built" drawings certified by a Registered Professional Land Surveyor.
24. All other items required for completion of the Contract.

1.06 UNIT PRICES

A. ITEM 1 – PVC Water Main
1. Water main shall be paid at the Contract Unit Price per linear foot of installed pipe. The measurement shall be made in place, along the center line of the pipe.
2. Contract Unit Price shall be full compensation for: excavation; bedding; backfill; furnishing and installing pipe and joints (including restrained joints); furnishing and installing all gaskets, nuts, bolts, and hardware necessary for the various pipe joints (including restrained joints and pipe restraints); furnishing and installing temporary caps; dewatering; compaction of backfill to required density; furnishing and installing tracer wire and marker tape; flushing and cleaning; testing; erosion control; final clean-up; coordination with other utilities; and all other incidental items of Work not paid for under other items.

B. ITEM 2 – HDPE Water Main (Horizontal Directional Drill)
1. HDPE Horizontal directional drill (HDD) shall be paid for at the Contract Unit Price per linear foot of HDD installed.
2. The Contract Lump Sum Price shall be payment in full for furnishing all labor, materials, tools, and equipment required for all clearing, excavating, directional drilling of pilot holes, pull-back of piping, drilling mud pumping/recirculation systems, pipe, testing, backfilling, restoration, erosion control, final cleanup, and all other incidental items of Work not paid for under other items. The Contractor shall include in the Contract Unit Price shall account for any allowance for horizontal deflection, vertical deflection, and all wastage.

C. ITEM 3 – 2" Temporary Poly Service Lines
1. 2" Temporary Poly Service Lines shall be paid at the Contract Unit Price per linear foot installed.
2. Contract Unit Price shall be full compensation for: excavation; dewatering, bedding, backfill, furnishing and installing the fittings, saddles, and/or adapter to connect the existing water service assembly to the potable water main; furnishing and installing polyethylene tubing, including installation under existing driveways, furnishing and installing all fittings, adapters, couplings, sleeves, valves, gaskets and appurtenances necessary for the temporary service line; and all other incidental items of Work not paid for under other items. Temporary service line, fittings, valves, and appurtenances removal and disposal after

the water main construction is complete shall be included in the unit price. No separate payment will be made.

D. ITEM 4 – Fittings

1. Fittings shall be paid at the Contract Unit Price for each fitting installed of the size and type identified.
2. The Contract Unit Price shall be payment in full for all excavation, furnishing and installing the fitting with joint restraint, testing, backfilling, restoration, erosion control, final cleanup, and all other incidental items of Work not paid for under other items.

E. ITEM 5 – Valves and Appurtenances

1. Valves and Appurtenances shall be paid at the Contract Unit Price for each valve installed of the size and type identified.
2. The Contract Unit Price shall be payment in full for all excavation, furnishing and installing the valve, valve box, and joint restraint, testing, dewatering, backfilling, restoration, erosion control, final cleanup, and all other incidental items of Work not paid for under other items.

F. ITEM 6 – Air Release Valve and Enclosure

1. Air Release Valve and Enclosure shall be paid at the Contract Unit Price for each air release valve installed.
2. The Contract Unit Price shall be payment in full for all material, labor, equipment, and tools required to install and air release valve. The Contract Unit Price shall also include, but is not limited to, air release valve, enclosure, tapping saddles, all necessary adapters, couplings, excavation and installation of joint restraints on existing pipe, hardware, dewatering, backfilling, final grading, coordination with other utilities, and all other incidental items of Work not paid for under other items.

G. ITEM 7 – Tapping Sleeve and Valve (Wet Tap)

1. Tapping Sleeve and Valve shall be paid for at the Contract Unit Price for each wet tap connection installed.
2. The Contract Unit Price shall be payment in full for all excavation, furnishing and installing the tapping sleeve and valve. The Contract Unit Price shall also include, but is not limited to, tapping sleeve, tapping valve, valve operators, valve extension stems and valve boxes, all necessary adapters, couplings, and appurtenances to make the final connection, joint restraints, hardware, dewatering, excavation bedding, backfilling, final grading, and all other incidental items of Work not paid for under other items. All final connections to existing water lines shall be made by the Contractor after the Contractor has received clearance from the Florida Department of Environmental Protection for the new water line.

H. ITEM 8 – Fire Hydrant Assembly

1. Fire Hydrant Assemblies shall be paid for at the Contract Unit Price for each fire hydrant assembly installed.
2. The Contract Unit Price shall be payment in full for all excavation, furnishing and installing the hydrant lead, hydrant, sample tap, isolation valve, valve box, and joint restraint, testing, backfilling, restoration, erosion control, final cleanup, and all other incidental items of Work not paid for under other items.

I. ITEM 9 – Concrete Driveway Restoration

1. Concrete Driveway Restoration shall be paid for at the Contract Unit Price per square yard of driveway disturbed within the limits of construction.
2. The Contract Unit Price shall be full compensation for removing and disposing of the existing pavement/driveway material, furnishing and installing all material to restore the pavement/driveway to original depth and width, repair of all areas disturbed, repair/replacement of mitered end sections and cross drains, and all other incidental items of Work not paid for under other items. All materials and Work shall be in accordance with FDOT Standard Specifications for Road and Bridge Construction, latest edition. All areas of this item disturbed due to the Contractor's operations which are not within the limits of construction as shown on the Drawings shall also be satisfactorily repaired at no additional cost to the Owner.

J. ITEM 10 – Unpaved Drive Restoration

1. Unpaved Drive Restoration shall be paid for at the Contract Unit Price per linear foot of unpaved drive disturbed within the limits of construction.
2. The Contract Unit Price shall be full compensation for removing and disposing of the existing unpaved drive material, furnishing and installing all material to restore the unpaved driveway to original depth and width, repair of all areas disturbed, and all other incidental items of Work not paid for under other items. All materials and Work shall be in accordance with FDOT Standard Specifications for Road and Bridge Construction, latest edition. All areas of this item disturbed due to the Contractor's operations which are not within the limits of construction as shown on the Drawings shall also be satisfactorily repaired at no additional cost to the Owner.

K. ITEM 11 – Asphalt Pavement/Driveway Restoration

1. Asphalt Pavement/Driveway Restoration shall be paid at the Contract Unit Price per square yard. Measurement shall be based on a 10′ wide cut (5′ to either side of pipe centerline). Repairs outside of the 10′ wide cut shall be at the contractor's expense. Repairs shall be measured to the nearest square yard.

2. The Contract Unit Price shall be full compensation for removing and disposing of the existing asphalt and base material, furnishing and installing all material to restore the pavement/driveway to original depth and width, repair of all areas disturbed; furnishing and installing any necessary sealer or tack coat; furnishing and installing pavement markings to match existing; and all other incidental items of Work not paid for under other items. All materials and Work shall be in accordance with FDOT Standard Specifications for Road and Bridge Construction, latest edition. All areas of this item disturbed due to the Contractor's operations which are not within the limits of construction as shown on the Drawings shall also be satisfactorily repaired at no additional cost to the Owner.

L. ITEM 12 – Asphalt Mill and Resurface

1. Asphalt Mill and Resurface shall be paid for at the Contract Unit Price per square yard of over the milled work area. Milled roadways shall be resurfaced to provide the same width, length and grade as the original roadway. Any pavement striping or markings that are removed in the milling process shall be replaced in kind at the original location after resurfacing.
2. The Contract Unit Price shall be full compensation for milling asphalt roadways, removal and disposal of the milled asphalt material as directed by the City, furnishing materials and labor to broom and tack coat the milled surface, furnishing and installing asphalt paving materials, furnishing and installing striping and markings, and all other incidental items of Work not paid for under other items. Demobilization from the work area to provide for material procurement or material cure time shall not constitute grounds for a claim for remobilization. All materials and Work shall be in accordance with FDOT Standard Specifications for Road and Bridge Construction, latest edition. All areas of this item disturbed due to the Contractor's operations which are not within the limits of construction as shown on the Drawings shall also be satisfactorily repaired at no additional cost to the Owner.

M. ITEM 13 – Elevated Water Utility Storage Tank

1. Elevated Water Utility Storage Tank shall be paid at the Contract Lump Sum Price.
2. Contract Lump Sum Price shall be full compensation for: 150,000 gallon elevated tank in accordance with the Plans and Specifications, including all excavation, site work, concrete foundation, tank accessories, piping, fencing, electrical, instrumentation, SCADA, testing, painting, disinfection, cleanup and all other incidental items of Work not paid for under other items. The compensation shall also include the services of the geotechnical engineer required for verification of the bearing stratum for the foundation.

N. ITEM 14 – Seeding and Mulch

1. Seeding and mulch shall be paid at the Contract Unit Price per linear feet of grass disturbed measured along the center line of pipe.
2. The Contract Unit Price shall be full compensation for supplying and installing seed and mulch, ground preparation, fertilizer, equipment, water, and all other incidental items of Work not paid for under other items. Seed type shall match the existing predominate type. All areas of this item disturbed due to the Contractor's operations which are not within the area described above shall be satisfactorily restored at no additional cost to the Owner

O. ITEM 15 – Sodding

1. Sodding shall be paid at the Contract Unit Price per linear feet of grass disturbed measured along the center line of pipe.
2. The Contract Unit Price shall be full compensation for supplying and installing sod, ground preparation, fill, fertilizer, equipment, water, and all other incidental items of Work not paid for under other items. Sod type shall match the existing predominate type. All areas of this item disturbed due to the Contractor's operations which are not within the area described above shall be satisfactorily restored at no additional cost to the Owner

P. ITEM 16 – Water Service Lines (Short & Long Side)

1. Water Services (Short & Long Side) shall be paid for at the Contract Unit Price for each water service installed of the size and type identified.
2. The Contract Unit Price shall be payment in full for all excavation, tapping saddle and valve, roadway crossing (either jack and bore or HDD), piping, shutoff valve, valve boxes, fittings, corp and curb stops, joint restraints, testing, backfilling, restoration, mulching, seeding, sodding, erosion control, final cleanup, and all other incidental items of Work not paid for under other items.

Q. ITEM 17 – Removal & Disposal of 2" Water Service Line

1. Grouting/Removal of Existing Main shall be paid at the Contract Unit Price per linear foot for each type removed. The measurement shall be made in place along the centerline of the pipe to the nearest linear foot.
2. The Contract Unit Price shall be full compensation for excavation, dewatering, backfill, removal, transport, and disposal cost, and all other incidental items of Work not paid for under other items. The existing water main shall not be grouted or removed until all final connections to the new main have been made by the Contractor. The Contractor shall be responsible for coordinating the Work with the Owner to minimize disruptions to the existing system.

S. ITEM 18 – Maintenance of Traffic

1. Maintenance of Traffic shall be paid at the Contract Lump Sum Price. Payment for Maintenance of Traffic shall be made in proportion to the pipe installed in road rights-of-way.
2. The Contract Lump Sum Price shall be full compensation for all traffic control including plan preparation and submittal, signs and barricades, flaggers, uniformed officers and all other incidental items of Work not paid for under other items. The nature and extent shall be as described in the Florida DOT Standard Specifications for Road and Bridge Construction.

T. ITEM 19 – Trench Safety Measures

1. Trench Safety Measures shall be paid at the Contract Lump Sum Price. Payment for Trench Safety Measures shall be made in proportion to the quantity of pipe installed.
2. The Contract Lump Sum Price shall be full compensation for all trench boxes, sheeting, bracing and shoring in excavations and all other incidental items of Work not paid for under other items. The nature and extent shall be as described in the Florida Trench Safety Act and OSHA Standard 29 CFR Part 1926.650 Subpart P.

U. ITEM 20– Prevention, Control, and Abatement of Erosion/Water Pollution

1. Prevention, Control, and Abatement of Erosion/Water Pollution shall be paid at the Contract Lump Sum Price.
2. The Contract Lump Sum Price shall be full compensation for all work including labor, materials, and equipment necessary for the prevention, control, and abatement of erosion and water pollution related to the construction of the Work required by the Contract Documents. Work under this item shall also include all regulatory permitting including NPDES NOI for General Permit for Construction Projects and the preparation of the erosion and sediment control plan.

V. ITEM 21 – Public Construction Bond

1. Public Construction Bond shall be paid at the Contract Lump Sum Price. Payment shall be made at the end of the first month.
2. The Contract Lump Sum Price shall be full compensation for the Public Construction Bond as Required for this Bid.

W. ITEM 22 – Mobilization

1. Mobilization shall be paid at the Contract Lump Sum Price. Payment for Mobilization shall be made as follows: 30% of the item shall be complete at the end of the first month (or pay period) of the contact time; 60% of the item shall be complete when 30% of the original contract is complete; 100% of the item shall be complete when 60% of the original contract is complete.

2. The Contract Lump Sum Price shall be full compensation for transporting equipment, labor and materials to the site at the beginning of and throughout the Project and removing said items at the end of the

1.08 SUBSTITUTION PROCEDURES

A. Engineer will consider requests for Substitutions only within 30 days after date established in Notice to Proceed following procedure required in Section 01 60 00 – Product Requirements.

1.09 SCHEDULE OF VALUES

A. Submit typed schedule on Application for Payment form (Section 00 62 76) or equivalent Contractor's standard form or electronic media printout acceptable to the Owner and Engineer.

B. Submit final Schedule of Values based on Bid unit prices in duplicate within fifteen (15) days after date of Owner-Contractor Agreement.

C. Include within each line item a direct proportional amount of Contractor's overhead and profit as included in the Bid submittal.

D. Revise schedule to list approved Change Orders with each Application for Payment.

1.10 APPLICATION FOR PROGRESS PAYMENTS

A. Payment Period: Submit at intervals stipulated in the Agreement.

B. Present required information in typewritten form.

C. Form: Section 00 62 76 – Application for Payment Form. Contractor's standard form or electronic media printout will be considered.

D. Execute certification by signature of authorized officer.

E. Use data from approved Schedule of Values. Provide dollar value in each column for each line item for units of work performed and for stored Products.

F. List each authorized Change Order as a separate line item, listing Change Order number and dollar amount as for an original item of Work.

G. Submit three copies of each Application for Payment. Electronic copy shall be acceptable with prior approval by Engineer and Owner.

H. Include the following with the application:
   1. Transmittal letter identifying project and Contractor.
   2. Updated Construction Progress Schedule as specified in Section 01 30 00.
   3. Current construction photographs specified in Section 01 30 00.

I. When Engineer requires substantiating information, submit data justifying dollar amounts in question. Provide one copy of data with cover letter for each copy of submittal. Show application number and date, and line item by number and description.

1.11 CONTRACT MODIFICATION PROCEDURES

A. The Engineer will advise of minor changes in the Work not involving an adjustment to Contract Sum/Price or Contract Time as authorized by EJCDC Article 9.05 by issuing supplemental instructions.

B. The Engineer may issue a Notice of Change which includes a detailed description of a proposed change with supplementary or revised Drawings and specifications, and a change in Contract Time for executing the change. Contractor will prepare and submit an estimate within five (5) days.

C. Stipulated Sum/Price Change Order: Based on Notice of Change and Contractor's fixed price quotation.

D. Unit Price Change Order: For pre-determined unit prices, the Change Order will be executed on a fixed unit price basis. For unit costs or quantities of units of Work which are not pre-determined, execute Work under a Work Directive Change. Changes in Contract Sum/Price or Contract Time will be computed as specified for Time and Material Change Order.

E. Work Directive Change: Engineer may issue a directive, on EJCDC Work Directive Change (Section 00 63 49) signed by the Owner, instructing the Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order. Document will describe changes in the Work, and designate method of determining any change in Contract Sum/Price or Contract Time. Promptly execute the change.

F. Time and Material Change Order: Submit itemized account and supporting data after completion of change, within time limits indicated in the Conditions of the Contract. Engineer will determine the change allowable in Contract Sum/Price and Contract Time as provided in the Contract Documents.

G. Maintain detailed records of Work done on Time and Material basis. Provide full information required for evaluation of proposed changes, and to substantiate costs for changes in the Work.

H. Change Order Forms: EJCDC Change Order (Section 00 63 63).

I. Execution of Change Orders: Engineer will issue Change Orders for signatures of parties as provided in the Conditions of the Contract.

1.12 APPLICATION FOR FINAL PAYMENT

A. Prepare Application for Final Payment as specified for progress payments, identifying total adjusted Contract Sum, previous payments, and sum remaining due.

PART 2 - PRODUCTS

Not Used

PART 3 - EXECUTION

Not Used

END OF SECTION

THIS PAGE INTENTIONALLY LEFT BLANK

SECTION 01 30 00
ADMINISTRATIVE REQUIREMENTS

PART 1 - GENERAL

1.01 SECTION INCLUDES

A. Project Management and Coordination.

B. Construction Progress Documentation.

C. Submittal Procedures.

1.02 PROJECT MANAGEMENT AND COORDINATION

A. Project Coordination
   1. Coordinate scheduling, submittals, and Work of the various Sections of specifications to assure efficient and orderly sequence of installation of interdependent construction elements, with provisions for accommodating items installed later.
   2. Verify that utility requirements characteristics of operating equipment are compatible with utilities. Coordinate work of various Sections having interdependent responsibilities for installing, connection to, and placing in service, such equipment.
   3. Coordinate completion and clean-up of Work of separate Sections in preparation for Substantial Completion and for portions of Work designated for Owner's partial occupancy.
   4. After Owner occupancy of premises, coordinate access to site for correction of defective Work and Work not in accordance with Contract Documents, to minimize disruption of Owner's activities.

B. Preconstruction Conference
   1. Owner will schedule a conference after Notice of Award.
   2. Attendance Required: Owner, Engineer and Contractor.
   3. Agenda:
      a. Execution of Owner-Contractor Agreement.
      b. Submission of executed bonds and insurance certificates.
      c. Distribution of Contract Documents.
      d. Submission of list of Subcontractors, list of products, Schedule of Values, and progress schedule.
      e. Designation of personnel representing the parties in Contract, and the Engineer.

f. Procedures and processing of field decisions, submittals, substitutions, applications for payments, proposal request, Change Orders and Contract closeout procedures.
g. Scheduling.
h. Scheduling activities of geo-technical Engineer.

C. Progress Meetings
1. Attend and participate in meetings throughout progress of the Work at maximum monthly intervals.
2. Attendance Required: Job superintendent, major Subcontractors and suppliers, Owner, Engineer, as appropriate to agenda topics for each meeting.
3. Agenda:
a. Review minutes of previous meetings.
b. Review of Work progress.
c. Field observations, problems, and decisions.
d. Identification of problems which impede planned progress.
e. Review of submittals schedule and status of submittals.
f. Review of off-site fabrication and delivery schedules.
g. Maintenance of progress schedule
h. Corrective measures to regain projected schedules.
i. Planned progress during succeeding Work period.
j. Coordination of projected progress.
k. Maintenance of quality and Work standards.
l. Effect of proposed changes of progress schedule and coordination.
m. Other business relating to Work.
4. Engineer will have the responsibility for preparing the agenda, presiding at the meeting, recording the minutes, and distributing copies to the Owner, Contractor, participants, and those affected by decisions made.

1.03 CONSTRUCTION PROGRESS SCHEDULES

A. Submit network analysis diagram using the critical path method, generally as outlined in Associated General Contractors of America (AGC) publication "The Use of CPM in Construction - A Manual for General Contractors and the Construction Industry

B. Show complete sequence of construction by activity, identifying Work of separate stages and other logically grouped activities. Indicate the early and late start, early and late finish, float dates, and duration.

C. Indicate estimated percentage of completion for each item of Work at each submission.

D. Indicate submittal dates required for shop drawings, product data, samples, and product delivery dates, including those furnished by Owner.

E. Submit initial Progress Schedules in duplicate within 15 days after date of Owner Contractor Agreement. After review by Engineer revise and resubmit as required. Submit revised schedules with each Application for Payment, reflecting changes since previous submittal.

1.04 SUBMITTAL PROCEDURES

A. Procedures.
   1. Deliver submittals to Engineer at Chastain-Skillman / DCCM, 205 E. Orange St, Ste. 110, Lakeland, Florida 33801.
   2. Transmit each item with a transmittal form identifying project, Contractor, subcontractor, major supplier; identify pertinent drawing sheet and detail number, and Specification section number, as appropriate. Submittals shall only be accepted from the Contractor.
   3. Comply with progress schedule for submittals related to Work progress. Submit all Shop Drawings, Product Data, and Samples in a prompt and timely manner so that there will be no delay to Work due to absence of data. Coordinate submittal of related items.
   4. Review Shop Drawings, Product Data and Samples prior to submission. Contractor shall stamp, date and sign each submittal to indicate that the subject matter conforms to the requirements of the Contract Documents.
   5. Determine and verify:
      a. Field measurements.
      b. Field construction criteria.
      c. Catalog numbers and similar data.
      d. Conformance with specifications.
   6. Coordinate each submittal with requirements of the Work and of the Contract Documents.
   7. Notify the Engineer in writing, at time of submission, identifying any deviations in the submittals from requirements of the Contract Documents.
   8. Should any submitted item require modification to any surrounding structure or appurtenance detailed on the drawings, details of the modifications shall also be submitted. The cost of any modifications shall be completed at no additional cost to the Owner.
   9. Begin no fabrication or Work which requires submittals until return of submittals with Engineer review comments.
   10. Provide submittals in a prompt and timely manner so as not to delay the Work. Delays in Work caused by incomplete or incorrect submittals or re-submittals shall not be grounds for time extensions or additional costs to the Owner.

11. After Engineer review of submittal, revise and resubmit as required, identifying changes made since previous submittal.
12. Distribute copies of reviewed submittals to concerned persons. Instruct recipients to promptly report any inability to comply with provisions.
13. Provide reasonable assurance that materials and equipment delivered to worksite conforms to the reviewed shop drawings. Notify the Engineer of any observed deviations from the shop drawings.

B. Shop Drawings.
1. Shop drawings shall be assigned a sequential number for ease in identification. Re-submittals shall retain the assigned number with an alphabetic suffix.
2. Drawings shall be presented in a clear and thorough manner. Details shall be identified by reference to drawing and detail number, and specification section number.
3. Minimum sheet size: 8 1/2" x 11".
4. After review, distribute in accordance with Procedures, above.

C. Product Data
1. Preparation
   a. Clearly mark each copy to identify pertinent products or models.
   b. Show performance characteristics and capacities.
   c. Show dimensions and clearances required.
   d. Show wiring or piping diagrams and controls.
2. Manufacturer's standard schematic drawings and diagrams:
   a. Modify drawings and diagrams to delete information which is not applicable to the Work.
   b. Supplement standard information to provide information specifically applicable to the Work.
3. After review, distribute in accordance with Article on Procedures above.

D. Manufacturer's Instructions
1. When required in individual Specification Section, submit manufacturer's printed instructions for delivery, storage, assembly, installation, start up, adjusting and finishing in quantities specified for product data.
2. Identify conflicts between manufacturer's instructions and Contract Documents.

E. Manufacturer's Certifications
1. When specified in individual specification Sections, submit manufacturer's certificate to Engineer for review.
2. Indicate material or product conforms to or exceeds specified requirements. Submit supporting reference date, affidavits, and certifications as appropriate.

3. Certificates may be recent or previous test results on material or Product, but must be acceptable to Engineer.

F. Samples
   1. Submit samples to illustrate functional and aesthetic characteristics of the Product, with integral parts and attachment devices. Coordinate sample submittals for interfacing Work.
   2. Submit samples of finishes from the full range of manufacturers' standard colors and textures for Engineer's selection.
   3. Include identification on each sample, with full Project information.
   4. Reviewed samples which may be used in the Work are indicated in individual specification sections.

G. Submission Requirements
   1. Electronic Submittals:
      a. Alternatively an electronic submittal may be made for Shop Drawings and Product Data. Submit one (1) PDF to the Engineer via email or other electronic transmission method approved by the Engineer. PDF format shall allow inserting comments into the document.
      b. A PDF transmittal sheet shall be included with the submittal.
      c. Submittals shall include all information required in paragraph 1.04.G.3. of this Section.
   2. Submittals shall contain:
      a. The date of submission.
      b. The Project title and number.
      c. Contract identification.
      d. The names of:
         i. Contractor
         ii. Subcontractor
         iii. Supplier
         iv. Manufacturer
      e. Identification of the product, with the specification section number.
      f. Field dimensions, clearly identified as such.
      g. Relation to adjacent or critical features of the Work or materials.
      h. Applicable standards, such as ASTM or Federal Specification numbers.
      i. Identification of deviations from Contract Documents.
      j. A 4" x 4" blank space for Engineer stamps.
      k. Contractor’s stamp, initialed or signed, certifying to review of submittals, verification of products, field measurements and field construction criteria, and coordination of the information within the submittal with requirements of the Work and of Contract Documents.
   3. Resubmissions shall contain:
      a. Date of previous submission.
      b. Revised drawings and data responding to comments of initial review.

c. Identification of other revisions made on shop drawings and reason for revisions.

4. Failure of Contractor to comply with these requirements shall be cause for rejection of any non-complying submittal.

1.05 PHOTO DOCUMENTATION

A. Preconstruction Video Route/Site Survey

1. A video route/site survey is required for all construction areas.
2. All video recording must be made in a digital, continuous running audio-video format. Audio-video recordings to be provided on thumb drive format suitable for play-back on standard computer drives.
3. All video recording shall be done during times of good visibility. No recording shall be done during periods of visible precipitation.
4. All thumb drives shall be properly identified as to location, time, and date. Locations must be identified with respect to street name and station numbering.
5. Two copies of the thumb drives shall be provided to the Engineer/Owner prior to construction.

PART 2 - PRODUCTS

Not Used

PART 3 - EXECUTION

Not Used

END OF SECTION

SECTION 01 40 00
QUALITY REQUIREMENTS

PART 1 - GENERAL

1.01 SECTION INCLUDES

A. Regulatory Requirements

B. References

C. Quality Assurance

D. Quality Control

1.02 RELATED SECTIONS

A. Section 01 30 00 – Administrative Requirements: Submission of Manufacturers' Instructions and Certificates.

B. Section 01 45 29 – Testing Laboratory Services.

C. Section 01 60 00 – Product Requirements: Requirements for material and product quality.

1.03 REGULATORY REQUIREMENTS

A. The permits listed in the Supplementary Conditions have been or will be obtained by the Owner for the construction of the Work.

B. Contractor shall comply with all provisions and restrictions in these permits.

1.04 REFERENCES

A. Conform to reference standard by date of issue current on date of Contract Documents.

B. Obtain copies of standards when required by Contract Documents.

C. Should specified reference standards conflict with Contract Documents, request clarification for Engineer before proceeding.

D. The contractual relationship of the parties to the Contract shall not be altered from the Contract Documents by mention or inference otherwise in any reference document.

1.05 QUALITY ASSURANCE

A. Manufacturers' Field Services and Reports
   1. When specified in individual specification Sections, require material or Product suppliers or manufacturers to provide qualified staff personnel to observe site conditions, conditions of surfaces and installation, quality of workmanship, start-up of equipment, test, adjust, and balance of equipment as applicable, and to initiate instructions when necessary.
   2. Individuals to report observations and site decisions or instructions given to applicators or installers that are supplemental or contrary to manufacturers' written instructions.
   3. Submit report in duplicate within 30 days of observation to Engineer for review.

B. Field Samples
   1. Install field samples at the site as required by individual specifications Sections for review.
   2. Acceptable samples represent a quality level for the Work.
   3. Where field sample is specified in individual Sections to be removed, clear area after field sample has been accepted by Engineer.

C. Mock-Up
   1. Assemble and erect specified items, with specified attachment and anchorage devices, flashings, seals, and finishes.
   2. Where mock-up is specified in individual Sections to be removed, clear area after mock-up has been accepted by Engineer.

1.06 QUALITY CONTROL

A. Field Quality Control Procedures
   1. Monitor quality control over suppliers, manufacturers, Products, services, site conditions, and workmanship, to produce Work of specified quality.
   2. Comply fully with manufacturers' instructions, including each step-in sequence.
   3. Should manufacturers' instructions conflict with Contract Documents, request written clarification from Engineer before proceeding.
   4. Comply with specified standards as a minimum quality for the Work except when more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
   5. Perform Work by persons qualified to produce workmanship of specified quality.

6. Secure Products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion, or disfigurement.

B. Testing and Inspection Services
   1. Contractor shall appoint, employ, and pay for services of an independent testing laboratory to perform specified inspection and testing.
   2. If allowance is specified in Section 01 20 00, Contractor shall pay for services from Allowance.
   3. Employment of testing laboratory shall in no way relieve Contractor of obligation to perform Work in accordance with requirements of Contract Documents.
   4. Retesting required because of non-conformance to specified requirements shall be performed by the same independent firm on instructions by Engineer. Payment for retesting will be charged to Contractor by deducting inspection or testing charges from the Contract Sum/Price.

PART 2 - PRODUCTS

Not Used

PART 3 - EXECUTION

Not Used

END OF SECTION

THIS PAGE INTENTIONALLY LEFT BLANK

SECTION 01 45 29
TESTING LABORATORY SERVICES

PART 1 - GENERAL

1.01 SECTION INCLUDES

A. Selection and payment.

B. Contractor submittals.

C. Laboratory responsibilities.

D. Laboratory reports.

E. Limits on testing laboratory authority.

F. Contractor responsibilities.

G. Schedule of inspections and tests.

1.02 RELATED SECTIONS

A. Section 01 20 00 – Price and Payment Procedures: Testing allowance, if specified.

B. Section 01 30 00 - Submittals: Manufacturer's certificates.

C. Section 01 40 00 – Quality Requirements: Testing and Inspection Services.

D. Section 01 70 00 - Contract Closeout: Project Record Documents.

E. Individual Specification Sections: Inspections and tests required, and standards for testing.

1.03 REFERENCES

A. ANSI/ASTM D3740 - Practice for Evaluation for Agencies Engaged in Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction.

B. ANSI/ASTM E329 - Recommended Practice for Inspection and Testing Agencies for Concrete, Steel, and Bituminous Materials as Used in Construction.

1.04 SELECTION AND PAYMENT

A. Refer to Section 01 40 00 – Quality Requirements for testing laboratory selection and payment.

1.05 QUALITY ASSURANCE

A. Comply with requirements of ANSI/ASTM E329 and ANSI/ASTM D3740.

B. Laboratory: Authorized to operate in state in which project is located.

C. Laboratory Staff: Maintain a full-time registered Engineer on staff to review services.

D. Testing Equipment: Calibrated at reasonable intervals with devices of an accuracy traceable to either National Bureau of Standards (NBS) Standards or accepted values of natural physical constants.

1.06 CONTRACTOR SUBMITTALS

A. Prior to start of Work, submit testing laboratory name, address, and telephone number, and names of full-time registered Engineer and responsible officer.

B. Submit copy of report of laboratory facilities inspection made by Materials Reference Laboratory of National Bureau of Standards (NBS) during most recent tour of inspection, with memorandum of remedies of any deficiencies reported by the inspection.

1.07 LABORATORY RESPONSIBILITIES

A. Test samples of mixes submitted by Contractor.

B. Provide qualified personnel at site. Cooperate with Engineer and Contractor in performance of services.

C. Perform specified inspection, sampling, and testing of Products in accordance with specified standards.

D. Ascertain compliance of materials and mixes with requirements of Contract Documents.

E. Promptly notify Engineer and Contractor with copies to Owner of observed irregularities or non-conformance of Work or Products.

F. Perform additional inspections and tests required by Engineer.

G. Attend pre-construction conferences and progress meetings.

1.08 LABORATORY REPORTS

A. After each inspection and test, promptly submit two copies of laboratory report to Engineer, to Owner and to Contractor.

B. Include:
1. Date issued
2. Project title and number
3. Name of inspector
4. Date and time of sampling or inspection
5. Identification of product and Specifications Section
6. Location in the Project
7. Type of inspection or test
8. Date of test
9. Results of tests
10. Conformance with Contract Documents.

C. When requested by Engineer, provide interpretation of test results.

1.09 LIMITS ON TESTING LABORATORY AUTHORITY

A. Laboratory may not release, revoke, alter, or enlarge on requirements of Contract Documents.

B. Laboratory may not approve or accept any portion of the Work.

C. Laboratory may not assume any duties of Contractor.

D. Laboratory has no authority to stop the Work.

1.10 CONTRACTOR RESPONSIBILITIES

A. Deliver to laboratory at designated location, adequate samples of materials proposed to be used which require testing, along with proposed mix designs.

B. Cooperate with laboratory personnel and provide access to the Work.

C. Provide incidental labor and facilities to provide access to Work to be tested, to obtain and handle samples at the site or at source of products to be tested, to facilitate tests and inspections, storage and curing of test samples.

D. Notify Engineer and laboratory 24 hours prior to expected time for operations requiring inspection and testing services.

E. G

F. g

PART 2 - PRODUCTS

Not Used

PART 3 - EXECUTION

Not Used

END OF SECTION

SECTION 01 50 00
TEMPORARY FACILITIES AND CONTROLS

PART 1 - GENERAL

1.01 REQUIREMENTS INCLUDED

A. Temporary Utilities

B. Temporary Controls

C. Construction Facilities

1.02 RELATED REQUIREMENTS

A. Section 01 70 00 – Execution and Closeout Procedures: Final Cleaning.

1.03 ELECTRICITY, LIGHTING

A. Provide and pay for power service required from utility source.

B. Provide separate metering and pay for cost of energy used.

C. Provide power outlets for construction operations, with branch wiring and distribution boxes located to allow service by means of construction type power cords.

D. Provide main service disconnect and over-current protection at convenient location.

1.04 TEMPORARY VENTILATION

A. Ventilate enclosed areas to assist cure of materials, to dissipate humidity, and to prevent accumulation of dust, fumes, vapors, or gases.

1.05 TEMPORARY WATER SERVICE

A. Connect to the City system with temporary meter.

B. Owner will pay cost of water used. Exercise measures to conserve water.

C. Extend branch piping with outlets located so water is available by hoses with threaded connections.

1.06 SANITARY FACILITIES

A. Provide and maintain required facilities and enclosures.

B. Existing sanitary facilities within buildings may not be utilized.

1.07 BARRIERS

A. Provide as required to prevent public entry to construction areas and to protect existing facilities and adjacent properties from damage from construction operations.

B. Provide barriers around trees and plants designated to remain. Protect against vehicular traffic, stored materials, dumping, chemically injurious materials and puddling or continuous running water.

1.08 PROTECTION OF INSTALLED WORK

A. Protect installed Work and provide special protection where specified in individual specification Sections.

B. Provide temporary and removable protection for installed products. Control activity in immediate work area to minimize damage.

C. Provide protective coverings at walls, projections, jambs, sills, and soffits of openings.

D. Protect finished floors, stairs, and other surfaces from traffic, dirt, wear, damage, or movement of heavy objects, by protecting with durable sheet materials.

E. Prohibit traffic and storage upon waterproofed or roofed surfaces. If traffic or activity is necessary, obtain recommendations for protection from waterproofing or roofing material manufacturer.

F. Prohibit traffic from landscaped areas.

1.09 SECURITY

A. Provide security program and facilities to protect Work, existing facilities and Owner’s operations from unauthorized entry, vandalism, and theft. Coordinate with Owner's security program.

1.10 WATER CONTROL

A. Grade site to drain. Maintain excavations free of water. Provide, operate and maintain pumping equipment as required to comply with Specifications.

B. Comply with County, City, Water Management District, and Department of Environmental Protection standards for runoff water quality.

1.11 PARKING

A. Arrange for temporary surface parking areas to accommodate construction personnel.

B. When site space is not adequate, provide additional off-site parking.

1.12 CLEANING DURING CONSTRUCTION

A. Maintain areas free of waste materials, debris, and rubbish. Maintain site in a clean and orderly condition.

B. Remove waste materials, debris and rubbish from site periodically and dispose of off-site.

1.13 REMOVAL

A. Remove temporary above ground or buried utilities, materials, equipment, services and construction prior to Substantial Completion inspection.

B. Clean and repair damage caused by installation or use of temporary facilities.

C. Restore existing facilities used during construction to original condition. Restore permanent facilities used during construction to specified condition.

PART 2 - PRODUCTS

Not Used

PART 3 - EXECUTION

Not Used

END OF SECTION

SECTION 01 57 13
TEMPORARY EROSION AND SEDIMENT CONTROL

PART 1 - GENERAL

1.01 WORK INCLUDED

A. Provision of temporary storm water pollution prevention measures.

1.02 REFERENCES

A. The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

B. ASTM D 4439 – Geosynthetics

C. ASTM D 4491 - Water Permeability of Geotextiles by Permittivity

D. ASTM D 4533 - Trapezoid Tearing Strength of Geotextiles

E. ASTM D 4632 - Grab Breaking Load and Elongation of Geotextiles

F. ASTM D 4751 - Determining Apparent Opening Size of a Geotextile

G. ASTM D 4873 - Identification, Storage, and Handling of Geosynthetic Rolls and Samples

1.03 GENERAL

A. The Contractor shall implement the storm water pollution prevention measures specified in this section in a manner which will meet the requirements of the National Pollution Discharge Elimination System (NPDES) permit.

1.04 SUBMITTALS

A. The following shall be submitted in accordance with Section 01 30 00 – Administrative Requirements:
   1. Mill Certificate or Affidavit: Certificate attesting that the Contractor has met all specified requirements.

1.05 EROSION AND SEDIMENT CONTROLS

A. Stabilization Practices: The stabilization practices to be implemented shall include temporary seeding, mulching, protection of trees, preservation of mature vegetation, etc. On his daily CQC Report, the Contractor shall record the dates when the major grading activities occur, (e.g., clearing and grubbing, excavation, and grading); when construction activities temporarily or permanently cease on a portion of the site; and when stabilization practices are initiated.

Except as provided in paragraphs UNSUITABLE CONDITIONS and NO ACTIVITY FOR LESS THAN 21 DAYS below, stabilization practices shall be initiated as soon as practicable, but no more than 14 days, in any portion of the site where construction activities have temporarily or permanently ceased.

1. Unsuitable Conditions: Where the initiation of stabilization measures by the fourteenth day after construction activity temporarily or permanently ceases is precluded by unsuitable conditions caused by the weather, stabilization practices shall be initiated as soon as practicable after conditions become suitable.
2. No Activity for Less Than 21 Days: Where construction activity will resume on a portion of the site within 21 days from when activities ceased (e.g., the total time period that construction activity is temporarily ceased is less than 21 days), then stabilization practices do not have to be initiated on that portion of the site by the fourteenth day after construction activity temporarily ceased.

B. Structural Practices: Structural practices shall be implemented to divert flows from exposed soils, temporarily store flows, or otherwise limit runoff and the discharge of pollutants from exposed areas of the site. Structural practices shall be implemented in a timely manner during the construction process to minimize erosion and sediment runoff. Structural practices shall include the following devices. Location and details of installation and construction are shown on the drawings.

1. Silt Fences: The Contractor shall provide silt fences as a temporary structural practice to minimize erosion and sediment runoff. Silt fences shall be properly installed to effectively retain sediment immediately after completing each phase of work where erosion would occur in the form of sheet and rill erosion (e.g. clearing and grubbing, excavation, embankment, and grading). Silt fences shall be installed in the locations indicated on the drawings. Final removal of silt fence barriers shall be upon approval by the Engineer.
2. Straw Bales: The Contractor shall provide bales of straw as a temporary structural practice to minimize erosion and sediment runoff. Bales shall be properly placed to effectively retain sediment immediately after completing each phase of work (e.g., clearing and grubbing, excavation, embankment,

and grading) in each independent runoff area (e.g., after clearing and grubbing in a area between a ridge and drain, bales shall be placed as work progresses, bales shall be removed/replaced/relocated as needed for work to progress in the drainage area). Areas where straw bales are to be used are shown on the drawings. Final removal of straw bale barriers shall be upon approval by the Engineer. Rows of bales of straw shall be provided as follows:

a. Along the downhill perimeter edge of all areas disturbed.
b. Along the top of the slope or top bank of drainage ditches, channels, swales, etc. that traverse disturbed areas.
c. Along the toe of all cut slopes and fill slopes of the construction areas.
d. Perpendicular to the flow in the bottom of existing drainage ditches, channels, swales, etc. that traverse disturbed areas or carry runoff from disturbed areas. Rows shall be spaced as shown on the drawings.
e. Perpendicular to the flow in the bottom of new drainage ditches, channels, and swales. Rows shall be spaced as shown on the drawings.

3. Floating Turbidity Barrier: The Contractor shall provide floating turbidity barriers as a temporary structural practice to minimize sediment runoff. Turbidity barriers shall be properly installed to effectively retain sediment prior to starting any work where erosion may occur and sediment discharged. Turbidity barriers shall be installed in the locations indicated on the drawings. Final removal of barriers shall be upon approval by the Engineer.

PART 2 - PRODUCTS

2.01 COMPONENTS FOR SILT FENCES

A. Filter Fabric: The geotextile shall comply with the requirements of ASTM D 4439, and shall consist of polymeric filaments which are formed into a stable network such that filaments retain their relative positions. The filament shall consist of a long-chain synthetic polymer composed of at least 85 percent by weight of ester, propylene, or amide, and shall contain stabilizers and/or inhibitors added to the base plastic to make the filaments resistance to deterioration due to ultraviolet and heat exposure. Synthetic filter fabric shall contain ultraviolet ray inhibitors and stabilizers to provide a minimum of six months of expected usable construction life at a temperature range of -18 to 49 degrees C (0 to 120 degrees F). The filter fabric shall meet the following requirements:

FILTER FABRIC FOR SILT SCREEN FENCE

PHYSICAL PROPERTY	TEST PROCEDURE	STRENGTH REQUIREMENT
Grab Tensile	ASTM D 4632	100 lbs. min.
Elongation (%)		30 % max.
Trapezoid Tear	ASTM D 4533	55 lbs. min.
Permittivity	ASTM D 4491	0.2 sec-1
AOS (U.S. Std Sieve)	ASTM D 4751	20-100

B. Silt Fence Stakes and Posts: The Contractor may use either wooden stakes or steel posts for fence construction. Wooden stakes utilized for silt fence construction shall have a minimum cross section of 2 inches by 4 inches for softwoods or 2 inches by 2 inches for hardwoods, and shall have a minimum length of 3 feet. Steel posts (standard "U" or "T" section) utilized for silt fence construction, shall have a minimum mass of 1.33 pounds per linear foot and a minimum length of 3 feet.

C. Mill Certificate or Affidavit: A mill certificate or affidavit shall be provided attesting that the fabric and factory seams meet chemical, physical, and manufacturing requirements specified above. The mill certificate or affidavit shall specify the actual Minimum Average Roll Values and shall identify the fabric supplied by roll identification numbers. The Contractor shall submit a mill certificate or affidavit signed by a legally authorized official from the company manufacturing the filter fabric.

D. Identification Storage and Handling: Filter fabric shall be identified, stored and handled in accordance with ASTM D 4873.

2.02 COMPONENTS FOR STRAW BALES

A. The straw in the bales shall be stalks from oats, wheat, rye, barley, rice, or from grasses such as bahia, bermuda, etc., furnished in air dry condition. The bales shall have a standard cross section of 14 inches by 18 inches. All bales shall be either wire-bound or string-tied. The Contractor may use either wooden stakes or steel posts to secure the straw bales to the ground. Wooden stakes utilized for this purpose, shall have a minimum dimension of 2 inches x 1 inch in cross section and shall have a minimum length of 4 feet. Steel posts (standard "U" or "T" section) utilized for securing straw bales, shall have a minimum weight of 1.33 pounds per linear foot and a minimum length of 3 feet.

2.03 COMPONENTS FOR FLOATING TURBIDITY BARRIERS

A. Floating Turbidity Barriers shall be either Type I or Type II, in accordance with FDOT standard specifications and details.

PART 3 - EXECUTION

3.01 INSTALLATION OF SILT FENCES

A. Silt fences shall extend a minimum of 15 inches above the ground surface and shall not exceed 18 inches above the ground surface. Filter fabric shall be from a continuous roll cut to the length of the barrier to avoid the use of joints. When joints are unavoidable, filter fabric shall be spliced together at a support post, with a minimum 6 inch overlap, and securely sealed. A trench shall be excavated approximately 4 inches wide and 8 inches deep on the upslope side of the location of the silt fence. The 4-inch by 8-inch trench shall be backfilled and the soil compacted over the filter fabric. Silt fences shall be removed upon approval by the Engineer.

3.02 INSTALLATION OF STRAW BALES

A. Straw bales shall be placed in a single row, lengthwise on the contour, with ends of adjacent bales tightly abutting one another. Straw bales shall be installed so that bindings are oriented around the sides rather than along the tops and bottoms of the bales in order to prevent deterioration of the bindings. The barrier shall be entrenched and backfilled. A trench shall be excavated the width of a bale and the length of the proposed barrier to a minimum depth of 4 inches. After the bales are staked and chinked (gaps filled by wedging with straw), the excavated soil shall be backfilled against the barrier. Backfill soil shall conform to the ground level on the downhill side. Loose straw shall be scattered over the area immediately uphill from a straw bale barrier to increase barrier efficiency. Each bale shall be securely anchored by at least two stakes driven through the bale. The first stake or steel post in each bale shall be driven toward the previously laid bale to force the bales together. Stakes or steel pickets shall be driven 18 inches deep into the ground to securely anchor the bales.

3.03 INSTALLATION OF FLOATING BARRIER

A. Floating barriers shall be installed in accordance with FDOT Standard Details and manufacturer's instructions.

3.04 MAINTENANCE

A. The Contractor shall maintain the temporary and permanent vegetation, erosion and sediment control measures, and other protective measures in good and effective operating condition by performing routine inspections to determine condition and effectiveness, by restoration of destroyed vegetative cover, and by

repair of erosion and sediment control measures and other protective measures. The following procedures shall be followed to maintain the protective measures.

1. Silt Fence Maintenance: Silt fences shall be inspected in accordance with paragraph INSPECTIONS, below. Any required repairs shall be made promptly. Close attention shall be paid to the repair of damaged silt fence resulting from end runs and undercutting. Should the fabric on a silt fence decompose or become ineffective, and the barrier is still necessary, the fabric shall be replaced promptly. Sediment deposits shall be removed when deposits reach one-third of the height of the barrier. When a silt fence is no longer required, it shall be removed. The immediate area occupied by the fence and any sediment deposits shall be shaped to an acceptable grade. The areas disturbed by this shaping shall be sodded.
2. Straw Bale Maintenance: Straw bale barriers shall be inspected in accordance with paragraph INSPECTIONS, below. Close attention shall be paid to the repair of damaged bales, end runs and undercutting beneath bales. Necessary repairs to barriers or replacement of bales shall be accomplished promptly. Sediment deposits shall be removed when deposits reach one-half of the height of the barrier. Bale rows used to retain sediment shall be turned uphill at each end of each row. When a straw bale barrier is no longer required, it shall be removed. The immediate area occupied by the bales and any sediment deposits shall be shaped to an acceptable grade. The areas disturbed by this shaping shall be sodded.

3.05 INSPECTIONS

A. General: The Contractor shall inspect disturbed areas of the construction site, areas used for storage of materials that are exposed to precipitation that have not been finally stabilized, stabilization practices, structural practices, other controls, and area where vehicles exit the site at least once every seven (7) calendar days and within 24 hours of the end of any storm that produces 0.5 inches or more rainfall at the site. Where sites have been finally stabilized, such inspection shall be conducted at least once every month.

B. Inspections Details: Disturbed areas and areas used for material storage that are exposed to precipitation shall be inspected for evidence of, or the potential for, pollutants entering the drainage system. Erosion and sediment control measures identified in the Storm Water Pollution Prevention Plan shall be observed to ensure that they are operating correctly. Discharge locations or points shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters. Locations where vehicles exit the site shall be inspected for evidence of offsite sediment tracking.

C. Inspection Reports: For each inspection conducted, the Contractor shall prepare a report summarizing the scope of the inspection, name(s) and qualifications of

personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the Storm Water Pollution Prevention Plan, maintenance performed, and actions taken. The report shall be furnished to the Engineer within 24 hours of the inspection as a part of the Contractor's daily CQC REPORT. A copy of the inspection report shall be maintained on the job site.

END OF SECTION

THIS PAGE INTENTIONALLY LEFT BLANK

SECTION 01 60 00
PRODUCT REQUIREMENTS

PART 1 - GENERAL

1.01 SECTION INCLUDES

A. General product requirements

B. Transportation and handling

C. Storage and protection

D. Product option requirements

E. Substitution limitations and procedures

F. Spare parts and maintenance materials

1.02 RELATED SECTIONS

A. Section 01 30 00 – Administrative Requirements: Product submittals.

B. Section 01 40 00 – Quality Requirements: Product quality monitoring.

PART 2 - PRODUCTS

2.01 NEW PRODUCTS

A. Provide new products unless specifically required or permitted by the Contract Documents.

2.02 PRODUCT OPTIONS

A. Products Specified by Reference Standards or by Description Only: Use any product meeting those standards or description.

B. Products Specified by Naming One or More Manufacturers: Use a product of one of the manufacturers named and meeting specifications, no options or substitutions allowed.

C. Products Specified by Naming One or More Manufacturers with a Provision for Substitutions: Submit a request for substitution for any manufacturer not named.

2.03 SPARE PARTS AND MAINTENANCE PRODUCTS

A. Provide spare parts, maintenance, and extra products of types and in quantities specified in individual specification sections.

B. Deliver to Project site; obtain receipt prior to final payment.

PART 3 - EXECUTION

3.01 SUBSTITUTION PROCEDURES

A. Instructions to Bidders specify time restrictions for submitting requests for substitutions during the bidding period.

B. Contractor shall submit request for substitutions within 30 days of the Effective Date of the Agreement.

C. Document each request with complete data substantiating compliance of proposed substitution with Contract Documents.

D. A request for substitution constitutes a representation that the Contractor:
   1. Has investigated proposed product and determined that it meets or exceeds the quality level of the specified product.
   2. Will provide the same warranty for the substitution as for the specified product.
   3. Will coordinate installation and make changes to other work which may be required for the Work to be complete with no additional cost to Owner.
   4. Waives claims for additional costs or time extension which may subsequently become apparent.
   5. Will reimburse Owner and Engineer for review or redesign services associated with re-approval by authorities in accordance with Paragraph 6.05E of the Standard General Conditions.
   6. Understand that the Owner may, at his sole discretion, select any substitution proposed.

E. E. Substitutions will not be considered when they are indicated or implied on shop drawing or product data submittals, without separate written request, or when acceptance will require revision to the Contract Documents.

F. Substitution Submittal Procedure:
   1. Submit three copies of request for substitution on the Substitution Request Form for consideration. Limit each request to one proposed substitution. All proposed Substitutions, except in the case where products become unavailable, must be listed.

2. Submit shop drawings, product data, certified test results, equipment technical details, performance details, and other information attesting to the proposed product equivalence as required by the Owner and/or as described in the Contract Documents.
3. Submit data documenting the amount to be deducted from the Contract Price. The deduction must be an installed price and include any changes in Work necessary to accommodate the substitution in accordance with Paragraph 6.05A of the Standard General Conditions.
4. The Engineer will notify Contractor in writing of decision to accept or reject request. If rejected, Contractor must use supplier/equipment identified in the Bid. If accepted, a Change Order will be issued reducing the Contract Price by the deductive amount stated on the Substitution Request Form.

3.02 TRANSPORTATION AND HANDLING

A. Coordinate schedule of product delivery to designated prepared areas in order to minimize site storage time and potential damage to stored materials.

B. Transport and handle products in accordance with manufacturer's instructions.

C. Transport materials in covered trucks to prevent contamination of product and littering of surrounding areas.

D. Promptly inspect shipments to assure that products comply with requirements, quantities are correct, and products are undamaged.

E. Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement, or damage.

F. Arrange for the return of packing materials, such as wood pallets, where economically feasible.

3.03 STORAGE AND PROTECTION

A. Store and protect products in accordance with manufacturer's instructions, with seals and labels intact and legible. Store sensitive products in weather-tight, climate-controlled enclosures.

B. For exterior storage of fabricated products, place on sloped supports, above ground.

C. Provide off-site storage and protection when site does not permit on-site storage or protection.

D. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to avoid condensation.

E. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement, or damage.

F. Arrange storage of products to permit access for inspection. Periodically inspect to assure products are undamaged and are maintained under specified conditions.

G. If requested by Engineer, provide documentation that stored materials are maintained in accordance with manufacturers' short and long-term storage procedures.

END OF SECTION

SUBSTITUTION REQUEST FORM

(After the Bidding/Negotiating Phase)

Project: _____ Substitution Request Number: _____

_____ From: _____

To: _____ Date: _____

_____ A/E Project Number: _____

Re: _____ Contract For: _____

Specification _____ Title: _____ Description: _____

Section: _____ Page: _____ Article/Paragraph: _____

Proposed Substitution: _____

Manufacturer: _____ Address: _____ Phone: _____

Trade Name: _____ Model No.: _____

Installer: _____ Address: _____ Phone: _____

History: ☐ New product ☐ 1-4 years old ☐ 5-10 years old ☐ More than 10 years old

Differences between proposed substitution and specified product: _____

_____

_____

☐ Point-by-point comparative data attached — REQUIRED BY A/E

Reason for not providing specified item: _____

_____

Similar Installation:

Project: _____ Architect: _____

Address: _____ Owner: _____

_____ Date Installed: _____

Proposed substitution affects other parts of Work: ☐ No ☐ Yes; explain _____

_____

Savings to Owner for accepting substitution: _____ ($ _____).

Proposed substitution changes Contract Time: ☐ No ☐ Yes [Add] [Deduct] _____ days.

Supporting Data Attached: ☐ Drawings ☐ Product Data ☐ Samples ☐ Tests ☐ Reports ☐ _____

© Copyright 2007, Construction Specifications Institute,
110 South Union Street, Stuie 100, Alexandria, VA 22314

Form Version: June 2004

SUBSTITUTION REQUEST FORM

(After the Bidding/Negotiating Phase — Continued)

The Undersigned certifies:

- Proposed substitution has been fully investigated and determined to be equal or superior in all respects to specified product.
- Same warranty will be furnished for proposed substitution as for specified product.
- Same maintenance service and source of replacement parts, as applicable, is available.
- Proposed substitution will have no adverse effect on other trades and will not affect or delay progress schedule.
- Cost data as stated above is complete. Claims for additional costs related to accepted substitution which may subsequently become apparent are to be waived.
- Proposed substitution does not affect dimensions and functional clearances.
- Payment will be made for changes to building design, including A/E design, detailing, and construction costs caused by the substitution.
- Coordination, installation, and changes in the Work as necessary for accepted substitution will be complete in all respects.

Submitted by: _____

Signed by: _____

Firm: _____

Address: _____

_____

Telephone: _____

Attachments: ☐

A/E's REVIEW AND ACTION

☐ Substitution approved.
☐ Substitution approved as noted.
☐ Substitution rejected - Use specified materials.
☐ Substitution Request received too late - Use specified materials.

Signed by: _____ Date: _____

Additional Comments: ☐ Contractor ☐ Subcontractor ☐ Supplier ☐ Manufacturer ☐ A/E
☐ Other:

© Copyright 2007, Construction Specifications Institute,
110 South Union Street, Stuie 100, Alexandria, VA 22314

SECTION 01 70 00
EXECUTION AND CLOSEOUT REQUIREMENTS

PART 1 - GENERAL

1.01 RELATED SECTIONS

A. Section 01 30 00 - Administrative Requirements: Submittals procedures.

B. Section 01 40 00 - Quality Requirements: Testing and inspection procedures.

1.02 SUBMITTALS

A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.

B. Survey work: Submit name, address, and telephone number of registered Professional Land Surveyor before starting survey work.
   1. On request, submit documentation verifying accuracy of survey work.
   2. Submit a copy of site drawing signed by the Land Surveyor, that the elevations and locations of the work are in conformance with Contract Documents.

C. Cutting and Patching: Submit written request in advance of cutting or alteration which affects:
   1. Structural integrity of any element of Project.
   2. Integrity of weather exposed or moisture resistant element.
   3. Efficiency, maintenance, or safety of any operational element.
   4. Visual qualities of sight exposed elements.
   5. Work of Owner or separate Contractor.

1.03 QUALIFICATIONS

A. For survey work, employ a land surveyor registered in the State in which the Project is located and acceptable to Engineer. Submit evidence of Surveyor's Errors and Omissions insurance coverage in the form of an Insurance Certificate.

1.04 PROJECT CONDITIONS

A. Grade site to drain. Maintain excavations free of water. Provide, operate, and maintain pumping equipment.

B. Protect site from puddling or running water. Provide water barriers as required to protect site from soil erosion.

1.05 COORDINATION

A. Coordinate scheduling, submittals, and work of the various sections of the Project Manual to ensure efficient and orderly sequence of installation of interdependent construction elements, with provisions for accommodating items installed later.

B. Notify affected utility companies and comply with their requirements.

C. Verify that utility requirements and characteristics of new operating equipment are compatible with building utilities. Coordinate work of various sections having interdependent responsibilities for installing, connecting to, and placing in service, such equipment.

D. Coordinate space requirements, supports, and installation of mechanical and electrical work which are indicated diagrammatically on Drawings. Follow routing shown for pipes, ducts, and conduit, as closely as practicable; place runs parallel with lines of building. Utilize spaces efficiently to maximize accessibility for other installations, for maintenance, and for repairs.

E. In finished areas except as otherwise indicated, conceal pipes, ducts, and wiring within the construction. Coordinate locations of fixtures and outlets with finish elements.

F. Coordinate completion and clean-up of work of separate sections.

G. After Owner occupancy of premises, coordinate access to site for correction of defective work and work not in accordance with Contract Documents, to minimize disruption of Owner's activities.

PART 2 - PRODUCTS

2.01 PATCHING MATERIALS

A. New Materials: As specified in product sections; match existing products and work for patching and extending work.

B. Type and Quality of Existing Products: Determine by inspecting and testing products where necessary, referring to existing work as a standard.

C. Product Substitution: For any proposed change in materials, submit request for substitution described in Section 01 60 00.

PART 3 - EXECUTION

3.01 EXAMINATION

A. Verify that existing site conditions and substrate surfaces are acceptable for subsequent work. Start of work means acceptance of existing conditions.

B. Verify that existing substrate is capable of structural support or attachment of new work being applied or attached.

C. Examine and verify specific conditions described in individual specification sections.

D. Take field measurements before confirming product orders or beginning fabrication, to minimize waste due to over-ordering or misfabrication.

E. Verify that utility services are available, of the correct characteristics, and in the correct locations.

F. Prior to Cutting: Examine existing conditions prior to commencing work, including elements subject to damage or movement during cutting and patching. After uncovering existing work, assess conditions affecting performance of work. Beginning of cutting or patching means acceptance of existing conditions.

3.02 PREPARATION

A. Clean substrate surfaces prior to applying next material or substance.

B. Seal cracks or openings of substrate prior to applying next material or substance.

C. Apply manufacturer required or recommended substrate primer, sealer, or conditioner prior to applying any new material or substance in contact or bond.

3.03 LAYING OUT THE WORK

A. Verify locations of survey control points prior to starting work.

B. Promptly notify Engineer of any discrepancies discovered.

C. Contractor shall locate and protect survey control and reference points.

D. Control datum for survey is that indicated on Drawings.

E. Protect survey control points prior to starting site work; preserve permanent reference points during construction.

F. Promptly report to Engineer the loss or destruction of any reference point or relocation required because of changes in grades or other reasons.

G. Replace dislocated survey control points based on original survey control. Make no changes without prior written notice to Engineer.

H. Utilize recognized engineering survey practices.

I. Establish elevations, lines and levels. Locate and lay out by instrumentation and similar appropriate means.

J. Periodically verify layouts by same means.

K. Maintain a complete and accurate log of control and survey work as it progresses.

3.04 GENERAL INSTALLATION REQUIREMENTS

A. Install products as specified in individual sections, in accordance with manufacturer's instructions and recommendations, and so as to avoid waste due to necessity for replacement.

B. Make vertical elements plumb and horizontal elements level, unless otherwise indicated.

3.05 CUTTING AND PATCHING

A. Execute cutting and patching including excavation and fill to complete the work, to uncover work in order to install improperly sequenced work, to remove and replace defective or non-conforming work, to remove samples of installed work for testing when requested, to provide openings in the work for penetration of mechanical and electrical work, to execute patching to complement adjacent work, and to fit products together to integrate with other work.

B. Execute work by methods to avoid damage to other work, and which will provide appropriate surfaces to receive patching and finishing.

C. Employ original installer to perform cutting for weather exposed and moisture resistant elements, and sight exposed surfaces.

D. Cut rigid materials using masonry saw or core drill. Pneumatic tools not allowed without prior approval.

E. Restore work with new products in accordance with requirements of Contract Documents.

3.06 PROGRESS CLEANING

A. Maintain areas free of waste materials, debris, and rubbish. Maintain site in a clean and orderly condition.

B. Remove debris and rubbish from pipe chases, plenums, attics, crawl spaces, and other closed or remote spaces, prior to enclosing the space.

C. Collect and remove waste materials, debris, and trash/rubbish from site periodically and dispose off-site; do not burn or bury.

3.07 PROTECTION OF INSTALLED WORK

A. Protect installed work from damage by construction operations.

B. Provide special protection where specified in individual specification sections.

C. Provide temporary and removable protection for installed products. Control activity in immediate work area to prevent damage.

D. Remove protective coverings when no longer needed; reuse or recycle plastic coverings if possible.

3.08 FINAL CLEANING

A. Use cleaning materials that are non-hazardous.

B. Clean site, sweep paved areas, rake clean landscaped surfaces.

C. Remove waste, surplus materials, trash/rubbish, and construction facilities from the site; dispose of in legal manner; do not burn or bury.

3.09 CLOSEOUT PROCEDURES

A. Make submittals that are required by governing or other authorities.

B. Notify Engineer when work is considered ready for Substantial Completion.

C. Submit written certification that Contract Documents have been reviewed, work has been inspected, and that work is complete in accordance with Contract Documents and ready for Engineer's review.

D. Correct items of work listed in executed Certificates of Substantial Completion and comply with requirements for access to Owner-occupied areas.

E. Notify Engineer when work is considered finally complete.

F. Record Drawings and Shop Drawings:
   1. Legibly mark each item to record actual construction including:
      a. Horizontal and vertical coordinates of underground utilities and appurtenances shall be provided for all fittings, valves, and ends of casings. Coordinates shall be based on the State Plane Coordinate System NAD83, adjustment 2011, Florida West Zone, US Survey feet. Elevation data, based on NAVD88 datum, shall be provided at all fittings, valves, and ends of casings, and at 250' intervals along mains. Coordinates shall be developed at survey levels of accuracy.
      b. Provide a Summary Table that identifies valves, casings, and key appurtenances of the project along with their horizontal and vertical coordinates.
      c. Field changes of dimension and detail.
      d. Details not on original Contract drawings.
   2. Record drawings shall be signed and sealed by a registered professional land surveyor.

G. Complete items of work determined by Engineer's final inspection.

END OF SECTION

SECTION 02 41 00
DEMOLITION

PART 1 - GENERAL

1.01 WORK INCLUDED

A. Demolition of designated structures, foundations, below-grade structural features, mechanical equipment, electrical equipment, utilities and other existing facilities.

B. Remove all demolition material from the project site and properly dispose of all demolition material at a location selected and provided by the Contractor.

C. Final grading and finishing of site.

1.02 RELATED SECTIONS

A. Section 01 10 00 – Summary: description of items to be salvaged or removed for re-use by Contractor

B. Section 01 30 00 – Administrative Procedures

C. Section 01 70 00 – Execution and Closeout Procedures

D. Section 31 23 23 - Backfilling

1.03 REGULATORY REQUIREMENTS

A. Obtain required permits from local and state regulatory authorities.

B. No demolished materials are to be buried on-site.

C. Conform to applicable codes for disposal of materials demolished and hauled off-site for disposal.

D. Notify affected utility companies before starting work and comply with their requirements.

E. Do not close or obstruct roadways, sidewalks or normal access to other facilities without an approved plan for providing temporary alternate throughways.

F. Contractor shall be responsible for site safety and shall make provisions to restrict public access at all times until work is completed.

G. This section is for demolition and disposal of construction materials only. If hazardous wastes are encountered, other than those noted in these Specifications and/or on the Drawings, refer to paragraph 5.06 of the General Conditions.

H. If buried tanks are discovered, comply with requirements of Paragraph 5.06 of the General Conditions.

1.04 SUBMITTALS

A. Submit under provisions of Section 01 30 00.

B. Shop Drawings: Indicate salvage and demolition sequence, particularly addressing the requirements for maintaining continuous operation of the existing facilities and for handling salvageable items. Identify location and construction of temporary work and confirm the limits of existing features that will be left abandoned in place.

1.05 PROJECT RECORD DOCUMENTS

A. Submit under provisions of Section 01 70 00.

B. Accurately record actual horizontal and vertical locations of capped utilities and subsurface structures left in place.

1.06 COORDINATION

A. Sequence work under the provisions of Section 01 30 00.

B. Contractor shall prepare and submit a schedule describing the sequence of demolition. In general, existing operational facilities cannot be removed from service and demolished until the replacement facilities are constructed, tested, and placed into service.

PART 2 - PRODUCTS

2.01 FILL MATERIAL

A. Fill material shall comply with the requirements of Section 31 23 23 - Fill.

PART 3 - EXECUTION

3.01 PREPARATION

A. Protect adjacent buildings, structures, equipment, utilities and other facilities which are to remain in place.

B. Protect plant life, lawns, and other features remaining as a portion of final landscaping.

C. Prevent movement or settlement of adjacent structures.

D. Protect bench marks, existing structures, fences, sidewalks, paving, and curbs that are to remain from demolition equipment and activities.

E. Maintain and protect above and below grade utilities which are to remain.

F. Notify utility company(s) to remove and/or re-locate utilities, when required.

G. Maintain designated site access for vehicle and pedestrian traffic.

3.02 DEMOLITION REQUIREMENTS

A. Conduct demolition to minimize interference with adjacent structures.

B. Cease operations immediately if adjacent structures appear to be in danger. Notify Engineer and authority having jurisdiction; do not resume operations until directed.

C. Conduct operations with minimum interference to public or private accesses. Maintain protected egress and access at all times.

D. Obtain written permission from adjacent property owners when demolition equipment will traverse, infringe upon or limit access to their property.

E. Sprinkle demolition areas with water to minimize dust. Provide hoses and water connections for this purpose.

F. Work under this section shall be carefully performed so as not to spill or disperse pollutants or create safety hazards. In particular, components containing fuels, oils, chemicals, or other fluids shall be carefully drained and purged, or plugged and sealed before being dismantled and removed. When required or recommended by codes, apply appropriate warning labels on such components to indicate their former contents.

3.03 DEMOLITION

A. Disconnect and cap designated utilities within demolition areas. Remove and identify disconnected utilities.

B. Remove foundation walls and footings completely.

C. Remove materials to be retained or re-installed in a manner that will prevent damage. Store and protect in accordance with requirements of Section 01 60 00.

D. Backfill areas excavated caused as a result of demolition, in accordance with Section 31 23 23.

E. Remove all demolished materials from site and properly dispose of the demolished material at an off site location. The Contractor shall select and provide for an off site location for the disposal of the demolished material.

F. Do not burn or bury materials on site. Leave site in clean condition.

3.04 SALVAGE

A. Contractor may salvage (remove from the site for reuse or sale) any materials deemed to be of value which are not listed for delivery to Owner.

3.05 SITE RESTORATION

A. Finish all disturbed areas to final grade with 6 inches of top soil of a quality equal or exceeding the surrounding undisturbed areas and suitable for supporting establishment of grass.

END OF SECTION

SECTION 260500
COMMON WORK RESULTS FOR ELECTRICAL

PART 1 - GENERAL

1.01 DESCRIPTION

A. The General Conditions, Supplementary Conditions, and related work in other Sections apply for all work in Section 26.

1.02 SCOPE OF WORK

A. This section specifies general requirements for electrical work. Detailed requirements for specific electrical items are specified in other sections, but are subject to the general requirements of this section. The electrical drawings and schedules included in this project manual are functional in nature and do not specify exact locations of equipment or equipment terminations. It is the intent of this Section of the Specifications and the accompanying drawings to describe and provide for the furnishing, installing, testing and placing in satisfactory and fully operational condition all equipment, materials, devices and necessary appurtenances to provide a complete electrical system, together with such other miscellaneous installations and equipment hereinafter specified and/ or shown on the drawings. The work shall include all materials, appliances and apparatus not specifically mentioned herein or shown on the drawings, but which are necessary to make a complete, fully operational installation of all electrical systems shown on the drawings or described herein. Equipment and devices furnished and installed under other Sections of this specification shall be connected under this Section. The drawings and specifications are complementary and what is called for in either is binding as if called for in both.

B. This project may include installation of packaged equipment system(s) or sub-system(s) that will require coordination between the Contractor and the manufacturer to determine the detailed installation requirements. The Engineer has shown general installation information for these systems based on the best information available at the time of design. Where indicated on the drawings to ‘provide a complete and operational system’ the Contractor shall provide all materials, installation, and coordination with the manufacturer so the equipment is installed and operates in a satisfactory manner. Minor changes in equipment locations, quantity of terminations or wires, junction boxes, conduit, etc shall be included in the Contract price.

C. See all other Sections of these specifications for work in other areas and disciplines related to this project.

1.03 GENERAL DESCRIPTION OF ELECTRICAL WORK

A. The Contractor shall provide all labor, material, tools, equipment and services required to complete the furnishing, installation, wiring, connection, calibration, adjustment, testing and operation of all electrical equipment, devices and components as indicated and implied by the drawings and specifications. General descriptions include:
   1. Complete the procurement, installation, wiring, connection, calibration, adjustment,

testing and operation of all electrical devices, components, accessories and equipment that is not shown or specified but which is nonetheless required to make the systems shown and specified function properly.

2. Install all equipment so it shall be readily accessible for maintenance. Installations shall have electrical clearances in accordance with NEC and shall be installed in locations that will provide adequate cooling.
3. Check electrical equipment prior to installation so that defective equipment is not installed.
4. Provide field services of qualified technicians to supervise and check out the installation of the equipment, to supervise and check out interconnecting wiring, to conduct start-up of operation of the equipment, and to correct any problems that occur during start-up.
5. Provide circuit breakers, conduit, wire and installation for all items that require electrical power.

1.04 PROJECT DESCRIPTION

A. This project shall consist of the construction of Elevated Water Storage Tank.

B. The major electrical work shall include, but not limited to:
   1. Connect to utility service 120V/240V, single phase.
   2. New manual transfer switch for mobile generator connection.
   3. New power distribution including panels, raceway, wiring, disconnects, etc.
   4. Lighting and lighting controls. (Interior tank lighting provided by tank manufacturer)
   5. PLC based monitoring.
   6. Instrumentation as shown on the drawings.
   7. Installation of packaged equipment and treatment systems.
   8. All other electrical work as shown on the drawings.

1.05 ELECTRICAL CONTRACTOR MINIMUM QUALIFICATIONS

A. The Electrical Contractor shall have a minimum 5 years of experience with having performed similar construction installations.

B. Provide a summary of qualifications with the bid form, including Owner, project description, and summary of electrical equipment manufacturer and ratings that shows similar project experience.

1.06 CODES AND REGULATIONS

A. The electrical systems shall be installed based on the following current Standards:

   1. NFPA 70 - National Electrical Code - current version as adopted by the State of Florida.

   2. NEC 2020 version.

B. The Contractor is required to familiarize himself with the detailed requirements of these standards and any local codes and ordinances as they affect the installation of specific electrical systems.

C. Thermal ratings of equipment terminations

1. All materials shall conform to the National Electrical Code Article 110-14C. Wiring and circuit breakers on this project are designed for 75 deg C operation above 100 amperes; 60 deg C for 100 amperes and below.

2. All products furnished on this project shall have electrical terminations rated for 60 deg C for ampacities of 100 amperes and below, and rated for 75 deg C for ampacities above 100 amperes.

1.07 PERMITS AND FEES

A. The Contractor shall obtain and pay for all licenses, permits and inspections required by laws, ordinances and rules governing work specified herein.

B. The Contractor shall arrange for inspection of work by the inspectors and shall give the inspectors all necessary assistance in their work of inspection.

1.08 COORDINATION

A. The Contractor responsible for accomplishing Section 26 work shall coordinate his work with that of the other Contractors and/ or other trades doing work on the project and shall examine all drawings and specifications of other trades for construction details and necessary coordination.

B. Obtain submittals and shop drawings of all equipment with electrical connections furnished under other Sections of the specifications. Provide all wiring in accordance with requirements indicated. Advise the Engineer of any changes which may affect the contract price.

C. Special attention is called to the following items and all conflicts shall be coordinated prior to installation:

1. Location of pipes and equipment so that all electrical equipment, lighting fixtures and other electrical outlets and equipment are clear from and in proper relation to these items.

2. Recessing and concealing electrical materials in CMU walls, concrete construction and similar construction methods.

3. Electrical characteristics (HP, KVA, voltage, phase) of actual equipment furnished under other Sections being different from that shown on the electrical drawings.

D. The Contractor will not be paid for relocation of work, cuttings, patching and finishing required for work requiring reinstallation due to lack of coordination prior to installation.

1.09 CONTRACT DRAWINGS

A. Raceways, boxes, and ground connections are shown diagrammatically only and indicate the general character and approximate location. The drawings do not necessarily show the total number of raceways or boxes for the circuits required, nor are the locations of indicated runs intended to show the actual routing of the raceways. The Contractor shall furnish, install and place in satisfactory condition all raceways, boxes, conductors, and connections and all

other materials required for the electrical systems shown or noted in the contract documents to be complete, fully operational and fully tested upon completion of the project.

B. The drawings do not show all requirements of the specifications. The drawings and specifications are complimentary and what is called for (or shown) in either is required to be provided as if called for in both.

C. Any minor changes in the location of the raceways, outlets, boxes, devices, wiring, Utility equipment, etc., from those shown on the drawings shall be made without extra charge.

D. Electrical drawings shall be used for construction of electrical systems only. The electrical drawings do not show construction features of other trades.

1.10 ELECTRICAL SUBMITTALS

A. Electrical submittals shall be submitted in electronic .pdf format, labeled with the project and Contractor's name.

B. The files shall include an index showing each product being submitted. Submittals shall be clearly identified per the electrical specifications by section and paragraph or equipment.

C. Each equipment submittal sheet shall clearly indicate the individual equipment name and part number. Submittals shall include:

1. Manufacturer’s name, address, and telephone number

2. Trade name, catalog model or number, nameplate data and size clearly indicated

3. Layout dimensions, capacity, project specification and paragraph reference

4. Local manufacturers representative

D. Submittals shall be largely complete prior to the first submittal. Long lead items may be submitted separately. Each item shall be clearly marked and provided with adequate sales and technical information to clearly show conformance with all aspects of the specification. Packages not provided as described above or largely incomplete shall be returned to the Contractor, without review or comment.

E. The Contractor shall ensure that the material being proposed conforms to the Contract requirements. In the event of any variance, the Contractor shall state specifically which portions vary and shall request a variance in writing.

F. The Contractor shall certify that all furnished equipment can be installed in the spaces allocated. Any costs for modifications to door openings etc required to move equipment to the final locations shall be the responsibility of the Contractor.

G. The Contractor shall provide shop drawings in .pdf format scaled for 11” x 17”

paper, and shall be scaled using standard engineering or architectural scales. Wiring diagrams shall identify circuit terminals, and indicate the internal wiring for each item of equipment and the interconnection between each item of equipment.

H. Failure to submit a specified item does not relieve the Contractor from meeting the requirements of the Specification.

I. The Engineer will review the original submittal and one re-submittal on each item. Subsequent submittal reviews shall be conducted at the Contractor's expense. The Contractor shall be billed at the Engineer's current hourly rates for these subsequent submittal reviews.

1.11 CONSTRUCTION POWER

A. The electrical contractor shall provide a dedicated electrical service for construction power. This includes power for construction equipment, job trailer, and any other construction power needs.

B. The coordination with the serving electrical utility and all associated costs for the temporary construction power equipment and installation shall be provided and paid for by the Contractor.

C. The Contractor shall pay the for the energy costs as billed by the utility on the construction power meter.

1.12 RECORD DRAWINGS

A. The Contractor shall record the actual electrical system installation on a set of prints kept readily available at the project during construction. These prints shall be used for this purpose alone. Accurately locate with exact dimensions all underground and under slab raceways and stub-outs. At the completion of the work, Contractor shall furnish the Engineer a set of record drawings and the set of markups. Final payment to the Contractor will not be authorized until these prints have been submitted to and accepted by the Engineer. The contractor shall maintain one set of record drawings at the job showing any deviations in the electrical systems from the original design.

B. Markings shown on the drawings shall conform to the following color coding conventions:

1. Red - Additions or changes showing placement different than shown on the original drawings

2. Green - Deletions or modifications depicting placements different than shown on the original drawing

3. Blue - Notes and Dimensional data showing exact placement of concealed or buried equipment, raceways, etc.

1.13 WARRANTY

A. The Contractor shall guarantee all work installed under this specification. He shall repair or replace, at his own expense, defective work, materials or parts which are identified within one year after final acceptance.

PART 2 PRODUCTS

2.01 GENERAL

A. All materials must be new, free from defects and not less than the quality herein specified.

B. Each type of materials furnished shall be of the same make and shall be of the standard products or manufacturers regularly engaged in the production of such materials and shall be the manufacturer's latest standard design.

C. All materials and equipment installed shall have been tested and listed by Underwriters Laboratories or other approved testing organization and shall be so labeled unless otherwise permitted by the Code Inspector (AHJ).

2.02 NAMEPLATES

A. Nameplates shall be provided on all electrical devices. This includes motor control equipment, MCC buckets, control stations, junction boxes, panels, motors, instruments, switches, indicating lights, meters, and all electrical equipment enclosures.

B. Nameplates shall be made of 1/16" thick machine engraved laminated phenolic having engraved black filled letters not less than 3/16" high on white background.

C. Warning nameplates shall be provided on all panels and equipment which contain multiple power sources or which may have energized circuits with the main disconnecting means in the off position. Lettering shall be white on red background.

D. All nameplates shall be secured to equipment with stainless steel screws or fasteners (screws shall not be self-tapping). Epoxy glue may be used where fasteners are not practical as determined by the Engineer.

2.03 OPERATION AND MAINTENANCE (O&M) MANUALS

A. The Contractor shall prepare O&M manuals for all equipment furnished under Section 26 of the specifications.

B. The information included must be the exact equipment installed. Where sheets show the equipment installed and other equipment, the installed equipment shall be neatly and clearly identified on such sheets.

C. The O&M manuals shall contain all the information needed to operate and maintain all systems and equipment provided in the project. It shall be presented and arranged in the logical manner for efficient use by the Owner's operation personnel. The information provided shall include but not be limited to the following:

1. Equipment manufacturer, make, model number, size, etc.
2. Equipment nameplate data.
3. Description of system configuration and operation including component identification.

4. Dimensional and performance data for specific unit provided.

5. Manufacturer's recommended operation instructions.

6. Manufacturer's recommended lubrication and servicing data.

7. Complete parts list including reordering information and recommended spares. Parts lists shall give full ordering information assigned by the original parts manufacturer.

8. Shop drawings and wiring diagrams.

D. Wiring diagrams for each system shall be complete drawings for the specific system installed under the contract.

E. The information contained in the manuals shall be grouped in an orderly arrangement by specification index. The manuals shall be bound in a hard cover binder and tabbed with an index. O&M manuals shall not exceed 5" thick. Provide two or more volumes if required. The covers shall be imprinted with the name of the job, Owner, Engineer, Electrical Engineer, Contractor and year of completion. Hard covers and literature contained may be held together with screw post bindings.

F. A preliminary copy, complete, except for the bound cover, shall be submitted 30 days prior to completion of the project for checking and review. The quantity of manuals shall be as indicated in the General Conditions, but shall not be less than (3) complete sets.

PART 3 EXECUTION

3.01 STORAGE AND HOUSEKEEPING

A. The Contractor shall store all electrical equipment in a dry environment free from dust, moisture, sprays or vapors which may be detrimental to their new condition. After installation of equipment, the Contractor shall take care to protect all equipment from all dust, moisture, paint and other sprays, and harmful vapors.

B. The premises shall be kept free of accumulated materials, rubbish and debris at all times. Surplus material, tools and equipment must not be stored at the job site. Upon completion of the project, all equipment and fixtures shall be cleaned and in proper condition for their intended use.

3.02 SCHEDULING WORK WITH UTILITIES

A. The Contractor shall be fully and completely responsible for all scheduling and coordination with the Utility companies, including the electrical utility provider.

B. The Contractor shall coordinate and schedule power outages, power service for operation and construction.

3.03 TESTS

A. The Contractor shall conduct testing for installed feeder cables, motors, and other electrical equipment.

B. Functional testing of all electrical systems shall be performed. Prior to functional testing, all protective devices shall be adjusted and made operative. Prior to energizing the equipment, the Contractor shall perform a functional checkout of each individual control circuit. Checkout shall consist of energizing each control circuit and operating each control device and verifying that the specified action occurs. The Contractor shall submit a description of the proposed functional test procedures prior to the performance of the functional checkout.

3.04 TRAINING

A. After substantial completion of the work, O&M manuals have been delivered to the owner, all testing is complete and final inspection of the work by the Authority(s) Having Jurisdiction, the Contractor shall demonstrate the electrical systems and instruct the Owner's designated operation and maintenance personnel in the operations and maintenance of the various electrical systems. The Contractor shall arrange scheduled instruction periods with the Owner. The Contractor's representatives shall be knowledgeable in each system and suppliers representatives, when so specified.

B. Scheduled minimum instruction period at each location shall be:

1. Electrical Systems 2 Hours

2. Control Systems 4 Hours

3.05 FINAL ACCEPTANCE

A. Prior to final acceptance, the Engineer will perform one or more site observation trips to develop a punch list of items deemed incomplete. The Electrical Contractor shall be present while these inspections are taking place and shall be available for opening cabinets and operating and adjusting the system as is necessary for the Engineer to verify all equipment is installed and operates to the requirements of the contract documents.

B. The Contractor shall complete all items of work, including wire markers, nameplates, final tests and final test reports prior to requesting final acceptance inspections. All equipment shall be checked for proper operation and all signals verified for correct calibration and

wiring. Fixtures shall have been cleaned, and burned out or defective lamps shall have been replaced.

3.06 STANDARD ABBREVIATIONS

Abbreviation	Definition
Accepted	Reviewed with no exceptions taken to submittal material.
AHJ	Authority Having Jurisdiction
ANSI	American National Standards Institute
Approved	Inspected and accepted by the Authority Having Jurisdiction

ASTM	American Society for Testing Materials
Boxes	Outlet, Junction or Pull Boxes
Code	All codes currently enforced at project location
Compression	Compressed using a leverage powered crimping tool
Connection	All materials and labor required for equipment to be fully operational
CSI	Construction Specifications Institute
EMT	Electrical Metallic Tubing
Exterior	Outside of outer surfaces of the location building
Fully Operational	Tested and approved and operating to the satisfaction of the AHJ, manufacturer and contract documents
Furnish	Purchase and deliver material
Install	Install and make fully operational
kcmil	Thousand circular mils (also MCM)
Mfr	Manufacturer
NEC	National Electric Code NFPA #70 current revision as adopted by AHJ
NEMA	National Electrical Manufacturers Association
NFPA	National Fire Protection Association
Noted	Shown or specified in the contract documents
PVC	Polyvinyl Chloride
Provide	Furnish and install
RGS, GRS	Rigid Galvanized Steel
Required	As required by code, AHJ, or contract documents for the installation to be fully operational
Shop Drawing	Hand drafted document which fully details the equipment and intended installation relative to this specified project
Shown	As indicated on the drawings or details
Submittal	Material for Engineer review which may include catalog cuts, shop drawings, wiring diagrams, etc., of the actual material being furnished.
UL	Underwriters Laboratories, Inc.
Wiring	Raceway, conductors and connections

END OF SECTION

(THIS PAGE INTENTIONALLY LEFT BLANK)

SECTION 26 05 19
LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES

PART 1 GENERAL

1.01 DESCRIPTION

A. This section specifies conductors and cables rated to 600 volts used for power, lighting, receptacle, signal, and control circuits.

PART 2 PRODUCTS

2.01 GENERAL

A. With the exception of lighting, communication, paging, security and receptacle circuits, the type, size and number of conductors shall be as specified on the drawings or schedules. Lighting and receptacle circuit conductors are unscheduled and shall be sized by the Contractor in accordance with the NEC to limit voltage drop to 3 percent. Number and types of communication, paging, and security cables shall be a required for the particular equipment provided.

2.02 LIGHTING AND RECEPTACLE BRANCH CIRCUIT CONDUCTORS

A. Conductors shall be provided with the following characteristics:

1. Voltage: 600 volts

2. Conductor: Bare soft annealed copper, Class B stranded per ASTM-8; solid per ASTM B-3

3. Insulation: THWN/THHN, 90 degree C dry, 75 degree C wet polyvinylchloride (PVC)

4. Jacket: Nylon

5. Flame resistance: UL 83

6. Manufacturer: Okonite; Southwire; or equal

2.03 POWER AND CONTROL CONDUCTORS AND CABLE, 600 VOLT

A. Single Conductor:

1. Single conductor cable shall be stranded and shall be used in conduits for power and control circuits.

2. Conductor shall be provided with the following characteristics:

a. Voltage 600 volts

b. Conductor: Uncoated, soft annealed copper, Class B stranded per ASTM B-8

c. Insulation: Power #6 AWG and larger: XHHW-2, 90 degrees C cont. rating, wet or dry.

d. Power up to #6 AWG: THHN/THWN, 90 degrees C cont. rating, wet or dry

e. Control: THHN/THWN, 90 degrees C cont. rating, wet or dry

f. Flame resistance: UL 83

g. Manufacturer: Okonite, Southwire; Anaconda; or equal

2.04 CONNECTORS

A. Pre-insulated Connectors for splices and taps in conductors 10 AWG and smaller shall be Ideal Industries "Wing Nut" or 3M Company "SCOTCHLOCK", or equal. For 8 AWG and larger conductors shall be T&B compression connectors, or equal. Compress using manufacturers recommended die and tools.

B. Waterproof silicone filled “wing nut” type connectors or spade/lug type terminations and terminals and coat with liquid insulation shall be used for all connections of wire to cord to removable equipment provided with integral cords (such as floats, transmitters, limit switches, etc.) in junction boxes in underground hand holes or outdoor junction boxes. Insulators shall be Thomas and Betts multi splice insulator MSLT112-4, or equal.

2.05 SPLICE INSULATION

A. Splice insulation shall be equal or greater than the insulation level of the conductor used.

B. All permanent splices that are underground or in damp or corrosive environments shall be insulated with cast epoxy type insulation which covers the jacket of all cords and the insulation on all wire. Epoxy splice shall be Scotch #3570 or equal.

2.06 WIRE MARKERS

A. Field installed wire markers shall be T&B SMS pre-printed clip-on markers, or equal.

PART 3 EXECUTION

3.01 GENERAL

A. Each power and control conductor shall be identified at each terminal to which it is connected.

B. Pulling wire and cable into conduit or trays shall be completed without damaging or putting undue stress on the cable insulation. Soapstone, talc or UL listed pulling compounds are acceptable lubricants for pulling wire and cable. Grease is not

acceptable. Raceway construction shall be complete, cleaned, and protected from the weather before cable is placed in the raceway.

3.02 600 VOLT CONDUCTOR AND CABLE

A. Conductors in panels and electrical equipment, 6 AWG and smaller, shall be bundled and laced at intervals not greater than 6 inches, spread into trees and connected to their respective terminals. Lacing shall be made up with plastic cable ties. Lacing is not necessary in plastic panel wiring duct. Conductors crossing hinges shall be bundled into groups not exceeding 12 and shall be so arranged that they will be protected from chafing when the hinged member is moved.

B. Slack shall be provided in junction and pull boxes and hand holes. Slack shall be sufficient to allow cables or conductors to be routed along the walls of the box. Amount of slack shall be equal to largest dimension of the box. Where plastic panel wiring duct is provided for wire runs, lacing is not required.

C. Solid wire shall not be lugged, nor shall electrical spring connectors be used on any except for solid wires in lighting and receptacle circuits. Lugs and connectors shall be installed with a compression tool.

D. All splices and terminations are subject to inspection by the Engineer prior to and after insulating. Terminations at 460-volt motors shall be made by bolt-connecting the lugged connectors. Connections shall be insulated and sealed with factory-engineered kits. Bolt connection area shall be kept free of mastics and fillers to facilitate rapid stripping and re-entry. Motor connection kits shall accommodate a range of cable sizes for both in-line and stub-type configurations. Connection kits shall be independent of cable manufacturer's tolerances.

E. In-line splices and tees, where approved, shall be made with tubular compression connectors and insulated as specified for motor terminations, except that conductors 10 AWG and smaller may be spliced using self-insulating connectors. Splices and tees in underground handholes or pull boxes shall be insulated using Scotch-cast epoxy resin splicing kits. Terminations at devices with 120 volt pigtail leads shall be made using self-insulating tubular compression connectors.

F. Terminations at solenoid valves, 120 volt motors, and other devices furnished with pigtail leads shall be made using self insulating tubular compression connectors.

G. In the case where multiple field located instrumentation and control devices require parallel or series wiring configuration, it shall be done at one location in one junction box with terminals. Interconnection of instrumentation and control devices shall not be done within conduit bodies (i.e. LBs, condulets, etc.)

H. Provide shielded power cable for leads extending from VFDs to motors, where indicated.

3.03 SIGNAL CABLING

A. Circuit runs shall be of individually shielded twisted pairs or triads. In no case shall a circuit be made up using conductors from different pairs or triads. Triads shall be used wherever 3-wire circuits are required. Terminal blocks shall be provided at instrument cable junctions unless otherwise specified. Signal circuits shall be run without splices

between instruments, terminal boxes, or panels.

B. Shields shall not be used as a signal path, except for coaxial cable circuits operating at radio frequencies.

C. Unless otherwise specified, shields shall be bonded to the signal ground bus at the control panel and isolated from ground and other shields at other locations. Terminals shall be provided for running signal leads and shield drain wires through junction boxes.

D. Spare circuits shall be terminated on terminal blocks at both ends of the cable run and be electrically continuous through terminal boxes. Shield drain wires for spare circuits shall not be grounded at either end of the cable run. Terminal boxes shall be provided at instrument cable splices. If cable is buried or in raceway below grade at splice, an instrument stand shall be provided as specified with terminal box mounted approximately 3 feet above grade.

E. Cable for paging, telephone, and security systems shall be installed and terminated in compliance with the manufacturer's recommendations.

3.04 COLOR CODING

A. Wiring shall conform to the following color code, unless otherwise specified.

B. Insulation on phase conductor sizes 8 AWG and smaller shall be colored, 6 AWG and larger may have black insulation with plastic tape of the appropriate color from the table below.

C. Insulation on the grounded conductor (neutral) sizes 6 AWG and smaller shall be colored;4 AWG and larger may have black insulation with plastic tape of white or gray in accordance with the table below.

Description	208Y/120V	480Y/277V	Control
Phase A (Left, Top, Front)	Black	Brown	--
Phase B (Center, Center, Center)	Red	Orange	--
Phase C (Right, bottom, Back)	Blue	Yellow	--
Neutral	White	Gray	White
Ground	Green	Green	Green
120 VAC Control	--	--	Red
120 VAC Control	Neutral	--	White
DC Control (+)	--	--	Blue
DC Control (-)	--	--	Blue/Wht Stripe
External Source	--	--	Yellow

D. All control wiring in control panels or other enclosures that is powered from an external source and is not disconnected by the control panel disconnect shall be terminated at a disconnecting terminal block upon entering the enclosure. The color of the wire shall then be changed to yellow to identify it as being powered from an external source. Provide identification nameplate on exterior of enclosure to indicate sources of external power.

3.05 TERMINAL MARKING

A. All terminals in instrument and relay compartments, motor control centers, in control panels, instrument panels, field panels and control stations, as well as connections to mechanical equipment shall have reference number and letter.

3.06 WIRE BENDING RADIUS

A. The radius of bends in all non-shielded wire (conductors and cables) shall not be less than eight (8) times the outside diameter of the wire. Shielded or lead covered wire shall not be bent to a radius less than twelve (12) times the diameter of the wire. Any wire installed with bends less than the allowed diameter and which the Engineer deems has caused that insulation to be damaged, shall be removed and new wire shall be installed.

3.07 GENERAL TESTS

A. The Contractor shall perform voltage, current and resistance tests as required in this section. Test reports shall be submitted to the Engineer prior to final acceptance by the Owner. The Contractor shall inform the Engineer of scheduled testing a minimum of 5 days prior to the testing.

B. The Contractor shall undertake all such corrective measures if the test results indicate corrective measures are required. No additional compensation will be paid for corrective measures

C. Test Scope

1. The Contractor shall provide all material, equipment, labor and technical supervision to perform tests and inspections as specified herein.

2. It is the intent of these tests to assure that all electrical equipment as supplied and installed by the Contractor is operational within the industry and manufacturer's tolerances and is installed in accordance with the design documents.

3. The tests and inspection shall determine the suitability for energization.

D. Conductor Tests

1. Following the completion of installation, the following conductors shall be tested:

a. All power feeders scheduled in Conduit and Cable Schedule.

b. Service conductors and feeder conductors

c. All new grounding; measure ground resistance at each ground rod.

E. Visual and Mechanical Inspections

1. Inspect exposed section for physical damage.

2. Verify cable is supplied and connected in accordance with specifications and one line diagram, and that phases are labeled correctly.

F. Electrical Tests

1. Perform insulation resistance test on each cable in reference to ground and adjacent conductors in the same raceway.

2. Perform continuity test to ensure proper cable connection.

3. Perform thermal imaging inspection on all power terminations.

G. Test Values

1. Insulation resistance tests shall be performed at 1000 volts DC for one-half minute.

2. Minimum megger readings at 20 degrees C shall be one megohm.

THE MAXIMUM ACCEPTABLE READING FOR AN INDIVIDUAL GROUND ROD SHALL BE 25 OHMS AS REQUIRED BY THE NEC AND MEASURED BY THE THREE ROD METHOD. THE COMPOSITE GROUND ELECTRODE SHALL HAVE A MAXIMUM ACCEPTABLE READING OF 15 OHMS.

SECTION 26 05 26
GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes: Grounding systems and equipment.

1.3 SUBMITTALS

A. Product Data: For each type of product indicated.

B. Field quality-control reports.

1.4 QUALITY ASSURANCE

A. Testing Agency Qualifications: Member company of NETA or an NRTL.

1. Testing Agency's Field Supervisor: Currently certified by NETA to supervise on-site testing.

B. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

C. Comply with UL 467 for grounding and bonding materials and equipment.

PART 2 - PRODUCTS

2.1 CONDUCTORS

A. Insulated Conductors: Copper wire or cable insulated for 600 V unless otherwise required by applicable Code or authorities having jurisdiction.

B. Bare Copper Conductors:

1. Solid Conductors: ASTM B 3.
2. Stranded Conductors: ASTM B 8.
3. Tinned Conductors: ASTM B 33.

4. Bonding Cable: 28 kcmil, 14 strands of No. 17 AWG conductor, 1/4 inch in diameter.
5. Bonding Conductor: No. 4 or No. 6 AWG, stranded conductor.
6. Bonding Jumper: Copper tape, braided conductors terminated with copper ferrules; 1-5/8 inches wide and 1/16 inch thick.

C. Grounding Bus: Predrilled rectangular bars of annealed copper, 1/4 by 4 inches in cross section, with 9/32-inch holes spaced 1-1/8 inches apart. Stand-off insulators for mounting shall comply with UL 891 for use in switchboards, 600 V. Lexan or PVC, impulse tested at 5000 V.

2.2 CONNECTORS

A. Listed and labeled by an NRTL acceptable to authorities having jurisdiction for applications in which used and for specific types, sizes, and combinations of conductors and other items connected.

B. Bolted Connectors for Conductors and Pipes: Copper or copper alloy, pressure type with at least two bolts.

1. Pipe Connectors: Clamp type, sized for pipe.

C. Welded Connectors: Exothermic-welding kits of types recommended by kit manufacturer for materials being joined and installation conditions.

D. Bus-bar Connectors: Mechanical type, cast silicon bronze, solderless compression-type wire terminals, and long-barrel, two-bolt connection to ground bus bar.

2.3 GROUNDING ELECTRODES

A. Ground Rods: Copper-clad steel 3/4 inch by 10 feet in diameter.

PART 3 - EXECUTION

3.1 APPLICATIONS

A. Conductors: Install solid conductor for No. 8 AWG and smaller, and stranded conductors for No. 6 AWG and larger unless otherwise indicated.

B. Underground Grounding Conductors: Install bare copper conductor, No. 2/0 AWG minimum.

1. Bury at least 24 inches (600 mm) below grade.

C. Isolated Grounding Conductors: Green-colored insulation with continuous yellow stripe. On feeders with isolated ground, identify grounding conductor where visible to normal inspection, with alternating bands of green and yellow tape, with at least three bands of green and two bands of yellow.

D. Conductor Terminations and Connections:

1. Pipe and Equipment Grounding Conductor Terminations: Bolted connectors.
2. Underground Connections: Welded connectors except at test wells and as otherwise indicated.
3. Connections to Ground Rods at Test Wells: Bolted connectors.

3.2 GROUNDING OVERHEAD LINES

A. Comply with IEEE C2 grounding requirements.

B. Install two parallel ground rods if resistance to ground by a single, ground-rod electrode exceeds 25 ohms.

C. Drive ground rods until tops are 12 inches below finished grade in undisturbed earth.

D. Ground-Rod Connections: Install bolted connectors for underground connections and connections to rods.

E. Lightning Arrester Grounding Conductors: Separate from other grounding conductors.

F. Secondary Neutral and Transformer Enclosure: Interconnect and connect to grounding conductor.

G. Protect grounding conductors running on surface of wood poles with molding extended from grade level up to and through communication service and transformer spaces.

3.3 GROUNDING UNDERGROUND DISTRIBUTION SYSTEM COMPONENTS

A. Comply with IEEE C2 grounding requirements.

B. Grounding Manholes and Handholes: Install a driven ground rod through manhole or handhole floor, close to wall, and set rod depth so 4 inches will extend above finished floor. If necessary, install ground rod before manhole is placed and provide No. 1/0 AWG bare, tinned-copper conductor from ground rod into manhole through a waterproof sleeve in manhole wall. Protect ground rods passing through concrete floor with a double wrapping of pressure-sensitive insulating tape or heat-shrunk insulating sleeve from 2 inches above to 6 inches below concrete. Seal floor opening with waterproof, nonshrink grout.

C. Grounding Connections to Manhole Components: Bond exposed-metal parts such as inserts, cable racks, pulling irons, ladders, and cable shields within each manhole or handhole, to ground rod or grounding conductor. Make connections with No. 4 AWG minimum, stranded, hard-drawn copper bonding conductor. Train conductors level or plumb around corners and fasten to manhole walls. Connect to cable armor and cable shields according to written instructions by manufacturer of splicing and termination kits.

D. Pad-Mounted Transformers and Switches: Install two ground rods and ground ring around the pad. Ground pad-mounted equipment and noncurrent-carrying metal items associated with substations by connecting them to underground cable and grounding electrodes. Install tinned-copper conductor not less than No. 2 AWG for ground ring and for taps to equipment grounding terminals. Bury ground ring not less than 6 inches from the foundation.

3.4 EQUIPMENT GROUNDING

A. Install insulated equipment grounding conductors with all feeders and branch circuits.

B. Install insulated equipment grounding conductors with the following items, in addition to those required by NFPA 70:

1. Feeders and branch circuits.
2. Lighting circuits.
3. Receptacle circuits.
4. Single-phase motor and appliance branch circuits.
5. Three-phase motor and appliance branch circuits.
6. Computer and Rack-Mounted Electronic Equipment Circuits: Install insulated equipment grounding conductor in branch-circuit runs from equipment-area power panels and power-distribution units.

C. Isolated Grounding Receptacle Circuits: Install an insulated equipment grounding conductor connected to the receptacle grounding terminal. Isolate conductor from raceway and from panelboard grounding terminals. Terminate at equipment grounding conductor terminal of the applicable derived system or service unless otherwise indicated.

D. Isolated Equipment Enclosure Circuits: For designated equipment supplied by a branch circuit or feeder, isolate equipment enclosure from supply circuit raceway with a nonmetallic raceway fitting listed for the purpose. Install fitting where raceway enters enclosure, and install a separate insulated equipment grounding conductor. Isolate conductor from raceway and from panelboard grounding terminals. Terminate at equipment grounding conductor terminal of the applicable derived system or service unless otherwise indicated.

E. Signal and Communication Equipment: In addition to grounding and bonding required by NFPA 70, provide a separate grounding system complying with requirements in TIA/ATIS J-STD-607-A.

1. For telephone, alarm, voice and data, and other communication equipment, provide No. 4 AWG minimum insulated grounding conductor in raceway from grounding electrode system to each service location, terminal cabinet, wiring closet, and central equipment location.
2. Service and Central Equipment Locations and Wiring Closets: Terminate grounding conductor on a 1/4-by-4-by-12-inch grounding bus.
3. Terminal Cabinets: Terminate grounding conductor on cabinet grounding terminal.

3.5 INSTALLATION

A. Grounding Conductors: Route along shortest and straightest paths possible unless otherwise indicated or required by Code. Avoid obstructing access or placing conductors where they may be subjected to strain, impact, or damage.

B. Ground Bonding Common with Lightning Protection System: Comply with NFPA 780 and UL 96 when interconnecting with lightning protection system. Bond electrical power system ground directly to lightning protection system grounding conductor at closest point to electrical

service grounding electrode. Use bonding conductor sized same as system grounding electrode conductor and install in conduit.

C. Ground Rods: Drive rods until tops are 2 inches below finished floor or final grade unless otherwise indicated.

1. Interconnect ground rods with grounding electrode conductor below grade and as otherwise indicated. Make connections without exposing steel or damaging coating if any.
2. For grounding electrode system, install at least three rods spaced at least one-rod length from each other and located at least the same distance from other grounding electrodes, and connect to the service grounding electrode conductor.

D. Bonding Straps and Jumpers: Install in locations accessible for inspection and maintenance except where routed through short lengths of conduit.
1. Bonding to Equipment Mounted on Vibration Isolation Hangers and Supports: Install bonding so vibration is not transmitted to rigidly mounted equipment.
2. Use exothermic-welded connectors for outdoor locations; if a disconnect-type connection is required, use a bolted clamp.

E. Grounding and Bonding for Piping:

1. Metal Water Service Pipe: Install insulated copper grounding conductors, in conduit, from building's main service equipment, or grounding bus, to main metal water service entrances to building. Connect grounding conductors to main metal water service pipes; use a bolted clamp connector or bolt a lug-type connector to a pipe flange by using one of the lug bolts of the flange. Where a dielectric main water fitting is installed, connect grounding conductor on street side of fitting. Bond metal grounding conductor conduit or sleeve to conductor at each end.
2. Water Meter Piping: Use braided-type bonding jumpers to electrically bypass water meters. Connect to pipe with a bolted connector.

F. Bonding Interior Metal Ducts: Bond metal air ducts to equipment grounding conductors of associated fans, blowers, electric heaters, and air cleaners. Install bonding jumper to bond across flexible duct connections to achieve continuity.

3.6 LABELING

A. Comply with requirements in Division 26 Section "Identification for Electrical Systems" Article for instruction signs. The label or its text shall be green.

B. Install labels at the telecommunications bonding conductor and grounding equalizer.

1. Label Text: "If this connector or cable is loose or if it must be removed for any reason, notify the facility manager."

3.7 FIELD QUALITY CONTROL

A. Perform tests and inspections.

B. Tests and Inspections:

1. After installing grounding system but before permanent electrical circuits have been energized, test for compliance with requirements.
2. Inspect physical and mechanical condition. Verify tightness of accessible, bolted, electrical connections with a calibrated torque wrench according to manufacturer's written instructions.
3. Test completed grounding system at each location where a maximum ground-resistance level is specified, at service disconnect enclosure grounding terminal at ground test wells, and at individual ground rods. Make tests at ground rods before any conductors are connected.

    a. Measure ground resistance no fewer than two full days after last trace of precipitation and without soil being moistened by any means other than natural drainage or seepage and without chemical treatment or other artificial means of reducing natural ground resistance.
    b. Perform tests by fall-of-potential method according to IEEE 81.

C. Grounding system will be considered defective if it does not pass tests and inspections.

D. Prepare test and inspection reports.

E. Report measured ground resistances that exceed the following values:

1. Power and Lighting Equipment or System with Capacity of 500 kVA and Less: 10 ohms.
2. Power and Lighting Equipment or System with Capacity of 500 to 1000 kVA: 5 ohms.
3. Power and Lighting Equipment or System with Capacity More Than 1000 kVA: 3 ohms.
4. Power Distribution Units or Panelboards Serving Electronic Equipment: 3 ohm(s).
5. Manhole Grounds: 10 ohms.

F. Excessive Ground Resistance: If resistance to ground exceeds specified values, notify Architect promptly and include recommendations to reduce ground resistance.

END OF SECTION

SECTION 26 05 33.13
CONDUIT FOR ELECTRICAL SYSTEMS

PART 1 GENERAL

1.01 SUBMITTALS

A. Product Data: Provide manufacturer's standard catalog pages and data sheets for conduits and fittings.

PART 2 PRODUCTS

2.01 CONDUIT APPLICATIONS

A. Do not use conduit and associated fittings for applications other than as permitted by NFPA 70, manufacturer's instructions, and product listing.

B. Unless otherwise indicated and where not otherwise restricted, use conduit types indicated for specified applications. Where more than one listed application applies, comply with most restrictive requirements. Where conduit type for particular application is not specified, use galvanized steel rigid metal conduit.

C. Underground:
   1. Under Slab on Grade: Use galvanized steel rigid metal conduit (RMC), galvanized steel intermediate metal conduit (IMC), or rigid PVC conduit.
   2. Exterior, Direct-Buried: Use galvanized steel rigid metal conduit (RMC), galvanized steel intermediate metal conduit (IMC), rigid PVC conduit, or high-density polyethylene (HDPE) conduit.
   3. Where rigid polyvinyl chloride (PVC) conduit or high-density polyethylene (HDPE) conduit is provided, transition to galvanized steel rigid metal conduit (RMC), galvanized steel intermediate metal conduit (IMC), galvanized steel electrical metallic tubing (EMT), or schedule 80 rigid PVC conduit where emerging from underground.
   4. Where galvanized steel rigid metal conduit (RMC) or galvanized steel intermediate metal conduit (IMC) is installed in direct contact with earth where soil has resistivity of less than 2000 ohm-centimeters or is characterized as severely corrosive based on soils report or local experience, use corrosion protection tape, factory-applied corrosion protection coating, or field-applied corrosion protection compound acceptable to authorities having jurisdiction to provide supplementary corrosion protection.
   5. Where galvanized rigid metal conduit (RMC), galvanized steel intermediate metal conduit (IMC), or galvanized steel electrical metallic tubing (EMT) emerges from concrete into soil, use corrosion protection tape, factory-applied corrosion protection coating, or field-applied corrosion protection compound acceptable to authorities having jurisdiction to provide supplementary corrosion protection for minimum of 4 inches on either side of where conduit emerges.

D. Embedded Within Concrete:
   1. Within Slab on Grade: Not permitted.

E. Concealed Within Masonry Walls: Use galvanized steel rigid metal conduit (RMC), galvanized steel intermediate metal conduit (IMC), or galvanized steel electrical metallic tubing (EMT).

F. Interior, Damp or Wet Locations: Use galvanized steel rigid metal conduit (RMC), aluminum rigid metal conduit (RMC), galvanized steel intermediate metal conduit (IMC), or galvanized steel electrical metallic tubing (EMT).

G. Exposed, Interior, Not Subject to Physical Damage: Use galvanized steel rigid metal conduit (RMC), galvanized steel intermediate metal conduit (IMC), or galvanized steel electrical metallic tubing (EMT).

H. Exposed, Exterior, Not Subject to Severe Physical Damage: Use galvanized steel rigid metal conduit (RMC) or galvanized steel intermediate metal conduit (IMC).

I. Corrosive Locations Above Ground: Use aluminum rigid metal conduit (RMC) or reinforced thermosetting resin conduit (RTRC).
   1. Corrosive locations include, but are not limited to:
      a. Chemical storage areas.

J. Flexible Connections to Vibrating Equipment:
   1. Damp, Wet, or Corrosive Locations: Use liquidtight flexible metal conduit (LFMC).
   2. Maximum Length: 6 feet unless otherwise indicated.
   3. Vibrating equipment includes, but is not limited to:
      a. Motors.

2.02 CONDUIT - GENERAL REQUIREMENTS

A. Comply with NFPA 70.

B. Provide conduit, fittings, supports, and accessories required for complete raceway system.

C. Provide products listed, classified, and labeled as suitable for purpose intended.

D. Minimum Conduit Size, Unless Otherwise Indicated:
   1. Branch Circuits: 3/4-inch trade size.
   2. Branch Circuit Homeruns: 3/4-inch trade size.
   3. Underground, Interior: 3/4-inch trade size.
   4. Underground, Exterior: 1-inch trade size.

E. Where conduit size is not indicated, size to comply with NFPA 70 but not less than applicable minimum size requirements specified.

2.03 GALVANIZED STEEL RIGID METAL CONDUIT (RMC)

A. Description: NFPA 70, Type RMC galvanized steel rigid metal conduit complying with ANSI C80.1 and listed and labeled as complying with UL 6.

B. Fittings:
   1. Nonhazardous Locations: Use fittings complying with NEMA FB 1 and listed and labeled as complying with UL 514B or UL 6.
   2. Material: Use steel or malleable iron.
      a. Do not use die cast zinc fittings.
   3. Connectors and Couplings: Use threaded type fittings only. Threadless fittings, including set screw and compression/gland types, are not permitted.

2.04 ALUMINUM RIGID METAL CONDUIT (RMC)

A. Description: NFPA 70, Type RMC aluminum rigid metal conduit complying with ANSI C80.5 and listed and labeled as complying with UL 6A.

B. Fittings:
   1. Nonhazardous Locations: Use fittings complying with NEMA FB 1 and listed and labeled as complying with UL 514B or UL 6A.
   2. Material: Use aluminum.
   3. Connectors and Couplings: Use threaded type fittings only. Threadless fittings, including set screw and compression/gland types, are not permitted.

2.05 GALVANIZED STEEL INTERMEDIATE METAL CONDUIT (IMC)

A. Description: NFPA 70, Type IMC galvanized steel intermediate metal conduit complying with ANSI C80.6 and listed and labeled as complying with UL 1242.

B. Fittings:
   1. Nonhazardous Locations: Use fittings complying with NEMA FB 1 and listed and labeled as complying with UL 514B or UL 1242.
   2. Material: Use steel or malleable iron.
   3. Connectors and Couplings: Use threaded type fittings only. Threadless fittings, including set screw and compression/gland types, are not permitted.

2.06 LIQUIDTIGHT FLEXIBLE METAL CONDUIT (LFMC)

A. Description: NFPA 70, Type LFMC polyvinyl chloride (PVC) jacketed steel flexible metal conduit listed and labeled as complying with UL 360.

B. Fittings:
   1. Description: Fittings complying with NEMA FB 1 and listed and labeled as complying with UL 514B.
   2. Material: Use steel or malleable iron.
      a. Do not use die cast zinc fittings.

2.07 GALVANIZED STEEL ELECTRICAL METALLIC TUBING (EMT)

A. Description: NFPA 70, Type EMT galvanized steel electrical metallic tubing complying with ANSI C80.3 and listed and labeled as complying with UL 797.

B. Fittings:
   1. Description: Fittings complying with NEMA FB 1 and listed and labeled as complying with UL 514B.
   2. Material: Use steel or malleable iron.
      a. Do not use die cast zinc fittings.
   3. Connectors and Couplings: Use compression/gland or set-screw type.
      a. Do not use indenter type connectors and couplings.
   4. Damp or Wet Locations, Where Permitted: Use fittings listed for use in wet locations.
   5. Embedded Within Concrete, Where Permitted: Use fittings listed as concrete-tight. Fittings that require taping to be concrete-tight are acceptable.

2.08 RIGID POLYVINYL CHLORIDE (PVC) CONDUIT

A. Description: NFPA 70, Type PVC rigid polyvinyl chloride conduit complying with NEMA TC 2 and listed and labeled as complying with UL 651; Schedule 40 unless otherwise indicated, Schedule 80 where subject to physical damage; rated for use with conductors rated 90 degrees C.

B. Fittings:
   1. Manufacturer: Same as manufacturer of conduit to be connected.
   2. Description: Fittings complying with NEMA TC 3 and listed and labeled as complying with UL 651; material to match conduit.

2.09 REINFORCED THERMOSETTING RESIN CONDUIT (RTRC)

A. Description: NFPA 70, Type RTRC reinforced thermosetting resin conduit complying with NEMA TC 14 (SERIES).

B. Supports: As recommended by manufacturer.

C. Fittings: Same type and manufacturer as conduit to be connected.

2.10 HIGH-DENSITY POLYETHYLENE (HDPE) CONDUIT

A. Description: NFPA 70, Type HDPE high-density polyethylene solid-wall conduit complying with ASTM F2160 and NEMA TC 7; list and label as complying with UL 651A; Schedule 40 unless otherwise indicated.

B. Mechanical Fittings: Comply with ASTM F2176; list and label as complying with UL 651A.

2.11 ACCESSORIES

A. Corrosion Protection Tape: PVC-based, minimum thickness of 20 mil, 0.020 inch.

B. Conduit Joint Compound: Corrosion-resistant, electrically conductive compound listed as complying with UL 2419; suitable for use with conduit to be installed.

C. Pull Strings: Use nylon or polyester tape with average breaking strength of not less than 1,250 lbf.

D. Foam Conduit Sealant:
   1. Removable, two-part, closed-cell foam, specifically designed for sealing conduit openings against water, moisture, gases, and dust.
   2. Suitable for use with conductors/cables and associated insulation/jackets to be installed.

PART 3 EXECUTION

3.01 INSTALLATION

A. Install products in accordance with manufacturer's instructions.

B. Install conduit in accordance with NECA 1.

C. Galvanized Steel Rigid Metal Conduit (RMC): Install in accordance with NECA 101.

D. Aluminum Rigid Metal Conduit (RMC): Install in accordance with NECA 102.

E. Intermediate Metal Conduit (IMC): Install in accordance with NECA 101.

F. Rigid Polyvinyl Chloride (PVC) Conduit: Install in accordance with NECA 111.

G. Conduit Routing:
   1. Conduits in the following areas may be exposed, unless otherwise indicated:
      a. Electrical rooms.
      b. Mechanical equipment rooms.
   2. Unless otherwise approved, do not route exposed conduits:
      a. Across floors.
      b. Across roofs.
      c. Across building exterior surfaces.
   3. Arrange conduit to provide no more than equivalent of four 90-degree bends between pull points.
   4. Route conduits above water and drain piping where possible.
   5. Maintain minimum clearance of 6 inches between conduits and piping for other systems.

H. Conduit Support:
   1. Secure and support conduits in accordance with NFPA 70 using suitable supports and methods approved by authorities having jurisdiction; see Section 26 05 29.
   2. Provide independent support from building structure. Do not provide support from piping, ductwork, or other systems.
   3. Use conduit strap to support single surface-mounted conduit.
      a. Use clamp back spacer with conduit strap for damp and wet locations to provide space between conduit and mounting surface.

4. Use metal channel/strut with accessory conduit clamps to support multiple parallel surface-mounted conduits.
5. Use conduit clamp to support single conduit from beam clamp or threaded rod.
6. Use trapeze hangers assembled from threaded rods and metal channel/strut with accessory conduit clamps to support multiple parallel suspended conduits.
7. Use of spring steel conduit clips for support of conduits is not permitted.
8. Use of wire for support of conduits is not permitted.

I. Connections and Terminations:
1. Use approved zinc-rich paint or conduit joint compound on field-cut threads of galvanized steel conduits prior to making connections.
2. Where two threaded conduits must be joined and neither can be rotated, use three-piece couplings or split couplings. Do not use running threads.
3. Provide drip loops for liquidtight flexible conduit connections to prevent drainage of liquid into connectors.
4. Terminate threaded conduits in boxes and enclosures using threaded hubs or double lock nuts for dry locations and raintight hubs for wet locations.
5. Where spare conduits stub up through concrete floors and are not terminated in box or enclosure, provide threaded couplings equipped with threaded plugs set flush with finished floor.
6. Provide insulating bushings, insulated throats, or listed metal fittings with smooth, rounded edges at conduit terminations to protect conductors.

J. Penetrations:
1. Do not penetrate or otherwise notch or cut structural members, including footings and grade beams, without approval of Structural Engineer.
2. Provide sleeves for penetrations as indicated or as required to facilitate installation. Set sleeves flush with exposed surfaces unless otherwise indicated or required.
3. Where conduits penetrate waterproof membrane, seal as required to maintain integrity of membrane.
4. Make penetrations for roof-mounted equipment within associated equipment openings and curbs where possible to minimize roofing system penetrations. Where penetrations are necessary, seal as indicated or as required to preserve integrity of roofing system and maintain roof warranty.
5. Install firestopping to preserve fire resistance rating of partitions and other elements; see Section 07 84 00.

K. Underground Installation:
1. Minimum Cover, Unless Otherwise Indicated or Required:
   a. Underground, Exterior: 18 inches.
   b. Under Slab on Grade: 12 inches to bottom of slab.

L. Conduit Movement Provisions: Where conduits are subject to movement, provide expansion and expansion/deflection fittings to prevent damage to enclosed conductors or connected equipment. This includes, but is not limited to:
1. Where conduits cross structural joints intended for expansion, contraction, or deflection.
2. Where calculated in accordance with NFPA 70 for rigid polyvinyl chloride (PVC) conduit installed above ground to compensate for thermal expansion and contraction.
3. Where calculated in accordance with NFPA 70 for reinforced thermosetting resin conduit (RTRC) conduit installed above ground to compensate for thermal expansion and contraction.
4. Where conduits are subject to earth movement by settlement or frost.

M. Conduit Sealing:
    1. Use foam conduit sealant to prevent entry of moisture and gases. This includes, but is not limited to:
        a. Where conduits enter building from outside.
        b. Where service conduits enter building from underground distribution system.
        c. Where conduits enter building from underground.
        d. Where conduits may transport moisture to contact live parts.
    2. Where conduits cross barriers between areas of potential substantial temperature differential, use foam conduit sealant at accessible point near penetration to prevent condensation. This includes, but is not limited to:
        a. Where conduits pass from outdoors into conditioned interior spaces.
        b. Where conduits pass from unconditioned interior spaces into conditioned interior spaces.

N. Provide pull string in each empty conduit and in conduits where conductors and cables are to be installed by others. Leave minimum slack of 12 inches at each end.

END OF SECTION

SECTION 26 05 33.16
BOXES FOR ELECTRICAL SYSTEMS

PART 1 GENERAL

1.01 SUBMITTALS

A. Product Data: Provide manufacturer's standard catalog pages and data sheets for cabinets and enclosures and underground boxes/enclosures.

1.02 QUALITY ASSURANCE

A. Comply with requirements of NFPA 70.

PART 2 PRODUCTS

2.01 BOXES

A. General Requirements:
   1. Do not use boxes and associated accessories for applications other than as permitted by NFPA 70 and product listing.
   2. Provide all boxes, fittings, supports, and accessories required for a complete raceway system and to accommodate devices and equipment to be installed.
   3. Provide products listed, classified, and labeled as suitable for the purpose intended.
   4. Where box size is not indicated, size to comply with NFPA 70 but not less than applicable minimum size requirements specified.
   5. Provide grounding terminals within boxes where equipment grounding conductors terminate.

B. Outlet and Device Boxes Up to 100 cubic inches, Including Those Used as Junction and Pull Boxes:
   1. Use sheet-steel boxes for dry locations unless otherwise indicated or required.
   2. Use cast iron boxes or cast aluminum boxes for damp or wet locations unless otherwise indicated or required; furnish with compatible weatherproof gasketed covers.
   3. Use cast iron boxes or cast aluminum boxes where exposed galvanized steel rigid metal conduit or exposed intermediate metal conduit (IMC) is used.
   4. Use cast aluminum boxes where aluminum rigid metal conduit is used.
   5. Use nonmetallic boxes where exposed rigid PVC conduit is used.
   6. Use suitable concrete type boxes where flush-mounted in concrete.
   7. Use suitable masonry type boxes where flush-mounted in masonry walls.
   8. Use raised covers suitable for the type of wall construction and device configuration where required.
   9. Use shallow boxes where required by the type of wall construction.
   10. Do not use "through-wall" boxes designed for access from both sides of wall.
   11. Sheet-Steel Boxes: Comply with NEMA OS 1, and list and label as complying with UL 514A.
   12. Cast Metal Boxes: Comply with NEMA FB 1, and list and label as complying with UL 514A; furnish with threaded hubs.
   13. Nonmetallic Boxes: Comply with NEMA OS 2, and list and label as complying with UL 514C.
   14. Boxes for Supporting Luminaires and Ceiling Fans: Listed as suitable for the type and weight of load to be supported; furnished with fixture stud to accommodate mounting of luminaire where required.

15. Boxes for Ganged Devices: Use multigang boxes of single-piece construction. Do not use field-connected gangable boxes unless specifically indicated or permitted.

C. Cabinets and Enclosures, Including Junction and Pull Boxes Larger Than 100 cubic inches:
   1. Comply with NEMA 250, and list and label as complying with UL 50 and UL 50E, or UL 508A.
   2. Junction and Pull Boxes Larger Than 100 cubic inches:
      a. Provide screw-cover or hinged-cover enclosures unless otherwise indicated.

D. Underground Boxes/Enclosures:
   1. Description: In-ground, open bottom boxes furnished with flush, non-skid covers with legend indicating type of service and stainless steel tamper resistant cover bolts.
   2. Size: As indicated on drawings.
   3. Depth: As required to extend below frost line to prevent frost upheaval, but not less than 12 inches.
   4. Provide logo on cover to indicate type of service.
   5. Applications:
      a. Sidewalks and Landscaped Areas Subject Only to Occasional Nondeliberate Vehicular Traffic: Use polymer concrete enclosures, with minimum SCTE 77 Tier 8 load rating.
      b. Do not use polymer concrete enclosures in areas subject to deliberate vehicular traffic.
   6. Polymer Concrete Underground Boxes/Enclosures: Comply with SCTE 77.

PART 3 EXECUTION

3.01 INSTALLATION

A. Install products in accordance with manufacturer's instructions.

B. Install boxes in accordance with NECA 1 (general workmanship) and, where applicable, NECA 130, including mounting heights specified in those standards where mounting heights are not indicated.

C. Arrange equipment to provide minimum clearances in accordance with manufacturer's instructions and NFPA 70.

D. Unless otherwise indicated, boxes may be surface-mounted where exposed conduits are indicated or permitted.

E. Box Supports:
   1. Secure and support boxes in accordance with NFPA 70 and Section 26 05 29 using suitable supports and methods approved by the authority having jurisdiction.
   2. Provide independent support from building structure except for cast metal boxes (other than boxes used for fixture support) supported by threaded conduit connections in accordance with NFPA 70. Do not provide support from piping, ductwork, or other systems.

F. Install boxes as required to preserve insulation integrity.

G. Underground Boxes/Enclosures:
   1. Install enclosure on gravel base, minimum 6 inches deep.
   2. Mount enclosures located in landscaped areas with top at 1 inch above finished grade.
   3. Provide cast-in-place concrete collar constructed in accordance with Section 03 30 00, minimum 10 inches wide by 12 inches deep, around enclosures that are not located in concrete areas.

4. Install additional bracing inside enclosures in accordance with manufacturer's instructions to minimize box sidewall deflections during backfilling. Backfill with cover bolted in place.

H. Install permanent barrier between ganged wiring devices when voltage between adjacent devices exceeds 300 V.

END OF SECTION

SECTION 26 05 53
IDENTIFICATION FOR ELECTRICAL SYSTEMS

PART 1 GENERAL

1.01 QUALITY ASSURANCE

A. Comply with requirements of NFPA 70.

PART 2 PRODUCTS

2.01 IDENTIFICATION REQUIREMENTS

A. Identification for Equipment:
   1. Use identification nameplate to identify each piece of electrical distribution and control equipment and associated sections, compartments, and components.
      a. Panelboards:
         1) Identify power source and circuit number. Include location when not within sight of equipment.
         2) Use typewritten circuit directory to identify load(s) served for panelboards with a door. Identify spares and spaces using pencil.
         3) For power panelboards without a door, use identification nameplate to identify load(s) served for each branch device. Do not identify spares and spaces.
      b. Enclosed switches, circuit breakers, and motor controllers:
      c. Transfer Switches:
         1) Identify short circuit current rating based on the specific overcurrent protective device type and settings protecting the transfer switch.
   2. Service Equipment:
      a. Use identification nameplate to identify each service disconnecting means.
   3. Available Fault Current Documentation: Use identification label to identify the available fault current and date calculations were performed at locations requiring documentation by NFPA 70 including but not limited to the following.
      a. Service equipment.
      b. Industrial control panels.
      c. Motor control centers.
      d. Elevator control panels.
      e. Industrial machinery.

B. Identification for Conductors and Cables:
   1. Color Coding for Power Conductors 600 V and Less: Comply with Section 26 05 19.
   2. Use identification nameplate or identification label to identify color code for ungrounded and grounded power conductors inside door or enclosure at each piece of feeder or branch-circuit distribution equipment when premises has feeders or branch circuits served by more than one nominal voltage system.
   3. Use wire and cable markers to identify circuit number or other designation indicated for power, control, and instrumentation conductors and cables at the following locations:
      a. At each source and load connection.

C. Identification for Boxes:
   1. Use identification labels or handwritten text using indelible marker to identify circuits enclosed.

2.02 IDENTIFICATION NAMEPLATES AND LABELS

A. Identification Nameplates:
   1. Materials:
      a. Indoor Clean, Dry Locations: Use plastic nameplates.
   2. Plastic Nameplates: Two-layer or three-layer laminated acrylic or electrically non-conductive phenolic with beveled edges; minimum thickness of 1/16 inch; engraved text.

B. Identification Labels:
   1. Materials: Use self-adhesive laminated plastic labels; UV, chemical, water, heat, and abrasion resistant.
   2. Text: Use factory pre-printed or machine-printed text. Do not use handwritten text unless otherwise indicated.

2.03 WIRE AND CABLE MARKERS

A. Markers for Conductors and Cables: Use wrap-around self-adhesive vinyl cloth, wrap-around self-adhesive vinyl self-laminating, heat-shrink sleeve, plastic sleeve, plastic clip-on, or vinyl split sleeve type markers suitable for the conductor or cable to be identified.

B. Markers for Conductor and Cable Bundles: Use plastic marker tags secured by nylon cable ties.

C. Legend: Power source and circuit number or other designation indicated.

D. Text: Use factory pre-printed or machine-printed text, all capitalized unless otherwise indicated.

E. Minimum Text Height: 1/8 inch.

F. Color: Black text on white background unless otherwise indicated.

2.04 WARNING SIGNS AND LABELS

A. Comply with ANSI Z535.2 or ANSI Z535.4 as applicable.

B. Warning Signs:
   1. Materials:
   2. Minimum Size: 7 by 10 inches unless otherwise indicated.

C. Warning Labels:
   1. Materials: Use factory pre-printed or machine-printed self-adhesive polyester or self-adhesive vinyl labels; UV, chemical, water, heat, and abrasion resistant; produced using materials recognized to UL 969.
   2. Machine-Printed Labels: Use thermal transfer process printing machines and accessories recommended by label manufacturer.
   3. Minimum Size: 2 by 4 inches unless otherwise indicated.

PART 3 EXECUTION

3.01 INSTALLATION

A. Install products in accordance with manufacturer's instructions.

B. Secure nameplates to exterior surfaces of enclosures using stainless steel screws and to interior surfaces using self-adhesive backing or epoxy cement.

END OF SECTION

SECTION 26 09 00
PUMP CONTROL PANEL AND INSTRUMENTS

PART 1 – GENERAL

1.01 DESCRIPTION

A. This specification covers the technical requirements for engineering, fabrication, wiring and installation for control panels and enclosures.

B. It is the intention that this specification shall cover a complete electrical control system as hereinafter described and all necessary appurtenances which might normally be considered a part of the complete electrical system for this installation.

C. The control panel is a simple monitoring and display system as described hereafter. The control system shall include:

1. Control Panel with an integrated AutomationDirect PLC, unlicensed radio and Precision Digital display.

2. Level instruments – Submersible level transducer as primary elevated tank bowl level monitoring. (level sensor cannot be within enclosure as no water connections shall be allowed within enclosure).

3. Reference drawings for details.

D. System Coordination and Single Source Responsibility:

1. The equipment provided shall be a completely integrated automatic control and monitoring system consisting of the required automation and alarm monitoring equipment in a factory wired and tested assembly. The automatic control and alarm/monitoring system components shall be standard, catalogued, stocked products of the System Supplier to assure one source responsibility, immediately available spare/replacement parts, proper system interconnections and reliable long-term operation.

2. All equipment and materials shall be subject to the Engineer’s review and shall not be purchased or manufactured until the review is complete and approved. Reference to drawings and these specifications shall not limit but provide minimum requirements for a fully functional system. It is the responsibility of the contractor to provide fully functional equipment and design for this project.

1.02 QUALITY ASSURANCE

A. Equipment specified herein shall meet applicable standards of the following agencies and associations:

1. Underwriters' Laboratories, UL.
2. National Electrical Manufacturers Association, NEMA.
3. National Electrical Code (NEC)

B. Underwriters' L Wire sizes inside the control panel shall comply with the NEC, for 60° C operation. The Supplier shall maintain quality in both design and workmanship as well as materials used in manufacture of equipment supplied. All equipment supplied under this Contract shall be of new manufacture.

C. All equipment supplied shall be of the most current and proven design at the time of delivery. The completed System and the equipment provided by the Supplier shall be compatible with the functions required and shall be a complete working System.

1.03 DOCUMENTATION

A. The complete assembly shall be provided with job-specific wiring diagrams, parts lists, enclosure dimensional and door layout drawings and instructions.

B. Shop Drawings shall be submitted for approval for all equipment herein specified. The Shop Drawing Submittal shall include a Table of Contents. A Project Summary shall be included which shall describe in detail all equipment provided. Each panel shall be provided with a job-specific Wiring Diagrams, Bill of Materials, Enclosure Door Layouts and Enclosure Dimension Drawings. Manufacturer's wiring diagrams that are not job-specific (standard drawings with options crossed out, etc.) are not acceptable. The wiring diagram requirement applies to all field mounted instrumentation and control equipment. Interconnection details shall be shown for all field mounted instrumentation. A Description of Operation shall be provided detailing the operation of the complete system, including the control and alarm handling.

C. Provide As-Built Drawings and Instruction Manuals. These manuals shall include corrected Shop Drawings. In addition, a detailed Programming and Operations Manual for the Microprocessor-based Controller Unit shall be included. The manual shall include all information as detailed for the Shop Drawing Submittals above.

PART 2 – PRODUCTS

2.01 GENERAL

A. The instrument panels and enclosures shall be as follows:

1. The freestanding or rack mounted enclosure shall be rated NEMA 4X, stainless steel, provided with accessories and components at a minimum as shown on the drawings and detailed in the project specifications.

B. Provide conduit accessories as needed for conduits terminating at control panels, including watertight conduit hubs, conduit seals for explosion-proof wiring applications, and manufactured moisture seals for non-hazardous applications. Sealing putty is not acceptable.

C. There shall be no penetrations in the top side of enclosure.

2.02 PANEL CONSTRUCTION

A. General

1. Stiffening members shall be provided for strength and stiffness as required.

2. Seamless welded construction shall be used throughout. All exposed seams shall be continuously welded and ground smooth.

3. Lifting rings shall be provided.

4. Sub panels shall be provided as required, with mounting designed for easy removal. The subpanels (interior equipment panels) shall be finished with 2 coats of white enamel paint.

5. Print pockets shall be attached to the interior side of each door.

6. Hinges shall be stainless steel piano continuous hinge type.

7. Provide 3-point door latching mechanisms with lockable handles on front of panel door(s).

8. Provide gasketing if required for rating.

2.03 PANEL GROUNDING

A. Provide equipment grounding bus bar or terminal block.

1. The ground bus bars shall be of nickel-plated copper, rated for 100 amperes.

2. The bus bar shall be provided with two (2) screw clamp terminal blocks, which shall be capable of accepting conductors up to #1 AWG.

3. The bus bar shall be provided with a minimum of twenty (20) screw clamp terminal blocks, which shall be capable of accepting conductors up to #4 AWG.

2.04 PANEL WIRING

A. Wiring within the enclosure shall be continuous and shall be terminated only at terminal blocks or equipment terminals.

B. Not more than two wires shall be terminated at any terminal.

C. Wiring splices and wire nuts will not be permitted within the enclosure.

D. Wiring within the enclosure shall be protected as follows:

1. In general, all wiring within the enclosure shall be routed in plastic wiring ducts. Wiring ducts shall be sized to include 100% (percent) spare capacity.

2. Wiring outside of the ducts shall be restrained by means of plastic ties.

3. Wiring passing a door hinge shall be grouped and wrapped in a protective wire

harness.

4. Provide abrasion protection for wire bundles passing through holes or across metal edges.

E. In general, wiring within the enclosure shall be as follows:

1. Control wiring within the enclosure shall be #18 AWG minimum (comply with all NEC regulations for wire size and corresponding amperage ratings), stranded, type MTW, 600V.

2. Wiring for 4-20 mA DC analog signals shall be #18 AWG twisted shielded pair.

a. Cables shall meet the following criteria:

1). U.L. Listed Subject 1277
2). Pass IEEE 383 or UL 1581 Flame Test
3). OSHA Acceptable
4). Pall UL VW-1 Flame Test
5). #18 AWG conductors, 7 strand, bare copper
6). 100% aluminum/polyester foil shield
7). 600 volt 90 degrees C rated insulation
8). Each conductor shall be numbered and color-coded.
9). Comply with NEC articles #318, #340 and #501, for power limited tray cable (PLTC)
10). Nominal 2" lay
11). PVC insulation, with ripcord and nylon jacket
12). Suitable for use in wet locations
13). For high amperage cables within the enclosure, high strand count welding cable may be used for flexibility within the enclosure. Note that special connectors will be required for termination of high strand count welding cable.

b. The manufacturer of the cables shall be an ISO 9001 certified facility.

F. In general, wiring within the enclosure shall follow the following color convention to comply with NFPA 79 (1994), part 16:

1. AC Neutral conductors shall be white.
2. AC Line, load and control conductors shall be black.
3. Grounding conductors shall be green.
4. Foreign voltage control conductors shall be yellow or orange.
5. Low voltage (below 50 volts) AC conductors shall be red.
6. Low voltage neutral (grounded) conductors shall be white with a red stripe.
7. DC control conductors shall be blue.
8. DC (+) power conductors shall be blue with a white stripe or purple.
9. DC (-) (grounded) power conductors shall be white with a blue stripe.
10. Wiring with multi-conductor cables shall be color-coded.

Note: Foreign voltage means all control circuits that may remain energized when the main disconnecting means is in the OFF position. Interlocking conductors shall be

yellow or orange throughout the entire circuit, including wiring in the control panel and the external field wiring.

G. Equipment and signal ground wiring, as well as Neutral wiring, shall not be daisy-chained; they shall each be terminated at isolated, bussed terminal blocks.

H. Each conductor end shall be terminated at a terminal block or at an equipment-wiring terminal. Each terminal block shall have a unique identification number. The terminal blocks shall be arranged and numbered in consecutive order, based on standard alphanumeric order. No more than two conductors shall be terminated together at a certain point. If two conductors add up to be a larger size than the accepted size of the termination point, only one conductor may occupy this termination.

I. Terminal blocks within enclosure shall be grouped as follows:

1. 480 Volts AC power.
2. 120 Volts AC power.
3. 120 Volts AC control wiring.
4. AC isolated Neutral.
5. 24 Volts DC power.
6. 24 Volts DC control wiring for discrete signals
7. 24 Volts DC Common.
8. Analog signal wiring (for 4-20 mA DC signals).
9. Grounding.

J. Provide 25% spare terminal blocks (minimum of six) for each type used in each enclosure.

2.05 TERMINAL BLOCKS

A. Except for incoming power terminal blocks, terminal blocks within enclosures shall be of the high-density modular types, constructed of nylon material, suitable for mounting on standard DIN rails. Termination type shall be tubular screw with serrated pressure plate. The terminal block system shall be manufactured by Phoenix Contact, Weidmuller, or equal.

B. All current carrying parts (metal bodies) shall be made of nickel/tin-plated copper.

C. Ground terminals shall be color coded in accordance with international standard, which shall be yellow/green.

D. Matching jumper bridges shall be color coded to the wiring colors.

E. Panel power distribution fused terminal blocks shall be provided with disconnect lever puller mechanism and illuminated indication.

1. Fused shall be standard ¼" by 1-¼" and shall be sized as shown on the drawings.
2. The terminal blocks shall be able to accept up to number 8 AWG conductor.
3. Terminal blocks shall be rated for 15 amps at 250 VAC.
4. Terminal blocks shall be Phoenix Contact type UK 6.3-HESiLA-250, Weidmuller type 6/2, or equal.

F. Terminal blocks for discrete inputs and outputs shall be two-level types:

1. Both levels shall be of the feed-through types.
2. Terminals shall be rated for up to 20 amperes at 300 VAC and shall be able to accept up to #12 stranded conductors.
3. Terminal blocks shall be Phoenix Contact type UKKB-3, Weidmuller WDK 2.5, or equal.

G. Terminal blocks for analog inputs and outputs shall be three-level types:

1. The top and center terminations shall be feed-through types.
2. The bottom termination shall be grounded through the railing.
3. The terminal blocks shall be rated for up to 10 amperes at 300 VAC and shall be able to accept up to #12 AWG stranded conductors.
4. The terminal blocks shall be Phoenix Contact type SLKK-5, Weidmuller type DLD 2.5/PE or equal.

H. Terminal blocks for foreign voltage "hot" conductors shall be single level disconnecting type:

1. Blocks shall be orange or yellow to match control wiring per Part 2.04, F.
2. The terminal blocks shall be rated for 10 amperes at 300 VAC and shall be able to accept #22 thru #12 AWG conductors.
3. The terminal blocks shall be lever type with clear indication of open/close status.
4. The terminal blocks shall be Weidmulller type WRT 2.5, Phoenix Contact or equal.

2.06 PANEL ACCESSORIES

A. Provide (furnish and install) interposing relays to interface all field-mounted equipment with power limited electronic control and communication equipment. Use intrinsically safe relays where field devices are located in hazardous areas.

B. Each enclosure shall have an Earth ground lug or bus bar for termination of isolated grounds.

C. Provide a thermostatically controlled condensation heater appropriately sized for each enclosure.

1. Saginaw Control and Engineering (SCE)
2. Hoffman or approved equal

2.07 PANEL INSTRUMENTS

A. Provide all terminal blocks, circuit breakers, surge protection device and so forth to interface all field mounted equipment with control system equipment.

B. Provide a a PLC/Controller for tank level monitoring and connectivity to existing SCADA system via unlicensed radio.

C. PLC shall be AutomationDirect C2-03CPU with associated I/O module C2-08D2-6C to match existing equipment.

D. Unlicensed radio shall be Maxon license-free SD-171EL.

2.08 PILOT AND CONTROL DEVICES

A. Pilot Devices: Pushbuttons, selector switches, and indicating lights shall be rated heavy-duty, oil-tight or watertight and corrosion resistant as required. All units shall be furnished with standard size legend plates with legends as described on the project Drawings. All Pilot devices shall be NEMA4X 30.5mm type.

B. Selector switches shall have the number of positions, switching arrangement, number and type of contact blocks indicated on the project Drawings.

C. Contact blocks shall have a minimum continuous current rating of 10 amperes at 240 VAC. Contact blocks shall have screw type connection terminals.

D. Indicating lights shall be light emitting diode type 120VAC, color cap, and push-to-test feature. Provide flashing type lights where indicated.

E. Pilot device manufacturers shall be:

1. Allen-Bradley Bulletin 800H or 800T
2. IDEC
3. Or equal

F. Control relays shall be plug-in type with sockets and hold-in clips. Sockets shall have

screw terminals. Contacts shall be silver cadmium, rated 10 amperes at 240 VAC. Relays shall have two-pole, double throw contacts (DPDT). Relays shall have a manual operator and pilot light. Coil voltages shall be 120 VAC, or as noted on the project Drawings. Relays shall be manufactured by Allen-Bradley Bulletin 700, Type HA or HB, or equal by same manufacturer as motor starters.

2.09 EQUIPMENT IDENTIFICATION AND WIRE TAGGING

A. All control wiring shall be identified by means of computer-generated, heat shrink type wire marker. Wire numbers shall be as shown on the drawings.

B. Each component mounted within the enclosure shall be provided with equipment identification. Equipment and device nameplates or identification shall be of engraved laminated plastic, with black lettering on white background. Nameplates shall be listed herein or as shown on the project Drawings.

2.10 ACCESSORY CIRCUIT BREAKERS

A. Accessory circuit breakers shall have terminal lug wire size #14 - #2 AWG Cu or Al. Reversible line and load lugs for flush mount wiring. DIN mounted (symmetrical rail 35 x 7.5 DIN/EN 50 022). UL Listed as HACR type from 15 A to 70 A. Field installable quick connectors. Single handle with internal common trip. UL Listed 120/240VAC (10,000 AIC).

B. Accessory circuit breakers shall be thermal magnetic type.

C. Accessory circuit breakers shall be supplied with reversible lugs. Mounting brackets shall be provided for flush installation.

2.11 MOTOR BRANCH CIRCUIT BREAKERS

A. Motor branch-circuit breakers shall be motor circuit protector type with adjustable instantaneous trip, or thermal magnetic type circuit breakers with inverse time-current characteristics.

B. Motor branch-circuit breakers shall be provided by manufacturer/supplier of solid-state motor controllers.

2.12 CONTACTORS AND RELAYS

A. These units shall be type and size with the number of poles and accessories as indicated on the Drawings.

B. Unless indicated otherwise, these units shall be by the same manufacturer as the motor starters.

C. Control relays shall be plug-in “ice-cube style” with screw terminal base and hold-in clips.

2.13 ACCESSORY DEVICES

A. These devices shall be heavy duty type and shall mount in the starter/pump control panel enclosure on the swing out panel or panel door, as indicated.

B. Unless otherwise indicated, these devices shall be by the same manufacturer as the motor starters.

2.14 SURGE PROTECTION DEVICE

A. The SPD shall be constructed using multiple surge current diversion arrays of metal oxide varistors (MOV), matched to 1% variance. The array shall consist of multiple gap-less metal oxide varistors, with each MOV individually fused. The arrays shall be designed and constructed in a manner which ensures MOV surge current sharing. No gas tubes, silicon avalanche diodes or selenium plates/rectifiers shall be used. The status of each array shall be continuously monitored and a green LED shall be illuminated if the array is in full working order. All protection modes, including N-G, shall be monitored and internally fused. Summary alarm dry contacts shall be provided: phase loss, undervoltage, power loss, protection failure.

2.15 SUBMERSION RATED PRESSURE TRANSDUCER

A. The elevated tank bowl shall be monitored continuously for level utilizing a pressure transducer rated for 0 – 100 PSI. The transducer shall be installed in a valve vault with a ball valve and pressure gauge as shown on drawings.

B. The transducer shall be connected at the control panel and split between the PLC analog input and the display unit as shown in the drawings. Provide a display similar to a Precision Digital PD765 with loop power and relay outputs.

C. General

1. Provide a loop powered submersible pressure transmitter for this project.

2. This section describes the requirements for a submersible level measuring system. Under this item, the contractor shall furnish and install the level measuring system, and all associated equipment and accessories as indicated on the plans and as herein specified.

D. Primary level monitoring shall be from a submersible pressure transducer.

E. The liquid level of the following areas shall be sensed by maintenance free Loop Powered Submersible Level Transducer system that uses reliable hydrostatic head pressure sensing principle to provide an accurate and reliable proportional 4-20 mA signal representing level/pressure. Other technologies that can be affected by foaming, turbulence, grease, suspended solids build up, atmospheric changes, condensation, or false echoing shall not be acceptable. Submersible sensor systems that use protective caps or cages to protect the sensing diaphragm, are susceptible to solids build up, shall be considered high maintenance and unreliable, and shall not be acceptable. The transducer shall be suitable for continuous submergence and operation and shall be installed in accordance with manufacturer's instructions.

F. The transducer housing shall be fabricated of a Teflon™ coated 316 stainless steel with a threaded nozzle of ½” diameter of heavy-duty, limp, foul-free, molded Teflon™ bonded

to a synthetic rubber back/seal. System design shall allow maintenance free operation in both water and wastewater environments (high solids). Housing construction shall resist and be unaffected by the buildup of solids on its surfaces or sensing diaphragm. The transducer electronics shall be encased within the protective housing and shall be electrically and mechanically isolated from the sensed media via non-conductive fluid filled pressure transference cavity and barometric compensated transducer electronics chamber. Metallic or ridged diaphragms shall not be acceptable in that they are subject to damage or distortion.

G. The submersible level transducer shall be a two-wire type and shall operate from a supply voltage of 9 to 30 VDC and produce a 4-20 mA signal in direct proportion to the measured level excursion over a pre-calibrated range of 0 to 30 PSI. The unit shall have ample instrument loop load capacity and shall be able to drive a minimum load of 750 Ohms @ 24 VDC loop power. The sensor technology shall be based on the use of a highly reliable and stable piezo-resistive pressure element with a .25% full scale accuracy with compensation for non-linearity, hysteresis and repeatability. The unit shall operate over a wide –40 to 185 degrees F. temperature range and shall have not more than a 3% full scale error over a –4 to 180 Deg F. range.

H. The transducer element shall incorporate high over-pressure protection and be designed to withstand intermittent overpressures (8X (1.5 PSI) 4X (5 PSI) 2X (15 & 30 PSI) – Select One) times the full-scale range being sensed. Sensing principles employing less reliable technologies including LVDTs, capacitance or pneumatic elements shall not be acceptable.

I. The internal pressure of the transducer assembly shall be relieved to atmospheric pressure through a heavy-duty urethane jacketed hose/cable assembly with a dedicated breather tube. The tube shall be ridged to prevent compression that may result from mounting or folding of the cable through installation. The breather system shall be sealed through the use of a rugged maintenance free air bladder assembly connected to the breather tube and mounted within a junction box or monitoring panel. The sealed breather system shall compensate for variations in barometric pressure including expansion and contraction of air due to temperature changes and altitude as well as prevent fouling from moisture and other corrosive/atmospheric elements.

J. Acceptable Manufacturers:

1. E&H Waterpilot FMX11 or 21
2. Or Approved Equal.

PART 3 – EXECUTION

3.01 INSTALLATION

A. Provide and install all necessary bracket mounting devices, structural pieces and anchors necessary for this purpose.

1. For this project, provide a heavy duty welded aluminum mounting frame, set in concrete. Provide corrosion protection coating for any portion of aluminum frame in direct contact with dirt and/or concrete. The upright support columns shall be welded closed so that there is not allowed water penetration.

B. General mounting heights for the various type devices shall be as follows, unless otherwise indicated.

1. Control Panel - 5'-6" to top.

C. All control devices, motor starters, and relays inside the pump control panel shall be identified with engraved laminate nameplate.

D. Pump control panel shall have engraved laminate nameplate on exterior.

E. Install and connect pump cables furnished with each pump.

F. Install and connect pump seal and temperature sensor cables for each pump motor.

G. Furnish, install and connect control cables for each level float.

H. Furnish and install stainless steel strain relief mesh grips and anchors for each cable installed in the wet well as required.

3.02 WIRING

A. Provide wiring for all motors, starters and control equipment.

B. Connections shown to equipment are approximate and do not represent the actual point of connection. Verify actual location before roughing-in.

3.03 START-UP AND COMMISSIONING

A. The manufacturer and/or contractor shall supply authorized personnel for start-up service as needed to ensure satisfactory operation. Subsequent trips to the job site to correct defects shall be made at no charge to the Owner during the warranty period.

B. Simulate the following failures/operations and detail how the operation/failure was simulated with the result. Submit the procedures for simulating the operation/failures to the engineer during the submittal phase. The engineer must approve the means and methods prior to performing the actual test. Include the final test results in the operation and maintenance manual.

1. Power Failure with actual generator hook-up.
2. Phase Failure
3. Simulate level control lead/lag operation.
4. Simulate float operation
5. Simulate high level alarm
6. Simulate one pump fail.
7. Simulate two pump fail.
8. Test alarm beacon and alarm horn.

C. The above testing and commissioning may overlap with owner training.

3.04 TRAINING

A. The system manufacturer shall supply authorized personnel to conduct a training session. The Owner shall have the right to video tape the training for future reuse.

B. The training session(s) shall be conducted and repeated as needed until the Owner and Engineer are satisfied that the operators are comfortable with the operation and maintenance of the system. Training shall be done on site with the owner's personnel. Start-up and training personnel shall provide their full attention to this customer while on site.

C. For any system to work properly, good training is important. The contractor shall insure that the training will be taken at the utmost importance and insure the client is comfortable with the system. Subsequent follow up with the owner at 6 months and 1 year will be performed to insure any questions are addresses.

3.05 WARRANTY

A. A one-year warranty shall begin from the time of "substantial completion" as issued by the engineer. This shall cover parts and labor due to faulty components and/or workmanship.

END OF SECTION

SECTION 26 24 16
PANELBOARDS

PART 1 GENERAL

1.01 SUBMITTALS

A. Product Data: Provide manufacturer's standard catalog pages and data sheets for panelboards, enclosures, overcurrent protective devices, and other installed components and accessories.

B. Shop Drawings: Indicate outline and support point dimensions, voltage, main bus ampacity, overcurrent protective device arrangement and sizes, short circuit current ratings, conduit entry locations, conductor terminal information, and installed features and accessories.

1.02 QUALITY ASSURANCE

A. Comply with requirements of NFPA 70.

PART 2 PRODUCTS

2.01 PANELBOARDS - GENERAL REQUIREMENTS

A. Provide products listed, classified, and labeled as suitable for the purpose intended.

B. Short Circuit Current Rating:
   1. Provide panelboards with listed short circuit current rating as indicated on the drawings.
   2. Listed series ratings are not acceptable.

C. Mains: Configure for top or bottom incoming feed as indicated or as required for the installation.

D. Bussing: Sized in accordance with UL 67 temperature rise requirements.
   1. Provide solidly bonded equipment ground bus in each panelboard, with a suitable lug for each feeder and branch circuit equipment grounding conductor.

E. Conductor Terminations: Suitable for use with the conductors to be installed.

F. Enclosures: Comply with NEMA 250, and list and label as complying with UL 50 and UL 50E.
   1. Boxes: Galvanized steel unless otherwise indicated.
      a. Provide wiring gutters sized to accommodate the conductors to be installed.
   2. Fronts:
   3. Lockable Doors: All locks keyed alike unless otherwise indicated.

G. Future Provisions: Prepare all unused spaces for future installation of devices including bussing, connectors, mounting hardware and all other required provisions.

2.02 LIGHTING AND APPLIANCE PANELBOARDS

A. Description: Panelboards complying with NEMA PB 1, lighting and appliance branch circuit type, circuit breaker type, and listed and labeled as complying with UL 67; ratings, configurations and features as indicated on the drawings.

B. Conductor Terminations:
   1. Main and Neutral Lug Material: Aluminum, suitable for terminating aluminum or copper conductors.
   2. Main and Neutral Lug Type: Mechanical.

C. Bussing:
   1. Phase and Neutral Bus Material: Aluminum.
   2. Ground Bus Material: Aluminum.

D. Circuit Breakers: Thermal magnetic bolt-on type unless otherwise indicated.

E. Enclosures:
   1. Provide surface-mounted or flush-mounted enclosures as indicated.
   2. Fronts: Provide lockable hinged door with concealed hinges for access to overcurrent protective device handles without exposing live parts.
   3. Provide clear plastic circuit directory holder mounted on inside of door.

2.03 OVERCURRENT PROTECTIVE DEVICES

A. Fusible Switches:
   1. Description: Quick-make, quick-break, dead-front fusible switch units complying with NEMA KS 1, and listed and labeled as complying with UL 98; ratings, configurations, and features as indicated on the drawings.
   2. Fuse Clips: As required to accept indicated fuses.
   3. Provide externally operable handle with means for locking in the OFF position. Provide means for locking switch cover in the closed position. Provide safety interlock to prevent opening the cover with the switch in the ON position with capability of overriding interlock for testing purposes.

B. Molded Case Circuit Breakers:
   1. Description: Quick-make, quick-break, over center toggle, trip-free, trip-indicating circuit breakers listed and labeled as complying with UL 489, and complying with FS W-C-375 where applicable; ratings, configurations, and features as indicated on the drawings.
   2. Interrupting Capacity:
      a. Provide circuit breakers with interrupting capacity as required to provide the short circuit current rating indicated, but not less than:
         1) 10,000 rms symmetrical amperes at 240 VAC or 208 VAC.
      b. Fully Rated Systems: Provide circuit breakers with interrupting capacity not less than the short circuit current rating indicated.
   3. Conductor Terminations:
      a. Provide mechanical lugs unless otherwise indicated.
      b. Lug Material: Aluminum, suitable for terminating aluminum or copper conductors.
   4. Thermal Magnetic Circuit Breakers: For each pole, furnish thermal inverse time tripping element for overload protection and magnetic instantaneous tripping element for short circuit protection.
   5. Do not use tandem circuit breakers.
   6. Do not use handle ties in lieu of multi-pole circuit breakers.

PART 3 EXECUTION

3.01 INSTALLATION

A. Perform work in accordance with NECA 1 (general workmanship).

B. Install products in accordance with manufacturer's instructions.

C. Install panelboards in accordance with NECA 407 and NEMA PB 1.1.

D. Arrange equipment to provide minimum clearances in accordance with manufacturer's instructions and NFPA 70.

E. Provide required support and attachment in accordance with Section 26 05 29.

F. Mount panelboards such that the highest position of any operating handle for circuit breakers or switches does not exceed 79 inches above the floor or working platform.

G. Provide minimum of six spare 1 inch trade size conduits out of each flush-mounted panelboard stubbed into accessible space above ceiling and below floor.

H. Provide grounding and bonding in accordance with Section 26 05 26.

I. Provide fuses complying with Section 26 28 13 for fusible switches as indicated.

J. Provide filler plates to cover unused spaces in panelboards.

END OF SECTION

SECTION 26 27 26
WIRING DEVICES

PART 1 GENERAL

1.01 SUBMITTALS

A. Product Data: Provide manufacturer's catalog information showing dimensions, colors, and configurations.

1.02 QUALITY ASSURANCE

A. Comply with requirements of NFPA 70.

B. Products: Listed, classified, and labeled as suitable for the purpose intended.

C. Product Listing Organization Qualifications: An organization recognized by OSHA as a Nationally Recognized Testing Laboratory (NRTL) and acceptable to authorities having jurisdiction.

PART 2 PRODUCTS

2.01 WIRING DEVICES - GENERAL REQUIREMENTS

A. Provide wiring devices suitable for intended use with ratings adequate for load served.

B. Wiring Device Applications:
   1. Receptacles Installed Outdoors or in Damp or Wet Locations: Use weather-resistant GFCI receptacles with weatherproof covers.

C. Wiring Device Finishes:
   1. Provide wiring device finishes as described below, unless otherwise indicated.
   2. Wiring Devices Installed in Unfinished Spaces: Gray with galvanized steel wall plate.
   3. Wiring Devices Installed in Wet or Damp Locations: Gray with weatherproof cover.

2.02 WALL SWITCHES

A. Wall Switches - General Requirements: AC only, quiet operating, general-use snap switches with silver alloy contacts, complying with NEMA WD 1 and NEMA WD 6, and listed as complying with UL 20 and where applicable, FS W-S-896; types as indicated on the drawings.

B. Standard Wall Switches: Industrial specification grade, 20 A, 120/277 V with standard toggle type switch actuator and maintained contacts; single pole single throw, double pole single throw, three way, or four way as indicated on the drawings.

2.03 RECEPTACLES

A. Receptacles - General Requirements: Self-grounding, complying with NEMA WD 1 and NEMA WD 6, and listed as complying with UL 498, and where applicable, FS W-C-596; types as indicated on the drawings.
   1. NEMA configurations specified are according to NEMA WD 6.

B. Convenience Receptacles:
   1. Standard Convenience Receptacles: Industrial specification grade, 20A, 125V, NEMA 5-20R; single or duplex as indicated on the drawings.

C. GFCI Receptacles:
   1. GFCI Receptacles - General Requirements: Self-testing, with feed-through protection and light to indicate ground fault tripped condition and loss of protection; listed as complying with UL 943, class A.

2. Standard GFCI Receptacles: Industrial specification grade, duplex, 20A, 125V, NEMA 5-20R, rectangular decorator style.
3. Weather Resistant GFCI Receptacles: Industrial specification grade, duplex, 20A, 125V, NEMA 5-20R, rectangular decorator style, listed and labeled as weather resistant type complying with UL 498 Supplement SD suitable for installation in damp or wet locations.

2.04 WALL PLATES AND COVERS

A. Wall Plates: Comply with UL 514D.
   1. Configuration: One piece cover as required for quantity and types of corresponding wiring devices.
   2. Size: Standard.
   3. Screws: Metal with slotted heads finished to match wall plate finish.

B. Galvanized Steel Wall Plates: Rounded corners and edges, with corrosion resistant screws.

C. Weatherproof Receptacle Covers for Wet Locations: Gasketed, cast aluminum, with hinged lockable cover and corrosion-resistant screws; listed as suitable for use in wet locations while in use with attachment plugs connected and identified as extra-duty type.

D. Weatherproof Switch Covers for Wet or Damp Locations: Gasketed, metallic, with externally operable actuating means and corrosion-resistant screws; listed as suitable for use in wet locations.

PART 3 EXECUTION

3.01 INSTALLATION

A. Perform work in accordance with NECA 1 (general workmanship) and, where applicable, NECA 130, including mounting heights specified in those standards unless otherwise indicated.

B. Coordinate locations of outlet boxes provided under Section 26 05 33.16 as required for installation of wiring devices provided under this section.

C. Install wiring devices in accordance with manufacturer's instructions.

D. Install permanent barrier between ganged wiring devices when voltage between adjacent devices exceeds 300 V.

E. Connect wiring devices by wrapping conductor clockwise 3/4 turn around screw terminal and tightening to proper torque specified by the manufacturer. Where present, do not use push-in pressure terminals that do not rely on screw-actuated binding.

F. Unless otherwise indicated, connect wiring device grounding terminal to branch circuit equipment grounding conductor and to outlet box with bonding jumper.

END OF SECTION

SECTION 26 41 13
LIGHTNING PROTECTION FOR STRUCTURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes lightning protection for buildings. A complete lightning protection system shall be provided in full compliance with the latest edition of UL96A and NFPA 780.

B. Furnish and install a complete new lightning protection system as required to achieve a UL master label.

C. All down conductors shall be concealed from view. The use of the building structural steel will NOT be allowed.

D. Refer to the grounding and lightning protection system drawings for additional information.

E. System shall be Class II based on building height.

1.3 DEFINITIONS

A. LPI: Lightning Protection Institute.

B. NRTL: National recognized testing laboratory.

1.4 SUBMITTALS

A. Product Data: For air terminals and mounting accessories.

B. Shop Drawings: Detail lightning protection system, including air-terminal locations, conductor routing and connections, and bonding and grounding provisions. Include indications for use of raceway, data on how concealment requirements will be met, and calculations required by NFPA 780 for bonding of grounded and isolated metal bodies.

C. Qualification data for firms and persons specified in "Quality Assurance" Article to demonstrate their capabilities and experience. Include data on listing or certification by an NRTL or LPI.

D. Field inspection reports indicating compliance with specified requirements.

1.5 QUALITY ASSURANCE

A. Installer Qualifications: Engage an experienced installer who is an NRTL or who is certified by LPI as a Master Installer/Designer.

B. Listing and Labeling: As defined in NFPA 780, "Definitions" Article.

C. Provide a UL master label.

D. The following sources of industry standards shall be used:

1. Lightning Protection Institute (LPI).
2. National Fire Protection Association (NFPA).
3. Underwriters Laboratories (UL).

E. All materials, equipment, installation and arrangement of the system shall comply with the following references:

1. LPI-175 – Lightning Protection Installation Standard.
2. LPI-176 – Lightning Protection System Material and Components Standard.
3. LPI-177 – Inspection Guide for LPI Certified Systems.
4. NFPA-780 – Lightning Protection Components.
5. UL 96 – Lightning Protection Components.
6. UL 96A – Installation Requirements for Lightning Protection Systems.

F. Perform work in accordance with NFPA 780.

G. Perform work in accordance with UL 96A and provide an independent UL master label inspection. Upon passing UL master label inspection, provide master label certification.

H. Master label certification shall be posted to the UL website at lps.ul.com.

1.6 COORDINATION

A. Coordinate installation of lightning protection with installation of other building systems and components, including electrical wiring, supporting structures and building materials, metal bodies requiring bonding to lightning protection components, and building finishes.

B. Coordinate installation of air terminals attached to roof systems with roofing manufacturer and Installer.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

1. Capitol Lightning Rod Company.

2. ERICO International Corporation.
3. Harger Lightning Protection, Inc.
4. Independent Protection Co.
5. Robbins Lightning Inc.
6. Thompson Lightning Protection.

2.2 LIGHTNING PROTECTION SYSTEM COMPONENTS

A. Comply with UL 96.

B. Roof-Mounting Air Terminals: NFPA Class II copper. Utilize aluminum only if required based on material at installation location for compliance with NFPA 780.

C. Ground Rods, Ground Loop Conductors, and Concrete-Encased Electrodes: Comply with Division 26 Section "Grounding and Bonding for Electrical Systems" and with standards referenced in this Section.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Install lightning protection components and systems according to UL 96A and NFPA 780.

B. Install conductors with direct paths from air terminals to ground connections. Avoid sharp bends and narrow loops.

C. Conceal the following conductors:

1. System conductors.
2. Down conductors.
3. Interior conductors.
4. Conductors within normal view from exterior locations at grade within 200 feet of building.
5. Notify Architect at least 48 hours in advance of inspection before concealing lightning protection components.

D. Cable Connections: Use approved exothermic-welded connections for all conductor splices and connections between conductors and other components.

E. Bond lightning protection components with intermediate-level interconnection loop conductors to grounded metal bodies of building at 60-foot intervals.

3.2 CORROSION PROTECTION

A. Do not combine materials that can form an electrolytic couple that will accelerate corrosion in the presence of moisture unless moisture is permanently excluded from junction of such materials.

B. Use conductors with protective coatings where conditions would cause deterioration or corrosion of conductors.

3.3 FIELD QUALITY CONTROL

A. UL Inspection: Provide inspections as required to obtain a UL master label for system.

B. Provide UL master label certificate.

C. Post the UL master label certificate to the UL website lps.ul.com.

END OF SECTION 26 41 13

SECTION 26 56 00
EXTERIOR LIGHTING

PART 1 GENERAL

1.01 SUBMITTALS

A. Product Data: Provide manufacturer's standard catalog pages and data sheets including detailed information on luminaire construction, dimensions, ratings, finishes, mounting requirements, listings, service conditions, photometric performance, weight, effective projected area (EPA), and installed accessories; include model number nomenclature clearly marked with all proposed features.
   1. LED Luminaires:
      a. Include estimated useful life, calculated based on IES LM-80 test data.

1.02 QUALITY ASSURANCE

A. Comply with requirements of NFPA 70.

PART 2 PRODUCTS

2.01 LUMINAIRE TYPES

A. Furnish products as indicated in luminaire schedule included on the drawings.

2.02 LUMINAIRES

A. Provide products that comply with requirements of NFPA 70.

B. Provide products that are listed and labeled as complying with UL 1598, where applicable.

C. Provide products listed, classified, and labeled as suitable for the purpose intended.

D. Unless otherwise indicated, provide complete luminaires including lamp(s) and all sockets, ballasts, reflectors, lenses, housings and other components required to position, energize and protect the lamp and distribute the light.

E. Unless specifically indicated to be excluded, provide all required conduit, boxes, wiring, connectors, hardware, poles, foundations, supports, trims, accessories, etc. as necessary for a complete operating system.

F. Provide products suitable to withstand normal handling, installation, and service without any damage, distortion, corrosion, fading, discoloring, etc.

G. Provide luminaires listed and labeled as suitable for wet locations unless otherwise indicated.

H. LED Luminaires:
   1. Components: UL 8750 recognized or listed as applicable.
   2. Tested in accordance with IES LM-79 and IES LM-80.
   3. LED Estimated Useful Life: Minimum of 50,000 hours at 70 percent lumen maintenance, calculated based on IES LM-80 test data.

PART 3 EXECUTION

3.01 INSTALLATION

A. Coordinate locations of outlet boxes provided under Section 26 05 33.16 as required for installation of luminaires provided under this section.

B. Install products in accordance with manufacturer's instructions.

C. Install luminaires in accordance with NECA/IESNA 501.

D. Provide required support and attachment in accordance with Section 26 05 29.

E. Install luminaires plumb and square and aligned with building lines and with adjacent luminaires.

F. Wall-Mounted Luminaires: Unless otherwise indicated, specified mounting heights are to center of luminaire.

G. Bond products and metal accessories to branch circuit equipment grounding conductor.

H. Install lamps in each luminaire.

END OF SECTION

SECTION 31 10 00
SITE CLEARING

PART 1 - GENERAL

1.01 WORK INCLUDED

A. Remove surface debris.

B. Remove paving, curbs, and sidewalks.

C. Clear the surface of the site of plant life and grass.

D. Remove root system of trees and shrubs.

E. Dispose of removed material.

1.02 REFERENCE STANDARDS

A. Florida Department of Transportation Standard Specifications for Road and Bridge Construction (SSRBC), latest edition.

1.03 REGULATORY REQUIREMENTS

A. Burning of debris on-site is prohibited.

B. Florida Department of Environmental Protection regulations.

C. Contractor shall obtain any special permits needed to remove and to dispose of any debris off-site.

D. Coordinate clearing work with utility companies.

PART 2 - PRODUCTS

Not Used

PART 3 - EXECUTION

3.01 PREPARATION

A. Verify that existing plant life designated to remain is tagged or identified.

3.02 PROTECTION

A. Protect plant life, lawns, and other features remaining as a portion of final landscaping.

B. Protect bench marks, existing structures, fences, sidewalks, paving, and curbs from excavation equipment and vehicular traffic.

C. Maintain and protect above and below grade utilities which are to remain.

D. Notify utility company(s) to remove and/or re-locate utilities, when required.

E. Maintain designated site access for vehicle and pedestrian traffic.

3.03 CLEARING

A. Clearing shall conform to the requirements of Section 110, SSRBC.

B. Clear areas required for access to site and execution of Work.

C. Remove trees and shrubs on the site that will conflict with the new facilities. Remove stumps and root systems to a minimum depth of six (6) inches.

D. Clear undergrowth and deadwood without disturbing subsoil.

E. Remove paving, curbs, and sidewalks.

3.04 DISPOSAL

A. Remove debris from site. No burning on the site will be allowed.

B. Conform to applicable Florida Department of Environmental Protection regulations for disposal of all debris.

END OF SECTION

SECTION 31 22 13
ROUGH GRADING

PART 1 - GENERAL

1.01 WORK INCLUDED

A. Removal of topsoil and subsoil

B. Cutting, grading, filling and rough contouring the site for site structures

1.02 REFERENCE STANDARDS

A. AASHTO T180 - Test Methods for Moisture Density Relations of Soils, Using 10-lb. Rammer and 18-inch Drop.

B. Florida Department of Transportation Standard Specifications for Road and Bridge Construction (SSRBC), latest edition.

1.04 PROJECT RECORD DOCUMENTS

A. Submit under provisions of Section 01 70 00.

B. Accurately record actual locations of utilities remaining, by horizontal dimensions, elevations or inverts, and slope gradients.

PART 2 - PRODUCTS

Not Used

PART 3 - EXECUTION

3.01 EXAMINATION

A. Verify site conditions.

B. Verify that survey bench mark and intended elevations for the Work are as indicated.

3.02 PREPARATION

A. Identify required lines, levels, contours and datum.

B. Stake and flag locations of known utilities.

C. Locate, identify, and protect utilities that remain from damage.

D. Notify utility company(s) to remove and/or re-locate utilities, when required.

E. Protect above and below grade utilities that remain.

F. Protect plant life, lawns, and other features remaining as part of final landscaping.

G. Protect bench marks, existing structures, fences, sidewalks, paving, and curbs from excavating equipment and vehicular traffic.

3.03 SUBSOIL EXCAVATION

A. Excavate subsoil from areas to be further excavated, re-landscaped, or re-graded.

B. Areas shall be leveled sufficiently to permit equipment traffic, cut to grade, if necessary, and then compacted using a large diameter, self-propelled or tractor drawn vibratory roller. The vibratory drum roller should have a static drum weight of eight to ten tons and should be capable of exerting a minimum impact force of 36,000 pounds.

C. Prior to beginning compaction, soil moisture content shall be controlled to ensure adequate compaction. Provide a moisture content within two percentage points of the optimum moisture content indicated by the modified Proctor test.

D. A minimum of eight overlapping passes shall be made by the vibratory drum roller across the stripped or cut ground surface. Compaction should continue until the minimum density of 98%, modified Proctor, is achieved.

E. Remove excess excavated material from site.

3.04 FILLING

A. Fill areas to contours and elevations.

B. Place fill materials in continuous layers not exceeding one foot thick, and compact to 98% modified Proctor, Maximum Dry Density.

C. Maintain optimum moisture content of fill materials to attain required compaction density.

D. Make grade changes gradual. Blend slope into level areas.

E. Remove surplus fill materials from site. Dispose of surplus material in accordance with all local, state and federal regulations.

3.05 TOLERANCES

A. Top Surface of Subgrade: Plus or minus 0.1 feet.

3.06 FIELD QUALITY CONTROL

A. Field inspection and testing will be performed under provisions of Section 01 40 00.

B. Compaction testing will be performed in accordance with AASHTO T180.

C. Frequency of Tests: Per FDOT requirements.

D. If tests indicate Work does not meet specified requirements, remove Work, replace and retest.

END OF SECTION

SECTION 31 23 16
EXCAVATION

PART 1 - GENERAL

1.01 WORK INCLUDED

A. Excavation for paving

B. Excavation for sidewalks

C. Excavation for site structures

D. Removing from the site and disposing of excess excavated material

1.02 REFERENCE STANDARDS

A. American Association of State Highway and Transportation Officials (AASHTO) M145 Soil Classifications.

PART 2 - PRODUCTS

2.01 MATERIALS

A. Satisfactory soil materials are defined as those complying with AASHTO M145, soil classification Groups A-1, A-2-4, A-2-5, and A-3, with less than 35% passing sieve #200 and maximum PI of 10.

B. Unsatisfactory soil materials are those defined in AASHTO M145 soil classification Groups A-2-6, A-2-7, A-4, A-5, A-6 and A-7; also peat and other highly organic soils.

PART 3 - EXECUTION

3.01 PREPARATION

A. Identify required lines, levels, contours, and datum.

3.02 EXCAVATION

A. Excavate subsoil required to accommodate sidewalk and paving and construction operations.

B. Excavation shall be in compliance with the safety regulations issued by the Department of Labor, Occupational Safety and Health Administration (OSHA) and with the Florida Trench Safety Act. Ensure that a "competent person", as defined by OSHA, is on-site during all construction activities.

C. Underpin adjacent structures which may be damaged by excavation work.

D. Grade top perimeter of excavation to prevent surface water from draining into excavation.

E. Hand trim excavation. Remove loose matter.

F. Remove lumped subsoil, boulders, and rock. Remove excessively wet, yielding, soft, or hard and lumpy unsuitable materials encountered to a minimum depth of 12 inches below finish grade or invert grade.

G. Notify Engineer of unexpected subsurface conditions and discontinue affected Work in area until notified to resume Work.

H. Correct areas over-excavated in accordance with Section 31 23 23.

I. Stockpile excavated material in designated area. Remove excess excavated material from site. Dispose of excess material in accordance with all local, state, and federal regulations.

3.03 FIELD QUALITY CONTROL

A. Field inspection and testing will be performed under provisions of Section 01 40 00.

B. Provide for visual inspection of bearing surfaces.

3.04 PROTECTION OF FINISHED WORK

A. Protect finished Work under provisions of Section 01 50 00.

B. Protect excavation by methods required to prevent cave-in or loose soil from falling into excavation.

END OF SECTION

SECTION 31 23 23
FILL

PART 1 - GENERAL

1.01 WORK INCLUDED

A. Filling, backfilling, and compacting for sidewalks, paved areas, and other facilities

B. Fill for over-excavation

C. Fill for excavation of unsuitable materials

D. Supplying fill material as needed

1.02 REFERENCE STANDARDS

A. AASHTO T180 - Moisture-Density Relations of Soils Using a 10-lb. Rammer and 18-in. Drop.

B. ASTM D3017 - Test Methods for Moisture Content of Soil and Soil-Aggregate Mixtures.

C. Florida Department of Transportation Standard Specifications for Road and Bridge Construction (SSRBC), latest edition.

PART 2 - PRODUCTS

2.01 FILL MATERIALS

A. Fill: Silica sand or local materials meeting requirements of Section 902, SSRBC.

B. Structural Fill: Size Number 57 Coarse Aggregate, complying with Section 901, SSRBC.

PART 3 - EXECUTION

3.01 PREPARATION

A. Compact subgrade to density requirements for subsequent backfill materials.

B. Cut out soft areas of subgrade not capable of in situ compaction. Backfill with fill and compact to density equal to or greater than requirements for subsequent fill material.

3.02 FILLING AND BACKFILLING

A. Supply, transport and install fill and backfill material as needed to meet the required elevations plus or minus 1-inch.

B. Systematically fill and backfill to allow maximum time for natural settlement. Do not fill or backfill over porous, wet or spongy subgrade surfaces.

C. Place and compact materials in continuous layers not exceeding 12 inches compacted depth. All fill and backfill shall be installed and compacted to 98 percent of the modified Proctor, maximum dry density.

D. Employ a placement method that does not disturb or damage other work.

E. Maintain optimum moisture content of materials to attain required compaction density.

F. Make gradual grade changes. Blend slope into level areas.

G. Remove surplus materials from site.

3.03 FIELD QUALITY CONTROL

A. Field inspection and testing will be performed under provisions of Section 01 40 00.

B. Compaction testing will be performed in accordance with AASHTO T180.

C. If tests indicate Work does not meet specified requirements, remove Work, replace and retest at no cost to the Owner.

D. Proof roll compacted fill surfaces under pavers and paving.

E. Frequency of Testing: per FDOT.

3.04 PROTECTION OF FINISHED WORK

A. Protect finished Work under provisions of Section 01 50 00.

B. Reshape and re-compact fills subjected to vehicular traffic.

END OF SECTION

SECTION 31 23 33
TRENCHING AND BACKFILLING

PART 1 - GENERAL

1.01 WORK INCLUDED

A. Excavating trenches for municipal utilities

B. Installing and compacting utility bedding material

C. Compacted fill from top of utility bedding to subgrade elevations

D. Backfilling and compaction of trenches

1.02 REFERENCE STANDARDS

A. AASHTO T180 - Moisture-Density Relations of Soils Using a 10-lb Rammer and 18-inch Drop.

B. ASTM D3017 - Test Methods for Moisture Content of Soil and Soil-Aggregate Mixtures.

C. Florida Department of Transportation Standard Specifications for Road and Bridge Construction (SSRBC), latest edition.

1.03 COORDINATION

A. Coordinate Work with owner(s) of utilities.

B. Verify Work associated with lower elevation utilities are complete before placing higher elevation utilities.

1.04 DEFINITIONS

A. Utility: Any buried pipe, conduit, or cable.

PART 2 - PRODUCTS

2.01 FILL MATERIALS

A. Fill: Silica sand or local materials meeting requirements of Section 902, SSRBC.

B. Utility Bedding: Silica sand or local materials meeting requirements of Section 901, SSRBC.

C. Structural Fill: FDOT #57 Coarse Aggregate, complying with Section 901, SSRBC.

PART 3 - EXECUTION

3.01 GENERAL

A. Verify that survey bench mark and intended elevations for the Work are as indicated.

B. Field verify that existing pipelines, other utilities, and structures are as shown on the Drawings (size, horizontal location, and vertical location).

C. Identify required lines, levels, contours, and datum.

D. Protect plant life, lawns, and other features remaining as a portion of final landscaping.

E. Protect bench marks, existing structures, fences, sidewalks, paving, and curbs from excavation equipment and vehicular traffic.

F. Maintain and protect above and below grade utilities which are to remain.

G. Notify utility company(s) to remove and/or re-locate utilities, when required.

H. No pipe shall be laid when, in the opinion of the Engineer, trench conditions are unsuitable. Pipe shall be laid in a dry trench unless otherwise authorized by the Owner or Engineer.

I. Length of open trench on existing roads may be limited by the Engineer to minimize public inconvenience or danger to life or property.

3.02 EXCAVATION

A. Underpin adjacent structures which may be damaged by excavation work.

B. Excavate subsoil required for utilities to design pipe, conduit, or cable invert.

C. Excavation shall be in compliance with the safety regulations issued by the Department of Labor, Occupational Safety and Health Administration (OSHA) and with the Florida Trench Safety Act. Ensure that a “competent person”, as defined by OSHA, is on-site during all construction activities.

D. Grade top perimeter of excavation to prevent surface water from draining into excavation.

E. Maintain vehicles 5 feet minimum from top of excavation slope.

F. Dewatering shall be performed, as necessary, to maintain a ground water level two (2) feet below the pipe invert or bottom of excavation during construction.

G. Cut trenches sufficiently wide to enable installation and to allow inspection.

H. Hand trim excavation. Hand trim for bell and spigot pipe joints. Remove loose material.

I. Remove lumped subsoil, boulders, and rock. Remove excessively wet, yielding, soft, or hard and lumpy unsuitable materials encountered to a minimum depth of 12 inches below finish grade or invert grade.

J. Notify Engineer of unexpected subsurface conditions and discontinue affected Work in area until notified to resume Work.

K. Correct areas over-excavated in accordance with Backfilling section 3.03.

L. Stockpile excavated material in designated area on-site. Remove excess excavated material not being used from site. Dispose of excess material in accordance with all local, state and federal regulations.

3.03 BACKFILLING

A. Supply, transport to the site, and install any necessary utility bedding and/or fill material.

B. Place and compact utility bedding material in continuous layers. Each layer shall not exceed 6 inches nor shall it exceed one half of the pipe diameter. Bedding shall extend to at least 12 inches above the top of the pipe or conduit. All bedding shall be compacted to 98 percent of the modified Proctor, maximum dry density.

C. Maintain optimum moisture content of bedding material to attain required compaction density.

D. Employ a placement method that does not disturb or damage pipe in trench.

E. Backfill the trench from the top of the bedding to the finished grade in lifts no greater than 12 inches. Backfill shall be compacted to 95 percent of the modified Proctor, maximum dry density. In non-paved areas and away from structures, backfill shall be compacted to 90 percent modified Proctor, maximum dry density.

F. Remove surplus fill materials from site. Dispose of surplus material in accordance with all local, state and federal regulations.

G. Leave fill material stockpile areas completely free of excess fill materials.

3.04 FIELD QUALITY CONTROL

A. Field inspection and testing will be performed under provisions of Section 01 40 00.

B. Compaction testing will be performed in accordance with AASHTO T180.

C. If tests indicate Work does not meet specified requirements, remove Work, replace, compact, and retest.

D. Frequency of tests:
   1. One test per installed lift under grassed or other non-paved areas at intervals not to exceed 500 feet. Initial test shall be performed in the first 100 feet of trench backfilled.
   2. One test per installed lift under paved areas at intervals not to exceed 200 feet. Initial test shall be performed in the first 100 feet of trench backfilled.

3.05 PROTECTION OF FINISHED WORK

A. Protect finished Work under provisions of Section 01 50 00.

B. Protect excavation by methods required to prevent cave-in or loose soil from falling into excavation.

C. Reshape and re-compact fills subjected to vehicular traffic during construction.

END OF SECTION

SECTION 32 16 00
CURBS, GUTTERS, SIDEWALKS, AND DRIVEWAYS

PART 1 - GENERAL

1.01 SECTION INCLUDES

A. Furnish and install cast-in-place concrete for curbs, gutters, sidewalks, and driveways.

B. Control, expansion and contraction joint devices associated with concrete work.

C. Concrete formwork.

D. Concrete reinforcement.

E. Miscellaneous concrete elements.

F. Concrete curing.

1.02 RELATED SECTIONS

A. Section 01 30 00 – Administrative Requirements

B. Section 01 40 00 – Quality Requirements

C. Section 01 70 00 – Execution and Close-out Requirements

1.03 REFERENCES

A. Without limiting the generality of other requirements of these specifications, all work herein shall conform to or exceed the requirements of the Building Code and the applicable requirements of the following documents to the extent that the provisions of such documents are not in conflict with the requirements of this Section.

1. Codes and Standards
   The building code, as referenced herein, shall be the Florida Building Code, (FBC) latest Edition with all current Supplements.
2. Commercial Standards.
   a. ACI 117 Standards Specifications for Tolerance for Concrete Construction and Materials
   b. ACI 211.1 Standard Practice for Selecting Proportions for Normal, Heavyweight and Mass Concrete.
   c. ACI 214 Recommended Practice for Evaluation of Strength

		Test Results of Concrete.
d.	ACI 304	Recommended Practice for Measuring, Mixing and Transporting and placing concrete
e.	ACI 305R	Hot Weather Concreting.
f.	ACI 306R	Cold Weather Concreting.
g.	ACI 308	Standard Practice for Curing Concrete
h.	ACI 309	Recommended Practice for Consolidation of Concrete
i.	ACI 315	Details and Detailing of Concrete Reinforcement.
j.	ACI 318	Building Code Requirements for Reinforced Concrete.
k.	ACI 347	Recommended Practice for Concrete Formwork.
l.	ACI 544	Fiber Reinforced Concrete
m.	ASTM A185	Standard Specifications for Steel Welded Wire reinforcement Plain For concrete
n.	ASTM A 615	Standard specifications for Deformed and Plain billet-Steel Bars for concrete reinforcement
o.	ASTM C 31	Methods of Making and Curing Concrete Test Specimens in the Field.
p.	ASTM C 33	Specification for Concrete Aggregates.
q.	ASTM C 39	Test Method for Compressive Strength of Cylindrical Concrete Specimens.
r.	ASTM C 88	Test Method for Soundness of Aggregates by use of Sodium Sulfate or Magnesium Sulfate.
s.	ASTM C 94	Specification for Ready-Mixed Concrete.
t.	ASTM C 136	Method for Sieve Analysis of Fine and Coarse Aggregate.
u.	ASTM C 143	Test Method for Slump of Portland Cement Concrete.
v.	ASTM C 150	Specification for Portland Cement.
w.	ASTM C 156	Test Method for Water Retention by concrete Curing Materials.
x.	ASTM C 157	Test Method for length Change of Hardened Cement Mortar and Concrete.
y.	ASTM C 171	Standards specifications for Sheet materials for Curing concrete.
z.	ASTM C 192	Method of Making and Curing concrete Test specimens in the Laboratory.
aa.	ASTM C 227	Standard Test Method for Potential Alkali Reactivity of Cement Aggregate Combinations (Mortar-Bar Method).

bb. ASTM C 260 Specification for Air-Entraining Admixtures for Concrete.

cc. ASTM C 289 Standard Test Method for Potential Reactivity of Aggregates (Chemical Method).

dd. ASTM C 494 Specification for Chemical Admixtures For Concrete.

ee. ASTM C 586 Standard Test Method for Potential Alkali Reactivity of Carbonate Rocks for Concrete Aggregates (Rock Cylinder Method).

ff. ASTM C 618 Standard Specification for Fly Ash and Raw or Claimed Natural Pozzolan for use as a Mineral Admixture in Portland Cement Concrete.

gg. ASTM D 1751 Specification for preformed Expansion Joint Fillers for Concrete Paving and Structural Construction (Non-extruding and Resilient Bituminous Types).

hh. ASTM E11 Specification for Wire-Cloth Sieves for Testing purposes.

B. Any procedure, materials, or operation specified by reference to the American Society for Testing and Materials (ASTM), the American Concrete Institute (ACI), Building Code, or other references shall comply with the requirements of the current and most recent specifications or standards. In conflicts between listed standards and this specification, the more stringent requirements shall govern.

C. The Contractor is expected to obtain the most recent issue of all standards, recommendations, codes, or specifications referred to within this specification.

1.04 SUBMITTALS

A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.

B. Product Data: Provide data on mix design, joint devices, attachment accessories, admixtures, reinforcement and forming accessories, waterstops, and others as requested by Engineer.

C. Materials Certificates: Provide manufacturer's certification that products meet or exceed specified requirements. Submit Manufacturer's data on all admixtures.

1.05 QUALITY ASSURANCE

A. Perform work of this section in accordance with ACI 301 and ACI 318.

B. Follow recommendations of ACI 305R when concreting during hot weather.

C. Follow recommendations of ACI 306R when concreting during cold weather.

PART 2 - PRODUCTS

2.01 FORMWORK

A. Formwork Design and Construction: Comply with guidelines of ACI 347 to provide formwork that will produce concrete complying with tolerances of ACI 117.

B. Form Materials: Contractor's choice of standard products with sufficient strength to withstand hydrostatic head without distortion in excess of permitted tolerances.
   1. Form Facing for Exposed Finish Concrete: Contractor's choice of materials that will provide smooth, stain-free final appearance. Construct to provide continuous straight, smooth, exposed surfaces. Furnish in largest practicable sizes to minimize number of joints and to conform to joint system shown on drawings. Provide form material with sufficient thickness to withstand pressure of newly-placed concrete without bow or deflection.
   2. Form Facing for Unexposed Finish Concrete: Form concrete surfaces which will be unexposed in finished structure with plywood, lumber, metal, or other acceptable material. Provide lumber dressed on at least two (2) edges and on side for tight fit.
   3. Earth Cuts: Do not use earth cuts as forms for vertical surfaces.
   4. Form Coating: Release agent that will not adversely affect concrete or interfere with application of coatings.
   5. Form Ties: Cone snap type that will leave no metal within 1-1/2 inches of concrete surface.

2.02 REINFORCEMENT

A. Steel Welded Wire Reinforcement: ASTM A 185, plain type.
   1. Form: Flat Sheets.
   2. Mesh Size and Wire Gage: As indicated on drawings.

B. Fiber-Mesh Reinforcement: Provide 100% virgin polypropylene, fibrillated fibers containing no reprocessed olefin materials and specifically manufactured to an optimum gradation for use as concrete secondary reinforcing. Volume per cubic yard shall equal a minimum of 0.1%.

C. Reinforcement Accessories:
   1. Tie Wire: Annealed, minimum 16 gage (1.5 mm).
   2. Chairs, Bolsters, Bar Supports, Spacers: Sized and shaped for adequate support of reinforcement during concrete placement.
   3. Provide stainless steel, galvanized, plastic, or plastic coated steel components for placement within 1-1/2 inches of weathering surfaces.

2.03 CONCRETE MATERIALS

A. Cement: ASTM C 150, Class I - Normal Portland type, unless otherwise acceptable to Engineer. Acquire all cement for entire project from same source.

B. Fine and Coarse Aggregates: ASTM C 33.
   1. Acquire all aggregates for entire project from same source.
   2. Local aggregates not complying with ASTM C33, but which have shown by special test or actual service to produce concrete of adequate strength and durability may be used when acceptable to Engineer.

C. Lightweight Aggregate: ASTM C 330.

D. Fly ash is not permitted in standard concrete mix.

E. Water: Clean and not detrimental to concrete. Water shall be potable, clean and free from objectionable quantities of silty organic matter, alkali, salts and other impurities. The water shall be considered potable, for the purposes of this Section only, if it meets the requirements of the local governmental agencies. Agricultural water with high total dissolved solids (over 1000 mg/L TDS) shall not be used.

2.04 CHEMICAL ADMIXTURES

A. Chemical admixtures may be added at the dosage rates recommended by the manufacturer and accepted by the Engineer.

B. Chemical Admixture Manufacturers:
   1. Master Builders.
   2. Sika Chemical Company.
   3. Substitutions: See Section 01 60 00 - Product Requirements.

C. Do not use chemicals that will result in soluble chloride ions in excess of 0.1 percent by weight of cement.

D. Air Entrainment Admixture: ASTM C 260.

E. High Range Water Reducing and Retarding Admixture: ASTM C 494, Type F or G.
   1. Acceptable Products:
      a. Eucon Super 37.
      b. LA-8.
      c. Sikament.

F. High Range Water Reducing Admixture: ASTM C 494, Type F.

G. Water Reducing and Accelerating Admixture: ASTM C 494, Type E.

H. Water Reducing and Retarding Admixture: ASTM C 494, Type D.
   1. Acceptable Products:
      a. Eucon Retarder 75.
      b. Pozzolith 300-R.
      c. Plastiment.
      d. Substitutions: See Section 01 60 00 - Product Requirements.

I. Water Reducing Admixture: ASTM C 49, Type A.
   1. Acceptable Products:
      a. Eucon WR-75.
      b. Pozzolith 322N.
      c. Plastocrete 160.

J. Shrinkage Reducing Admixture:
   1. Available Products: Subject to compliance with requirements, products which may be incorporated in the work include, but are not limited to, the following:
      a. "Eclipse"; W. R. Grace Construction Products
      b. "Tetraguard AS20"; Master Builders Technologies (BASF)
      c. Or equal.

K. Calcium chloride, thiocyanate or admixtures containing more than 0.05 percent chloride ions are not permitted.

2.05 ACCESSORY MATERIALS

A. Chemical Hardener: Fluosilicate solution designed for densification of cured concrete slabs.

B. Moisture-Retaining Cover: ASTM C 171; regular curing paper, white curing paper, clear polyethylene, white polyethylene, or white burlap-polyethylene sheet.

C. Liquid Curing Compound: ASTM C 309, Type 1, clear or translucent.
   1. Acceptable Products:
      a. Ecocure.
      b. Masterseal.
      c. Substitutions: See Section 01 60 00 - Product Requirements.

2.06 BONDING AND JOINTING PRODUCTS

A. Joint Filler: Nonextruding, resilient asphalt impregnated fiberboard or felt, complying with ASTM D 1751, 1/2 inch thick and 4 inches deep; tongue and groove profile.

2.07 CONCRETE MIX DESIGN

A. Proportioning Normal Weight Concrete: Comply with ACI 211.1 recommendations.

B. Concrete Strength: Establish required average strength for each type of concrete on the basis of field experience, as specified in ACI 301.

C. Admixtures: Add acceptable admixtures as recommended in ACI 211.1 and at rates recommended by manufacturer.

D. Design mixes to provide normal weight concrete with the following properties, as indicated on drawings and schedules:

1. FDOT Class I Concrete – Normal Weight Concrete (3000 Psi At 28 days) Use for curbs, gutters, sidewalks, and driveways

Minimum cementitous materials content, per cubic yard	508 lbs.
Maximum water-cementitous materials ratio, by weight	0.50
Slump, maximum	3-inches (5-inches for curb & gutters)
Compressive strength lbs. per sq. inch at 28 days –F'c	3,000
Coarse Aggregates	#57 per ASTM C33
Total Air (ASTM C173)	3 to 5 % for maximum 2 inch aggregate 3 to 7% for maximum 3/4 inch aggregate 6 to 8 % for maximum 1/2 inch aggregate

2.08 MIXING

A. On Project Site: Mix in drum type batch mixer, complying with ASTM C 685. Mix each batch not less than 1-1/2 minutes and not more than 5 minutes.

B. Transit Mixers: Comply with ASTM C 94/C 94M.
1. When air temperature is between 85° F (30° C) and 90° F (32° C), reduce mixing and delivery time from 1-1/2 hours to 75 minutes.
2. When air temperature is above 90° F (32° C), reducing mixing and delivery time to 60 minutes.

C. Delivery tickets shall indicate the cement content, the water to cement ratio, and mix-design number.

PART 3 - EXECUTION

3.01 EXAMINATION

A. Verify lines, levels, and dimensions before proceeding with work of this section.

3.02 PREPARATION

A. Formwork: Comply with requirements of ACI 301. Design and fabricate forms to support all applied loads until concrete is cured, and for easy removal without damage to concrete.

B. Verify that forms are clean before applying release agent.

C. Design formwork to be readily removable without impact, shock or damage to cast-in-place concrete surfaces and adjacent materials.

D. Fabricate forms for easy removal without hammering or prying against concrete surfaces. Provide crush plates or wrecking plates where stripping may damage cast concrete surfaces. Provide top forms for inclined surfaces where slope is too steep to place concrete with bottom forms only. Kerf wood inserts for forming keyways, reglets, recesses, and the like, to prevent swelling and for easy removal.

E. Chamfer exposed corners and edges, using wood, metal, PVC or rubber chamfer strips fabricated to produce uniform smooth lines and tight edge joints unless otherwise noted.

F. Cleaning and Tightening: Thoroughly clean forms and adjacent surfaces to receive concrete. Remove chips, wood, sawdust, dirt or other debris just before concrete is placed. Retighten forms and bracing after concrete placement as required to eliminate mortar leaks and maintain proper alignment.

3.03 INSTALLING REINFORCEMENT

A. Install welded wire reinforcement in maximum possible lengths, and offset end laps in both directions. Lap adjoining pieces at least one full mesh. Splice laps with tie wire.

3.04 JOINTS

A. Construction Joints: Locate and install construction joints, as shown on drawings or as required, so as not to impair strength and appearance of the structure, as approved by Engineer.

B. Place construction joints perpendicular to the main reinforcement. Continue reinforcement across construction joints.

C. Contraction (Control) Joints in Slabs-on-Ground: Construct contraction joints in slabs-on-ground to form panels of patterns as required. Use inserts 1/4 inch wide x 1/4 of slab depth, unless otherwise indicated. Seal all joints. Contractor to submit suggested locations to Engineer for approval.

3.05 INSTALLATION OF EMBEDDED ITEMS

A. General: Set and build into work anchorage devices and other embedded items required for other work that is attached to, or supported by, cast-in-place concrete. Use setting drawings, diagrams, instructions and directions provided by suppliers of items to be attached thereto.

3.06 PLACING CONCRETE

A. Place concrete in accordance with ACI 304R.

B. Notify Engineer not less than 24 hours prior to commencement of placement operations.

C. Ensure reinforcement, inserts, embedded parts, and formed construction joint devices will not be disturbed during concrete placement.

D. Separate slabs on grade from vertical surfaces with joint filler.

E. Install joint devices in accordance with manufacturer's instructions.

F. Maintain records of concrete placement. Record date, location, quantity, air temperature, and test samples taken.

G. Place concrete continuously between predetermined expansion, control, and construction joints.

H. Do not interrupt successive placement; do not permit cold joints to occur.

I. Saw cut joints within 24 hours after placing. Use 3/16 inch thick blade, cut into 1/4 depth of slab thickness.

J. Screed concrete on grade level, using wood or metal screed, maintaining surface flatness of maximum 1/4 inch in 10 ft

K. Hot-Weather Placing: When hot weather conditions exist that would seriously impair quality and strength of concrete, place concrete in compliance with ACI 305 and as herein specified.

1. Cool ingredients before mixing to maintain concrete temperature at time of placement below 90° F (32° C). Mixing water may be chilled, or chopped ice may be used to control temperature provided water equivalent of ice is calculated to total amount of mixing.
2. Cover reinforcing steel with water-soaked burlap if it becomes too hot, so that steel temperature will not exceed the ambient air temperature immediately before embedment in concrete.
3. Wet forms thoroughly before placing concrete.
4. Use water-reducing retarding admixture (Type D) when required by high temperatures, low humidity, or other adverse placing conditions.

L. Remove all grade stakes and other wood from within concrete and fill holes.

3.07 CONCRETE FINISHING

A. Repair surface defects, including tie holes, immediately after removing formwork.

B. Finish to requirements of ACI 302.1R, and as follows:
1. Non-Slip Broom Finish shall be applied to all sidewalks and driveways, and elsewhere as indicated.
2. Brush finish shall be applied to all curbs and gutters.

3.08 CURING AND PROTECTION

A. Comply with requirements of ACI 308. Immediately after placement, protect concrete from premature drying, excessively hot or cold temperatures, and mechanical injury.

B. Maintain concrete with minimal moisture loss at relatively constant temperature for period necessary for hydration of cement and hardening of concrete.

C. Formed Surfaces: Cure by moist curing with forms in place for full curing period.

D. Surfaces Not in Contact with Forms:
1. Start initial curing as soon as free water has disappeared and before surface is dry. Keep continuously moist for not less than seven days by water-fog spray or saturated burlap.
2. Begin final curing after initial curing but before surface is dry. Continue final curing for at least seven days in accordance with ACI 301 procedures. Avoid rapid drying at end of final curing period.

E. Provide curing compound as follows:

1. Apply specified curing and sealing compound to concrete slabs as soon as final finishing operations are complete (within 2 hours). Apply uniformly in continuous operation by power-spray or roller in accordance with manufacturer's directions. Recoat areas subjected to heavy rainfall within 3 hours after initial application. Maintain continuity of coating and repair damage during curing period. Apply second coat of curing/sealing compound to exposed interior slabs at completion of job.

F. Curing Formed Surfaces: Cure formed concrete surfaces by moist curing with forms in place for full curing period or until forms are removed. If forms are removed, continue curing by methods specified above, as applicable.

3.09 REMOVAL OF FORMS

A. Formwork not supporting weight of concrete may be removed after cumulatively curing at not less than 50° F (10° C) for 24 hours after placing concrete, provided concrete is sufficiently hard to not be damaged by form removal operations, and provided curing and protection operations are maintained.

3.10 RE-USE OF FORMS

A. Clean and repair surfaces of forms to be re-used in work. Split, frayed, delaminated or otherwise damaged form facing material will not be acceptable for exposed surfaces.

B. The Engineer shall inspect all forms to be re-used in the work. Any forms that in the opinion of the Engineer are damaged or otherwise unacceptable for use, shall not be used in the work and shall be removed from the project site.

C. Forms that are acceptable for re-use shall have a new form coating compound applied as specified for new formwork.

3.11 FIELD QUALITY CONTROL

A. When forms are extended for successive concrete placement, thoroughly clean surfaces, remove fins and laitance, and tighten forms to close joints. Align and secure joint to avoid offsets. Do not use "patched" forms for exposed concrete surfaces, except as acceptable to Engineer.

B. An independent testing agency will perform field quality control tests, as specified in Section 01 40 00.

C. Concrete delivered to the site that is determined by Engineer to be unacceptable shall be removed from the site and shall not be incorporated into the Work. Reasons for rejecting a load of concrete include, but are not limited to, excessive slump, a high concrete temperature, or other indications that the concrete has begun curing.

D. Provide free access to concrete operations at project site and cooperate with appointed firm.

E. Submit proposed mix design for each class of concrete for review prior to commencement of Work

F. Sampling and testing for quality control during placement of concrete may include the following, as directed by Engineer.
   1. Sampling Fresh Concrete: ASTM C 172, except modified for slump to comply with ASTM C 94.
   2. Slump: ASTM C 143; one test for each set of compressive strength test specimens.
   3. Air Content: ASTM C 173, volumetric method for lightweight or normal weight concrete; ASTM C 231 pressure for normal weight concrete; one for each set of compressive strength test specimens.
   4. Concrete Temperature: Test hourly when air temperature is 40° F (4° C) and below, and when 80° F (27° C) and above; and each time a set of compression test specimens made.
   5. Compression Test Specimen: ASTM C 31; one set of 4 standard cylinders for each compressive strength test, unless otherwise directed. Mold and store cylinders for laboratory cured test specimens except when field-cure test specimens are required.
   6. Compressive Strength Tests: ASTM C 39; one set for each 100 cubic yards or fraction thereof, of each concrete class placed in any one day or for each 5,000 sq. ft. of surface area placed; 1 specimen tested at 7 days, 2 specimens tested at 28 days, and 1 specimen retained in reserve for later testing if required.
   7. Perform one slump test for each set of test cylinders taken, following procedures of ASTM C 143/C 143M.
   8. When total quantity of a given class of concrete is less than 50 cubic yards, strength test may be waived by Engineer if, in their judgment, adequate evidence of satisfactory strength is provided.
   9. When strength of field-cured cylinders is less than 85% of companion laboratory-cured cylinders, evaluate current operations and provide corrective procedures for protecting and curing the in-place concrete.

10. Strength level of concrete will be considered satisfactory if averages of sets of three consecutive strength test results equal or exceed specified compressive strength, and no individual strength test result falls below specified compressive strength by more than 500 psi.

G. Shrinkage Tests

1. Drying shrinkage tests will be made for the trial batch specified in the Paragraph in Part 2 entitled "Trial Batch and Laboratory Tests," the first placement of each class of concrete, and during construction to insure continued compliance with these Specifications.
2. Drying shrinkage specimens shall be 4-inch by 4-inch by 11-inch prisms with an effective gage length of 10 inches, fabricated, cured, dried and measured in accordance with ASTM C 157 modified as follows: specimens shall be removed from molds at an age of 23 ±1 Aours after trial batching, shall be placed immediately in water at 70° F ±3° F for at least 30 minutes, and shall be measured within 30 minutes thereafter to determine original length and then submerged in saturated lime water at 73° F ±3° F. Measurement to determine expansion expressed as a percentage of original length shall be made at age 7 days. This length at age 7 days shall be the base length for drying shrinkage calculations ("0" days drying age). Specimens then shall be stored immediately in a humidity control room maintained at 73° F ±3° F and 50 percent ±4 percent relative humidity for the remainder of the test. Measurements to determine shrinkage of base length shall be made and reported separately for 7, 14, 21, and 28 days of drying after 7 days of moist curing.
3. The drying shrinkage deformation of each specimen shall be computed as the difference between the base length (at "0" days drying age) and the length after drying at each test age. The average drying shrinkage deformation of the specimens shall be computed to the nearest 0.0001 inch at each test age. If the drying shrinkage of any specimen departs from the average of that test age by more than 0.0004-inch, the results obtained from that specimen shall be disregarded. Results of the shrinkage test shall be reported to the nearest 0.001 percent of shrinkage. Compression test specimens shall be taken in each case from the same concrete used for preparing drying shrinkage specimens. These tests shall be considered a part of the normal compression tests for the project. Allowable shrinkage limitations shall be as specified in Part 2, herein.

G. Additional Tests: The testing service will make additional tests of in- place concrete when test results indicate specified concrete strengths and other characteristics have not been attained in the structure, as directed by Engineer. Testing service may conduct tests to determine adequacy of concrete by cored

cylinders complying with ASTM C 42 or by other methods as directed. Contractor shall pay for such tests conducted, and any other additional testing as may be required, when unacceptable concrete is verified.

3.12 DEFECTIVE CONCRETE

A. Test Results: The testing agency shall report test results in writing to Engineer and Contractor within 24 hours of test.

B. Defective Concrete: Concrete not conforming to required lines, details, dimensions, tolerances or specified requirements.

C. Repair or replacement of defective concrete will be determined by the Engineer. The cost of additional testing shall be borne by Contractor when defective concrete is identified.

D. Patching Defective Areas:
   1. Repair and patch defective areas with cement mortar immediately after removal of forms, when acceptable to Engineer.
   2. Cut out honeycomb, rock pockets, voids over 1/4 inches in any dimension, and holes left by tie rods and bolts, down to solid concrete but, in no case to a depth of less than 1-inch. Make edges of cuts perpendicular to the concrete surface. Thoroughly clean, dampen with water and brush-coat the area to be patched with specified bonding agent. Place patching mortar after bonding compound has dried.
   3. For exposed-to-view surfaces, blend white Portland cement and standard Portland cement so that, when dry, patching mortar will match color surrounding. Provide test areas at inconspicuous location to verify mixture and color match before proceeding with patching. Compact mortar in place and strike-off slightly higher than surrounding surface.

E. Repair of Formed Surfaces: Remove and replace concrete having defective surfaces if defects cannot be repaired to satisfaction of Engineer. Surface defects as such, include color and texture irregularities, cracks, spalls, air bubbles, honeycomb, rock pockets, fins and other projections on surface; and stains and other discolorations that cannot be removed by cleaning. Flush out form tie holes, fill with dry pack mortar, or precast cement cone plugs secured in place with bonding agent.
   1. Repair concealed formed surfaces, where possible, that contain defects that affect the durability of concrete. If defects cannot be repaired, remove and replace concrete.

F. Repair of Unformed Surfaces: Test unformed surfaces, such as monolithic slabs, for smoothness and verify surface plane to tolerances specified for each surface and finish. Correct low and high areas as herein specified. Test unformed surfaces sloped to drain for trueness of slope, in addition to smoothness, using a template having required slope.

1. Repair finished unformed surfaces that contain defects which affect durability of concrete. Surface defects, as such, include crazing, cracks in excess of 0.01 inches wide or which penetrate to reinforcement or completely through non-reinforced sections regardless of width, spalling, pop-outs, honeycomb, rock pockets, and other objectionable conditions.
2. Correct high areas in unformed surfaces by grinding, after concrete has cured at least 14 days.
3. Correct low areas in unformed surfaces during, or immediately after completion of surface finishing operations by cutting out low areas and replacing with fresh concrete. Finish repaired areas to blend into adjacent concrete. Proprietary patching compounds may be used when acceptable to Engineer.

G. Repair defective areas, except random cracks and single holes not exceeding 1 inch diameter, by cutting out and replacing with fresh concrete. Remove defective areas to sound concrete with clean, square cuts and expose reinforcing steel with at least 3/4 inch clearance all around. Dampen concrete surfaces in contact with patching concrete and apply bonding compound. Mix patching concrete of same materials to provide concrete of same type or class as original concrete. Place, compact and finish to blend with adjacent finished concrete. Cure in same manner as adjacent concrete.

H. Repair isolated random cracks and single holes not over 1 inch in diameter by dry-pack method. Groove top of cracks and cut-out holes to sound concrete and clean of dust, dirt and loose particles. Dampen cleaned concrete surfaces and apply bonding compound. Mix dry-pack, consisting of one part portland cement to 2-1/2 parts fine aggregate passing a No. 16 mesh sieve, using only enough water as required for handling and placing. Place dry pack after bonding compound has dried. Compact dry-pact mixture in place and finish to match adjacent concrete. Keep patched area continuously moist for not less than 72 hours.

I. Use epoxy-based mortar for structural repairs, where directed by Engineer.

J. Repair methods not specified above may be used, subject to acceptance of Engineer.

K. Do not patch, fill, touch-up, repair, or replace exposed concrete except upon express direction of Engineer for each individual area.

END OF SECTION

THIS PAGE INTENTIONALLY LEFT BLANK

SECTION 32 92 23
SODDING

PART 1 - GENERAL

1.01 WORK INCLUDED

A. Sod

B. Preparation of Ground

C. Placement of Sod and Fertilization

D. Maintenance of Sod

1.02 REFERENCE STANDARDS

A. Florida Department of Transportation Standard Specifications for Road and Bridge Construction (SSRBC), latest edition.

PART 2 - PRODUCTS

2.01 SOD

A. Sod shall be St. Augustine "Floratam" or Argentine Bahia as shown on the plans. Obtain sod from areas having growing conditions similar to areas to be covered. Sod shall have a clean growth of acceptable grass, reasonably free of weeds, with not less than 1 1/2" of soil firmly adhering to roots. Cutting shall be rectangular strips, of equal width, and a size to permit being lifted and rolled without breaking. All broken sod pads, irregularly shaped pieces, torn or uneven ends will be rejected. Sod installation shall be done within 48 hours after the time of harvesting.

B. Sod shall be planted as soon as possible after being dug and shall be shaded and kept moist from the time it is dug until it is planted.

2.02 FERTILIZER

A. For lawns, provide fertilizer with 16-4-8 formulation. Fertilize at a rate of 12 pounds per 1,000 S.F. Fertilizer shall be delivered to the site in the original containers and bear the manufacturer's guarantee.

B. Each bag or container shall have a quantitative analysis card.

PART 3 - EXECUTION

3.01 PREPARATION OF GROUND

A. Loosen sub grade of lawn areas to a minimum depth of 4 inches. Remove stones over 1 1/2" in any dimension. Remove sticks, roots, rubbish, and other extraneous matter. Limit preparation to areas, which will be planted promptly after preparation.

B. Spread soil to minimum depth required meeting lines, grades, and elevations shown, after light rolling and natural settlement.

C. Preparation of Grade: Where lawns are to be planted, prepare soil for lawn planting as follows: Till to a depth of not less than 4". Remove high areas and fill in depressions. Till soil to homogenous mixture of fine texture, free of lumps, clods, stones, roots and other extraneous matter. Owner's representative shall approve preparation of grades before lawns are installed.

D. Prior to grade preparation of unchanged areas, remove existing grass and other vegetation. Dispose of such material outside of Owner's property. Do not turn existing vegetation over into soil being prepared for lawns. Allow for sod thickness in areas to be sodded.

E. Apply specified fertilizer at rates indicated above and thoroughly mix into upper 2" of existing soil. Delay application of fertilizer if lawn planting will not follow within a few days. Landscape Architect must observe fertilizer application, approve application rates, and issue field report.

F. Fine grade lawn areas to a smooth, even surface with loose, uniformly fine texture. Roll, rake, and drag soil, remove ridges and fill depressions, as required to meet finish grades. Limit fine grading to areas, which can be planted immediately after grading.

3.02 PLACING SOD

A. Sodding shall be incorporated into the project at the earliest practical time in the life of the contract.

B. No sod which has been cut for more than 72 hours shall be used. Any sod which is not planted within 24 hours after cutting shall be stacked in an approved manner and maintained properly moistened.

C. Lay sod to form a solid mass with tightly fitted joints. Butt ends and sides of sod strips; do not overlap. Stagger strips to offset joints in adjacent courses. Avoid damage to sod during installation. Tamp or roll to ensure contact with sub grade, eliminate air pockets, and form a smooth surface. Work sifted soil into minor cracks between pieces of sod; remove excess to avoid smothering of adjacent grass.

D. On areas where the sod may slide, the sod shall be pegged, with pegs driven through the sod blocks into firm earth, at suitable intervals.

E. Any pieces of sod which, after placing, shows an appearance of extreme dryness shall be removed form the work.

3.3 MAINTENANCE

A. Maintain sodded lawns for thirty days, after substantial completion.

B. Maintain lawns by watering, fertilizing, weeding, mowing, edging, and any other required operation. Roll, re-grade, and replant bare or eroded areas to produce a uniformly smooth lawn. Mow as frequently as required to remove no more than 30% of the grass height in one mowing. Do not mow when grass is wet.

3.04 WATERING

A. The areas on which the sod is to be placed shall contain sufficient moisture for optimum results after being placed.

B. Water sod thoroughly with a fine spray immediately after planting. During the sod establishment period, set irrigation to water daily or as frequently as necessary to maintain moist soil to a minimum depth of 1 1/2" below the sod.

END OF SECTION

THIS PAGE INTENTIONALLY LEFT BLANK

SECTION 32 92 19
SEEDING AND MULCHING

PART 1 - GENERAL

1.01 WORK INCLUDED

A. Seeding

B. Mulching

C. Fertilizing

D. Watering

1.02 REFERENCE STANDARDS

A. Florida Department of Transportation Standard Specifications for Road and Bridge Construction (SSRBC), latest edition.

1.03 REGULATORY REQUIREMENTS

A. All seed shall meet the requirements of the State Department of Agriculture and Consumer Services and all applicable State laws.

1.04 DELIVERY, STORAGE AND HANDLING

A. Deliver grass seed in original containers showing analysis of seed mixture, percentage of pure seed, year of production, net weight, date of packaging and location of packaging. Damaged packages are not acceptable.

B. Deliver fertilizer in waterproof bags showing weight, chemical analysis and name of manufacturer.

PART 2 - PRODUCTS

2.01 SEED

A. Where seeding is called for on the Drawings or in these Specifications it shall mean a permanent type grass seed. Unless called for otherwise on the Drawings, the seed shall be a mixture of 20 parts of bermuda seed and 80 parts of Pensacola bahia seed.
   1. The bermuda seed shall be an equal mixture of hulled and unhulled seed.

2. The Pensacola bahia seed shall be scarified seed, having a minimum active germination of 40 percent and total germination of 85 percent

B. Quick growing type grass seed shall be a species which will provide an early ground cover during the winter season and will not compete with the permanent grass. The separate types of seed used shall be thoroughly dry mixed immediately before sowing. Seed that has become wet shall not be used.

2.02 MULCH

A. Dry Mulch: The mulch material used shall normally be dry mulch. Dry mulch shall be straw or hay consisting of oat, rye, or wheat straw, or of pangola, peanut, coastal bermuda or bahia grass hay. Only undetermined mulch which can readily be cut into the soil shall be used.

B. Green Mulch:
1. Types allowed: Green mulch shall consist of live coastal bermuda, other approved type of grass, and shall be free from weeds and obnoxious or other undesirable grasses.
2. Conditions Under which Green Mulch will be Permitted: No green mulch which, in the Engineer's opinion, has been allowed to become sufficiently dry as to lose its growth producing benefits will be allowed to be used.
3. In the event that the subsequent stand of grass is found to be contaminated with weeds or other obnoxious or undesirable growth, and it can be determined that such growth was introduced with the green mulch, then the Contractor will be required to effectively eliminate such undesirable growth, at his own expense.

C. Manufactured Mulch (Other than Wood Cellulose Fiber Mulch): When specified or permitted by the Engineer, manufactured mulches may be allowed. Such mulches may consist of jute, cotton, or other fiber materials, plastic sheeting, netting, chemical adhesive soil stabilizers, or other approved coverings. When so permitted, the particular type to be used shall be approved by the Engineer.

2.03 FERTILIZER

A. Fertilizer shall conform to the requirements of Section 982 SSRBC.

B. The chemical designation of the fertilizer shall be 12 8 8 (12% - total nitrogen, 8% - available phosphoric acid, and 8% - water soluble potash).

C. Each bag or container shall have a quantitative analysis card.

2.04 DOLOMITIC LIMESTONE

A. Dolomitic limestone shall be an approved product, designated for agricultural use.

2.05 WATER

A. The water used in the grassing operations may be obtained from any approved spring, pond, lake, stream or municipal water system.

B. The water shall be free of excess and harmful chemicals, acids, alkalis, or any substance which might be harmful to plant growth or obnoxious to traffic.

2.06 EQUIPMENT

A. Fertilizer Spreader: The devices for spreading fertilizer and dolomitic limestone shall be capable of uniformly distributing the material at the required rate.

B. Seed Spreader: The seed spreader shall be an approved mechanical hand spreader or other approved type of spreader.

C. Equipment for Cutting Mulch into Soil: The mulching equipment shall be of a type capable of cutting the specified material uniformly into the soil and to the required depth. Harrows will not be allowed.

D. Rollers: A cultipacker, traffic roller, or other suitable equipment will be required for rolling the grassed areas.

PART 3 - EXECUTION

3.01 GENERAL

A. Seed and mulch all areas disturbed during construction except for those areas designated to be sodded.

B. Fertilizing, seeding, or mulching operations will not be permitted when wind velocities exceed 15 miles per hour.

C. Seed shall be sown only when the soil is moist and in proper condition to induce growth. No seeding shall be done when the ground is frozen, unduly wet or otherwise not in a tillable condition.

D. Whenever a suitable area has been graded, it shall be made ready, when directed by the Engineer, and grassed in accordance with these specifications. Grassing

shall be incorporated into the project at the earliest practical time in the life of the contract.

3.02 SEQUENCE

A. The several operations involved in the work shall proceed in the following sequence:
   1. Preparation of the Ground.
   2. Fertilizing (and/or application of limestone).
   3. Seeding.
   4. Mulching and rolling.

3.03 PREPARATION OF THE GROUND

A. The ground to be seeded shall be prepared by disk harrowing and thoroughly pulverizing the soil to a suitable depth. The prepared soil shall be loose and reasonably smooth. It shall be reasonably free of large clods, roots, and other material which will interfere with the work or subsequent mowing and maintenance operations. No subsequent operations shall be commenced until the Engineer has approved the condition of the prepared areas.

3.04 FERTILIZING

A. The fertilizer shall be spread uniformly in an initial application of 400 to 500 pounds per acre. A second application of 400 to 500 pounds per acre shall be applied within 90 calendar days.

B. Immediately after the fertilizer is spread, it shall be mixed to a depth of four (4) inches or two (2) inches on steep slopes.

3.05 SEEDING

A. While the soil is still loose and moist, the seed shall be scattered uniformly over the grassing area. Unless shown otherwise on the Drawings, the permanent type seed mixture shall be spread at a rate of 100 pounds per acre.

B. When so directed by the Engineer, seed of an approved quick growing species of grass, such as rye, Italian rye, millet, or other cereal grass, shall be spread in conjunction with the permanent type seed mixture. The type of quick growing seed used shall be appropriate to provide an early ground cover during the particular season when planting is done. The rate of spread shall be 30 pounds per acre.

3.06 MULCHING

A. Approximately two inches, loose thickness, of the mulch material shall be uniformly applied over the seeded area.

B. The mulch material shall be cut into the soil with the equipment specified, so as to produce a loose mulched thickness of three to four inches. Care shall be exercised that the materials are not cut too deeply into the soil. When green mulch is used, the green mulch shall be incorporated into the soil not later than two days after being cut, and no artificial watering of the mulch shall be done before it is applied.

C. Immediately after completion of the seeding, the entire area shall be rolled thoroughly with the equipment specified. At least two trips over the entire area will be required.

3.07 WATERING

A. The areas on which the seed is to be placed shall contain sufficient moisture for optimum results after being placed.

B. The seeded area shall be kept in a moist condition for no less than two (2) weeks. The moistened condition shall extend at least to the full depth of the rooting zone. Water shall not be applied, however, when there is danger of a freezing condition.

END OF SECTION

SECTION 33 05 23.13
HORIZONTAL DIRECTIONAL DRILLING (HDD)

PART 1 - GENERAL

1.01 WORK INCLUDED

A. The work specified in this Section consists of furnishing and installing underground utilities using the Horizontal Directional Drilling (HDD) installation method, also commonly referred to as a Directional Bore. This work shall include all services, equipment, materials, and labor for the complete and proper installation, testing, and restoration of underground utilities.

1.02 QUALITY ASSURANCE

A. The requirements set forth in this Specification specify a wide range of procedural precautions necessary to insure that the very basic, essential aspects of a proper Directional Bore installation are adequately controlled. Strict adherence shall be required under specifically covered conditions outlined in this Specification.

B. Adherence to the specifications contained herein, or the Engineer's approval of any aspect of any Directional Bore operation covered by this Specification, shall in no way relieve the Contractor of their ultimate responsibility for the satisfactory completion of the work authorized under the Contract.

1.03 SUBMITTALS

A. Prior to beginning work, the Contractor must submit to the Engineer a report of procedure and subsurface soil conditions as they exist along the path of the proposed crossing. The report will insure that the subsurface conditions are known to the Contractor and that his proposed crossing procedure is based on factual information. If the subsurface conditions are known to the Contractor by previous work done in the immediate area, the information can be recorded in the report with no physical testing required. The report shall include the following:
   1. The general classification of soils along the path of the proposed crossing; along with method of obtaining this information.
   2. A list of equipment expected to be used for the Directional Bore, including special equipment and materials required for various soil conditions.
   3. Time schedule for completing each Directional Bore, including any delays due to particular soil conditions.

1.04 JOB CONDITIONS

A. Planned nighttime work is expressly prohibited and will not be allowed unless stipulated in the special conditions of the Contract.

B. All crossing operations shall be accomplished during daylight hours and shall not begin after the hour pre established as the latest starting time that will allow completion during daylight hours.

1.05 CONTRACTOR RESPONSIBILITIES

A. The Contractor shall supply all labor, supervision, tools and equipment, and materials necessary to install carrier pipe by directional bore method for wastewater systems. Installation of the carrier pipe system includes the installation of wastewater force mains and/or any other devices or materials deemed necessary for the respective systems.

B. The Contractor shall provide experienced operators to perform directional boring. The operator shall have performed at least three directional bores of similar pipe diameter and bore length.

C. The Contractor shall be fully responsible for placement of the pipe per the specifications.

D. The Contractor shall supply experienced persons who have received proper training in the use of the fusion equipment according to the recommendations of the pipe manufacturer and fusion equipment supplier to perform thermal fusion of the specific HDPE pipe to be used.

PART 2 - PRODUCTS

2.01 EQUIPMENT

A. The directional drilling equipment shall consist of a directional-drilling rig of sufficient capacity to perform the bore and pull back the pipe.

B. The steerable, directional-boring equipment shall produce a stable fluid lined tunnel with a minimum burial depth of 36-inches for the carrier pipe installation.

C. The tunneling equipment shall employ a fluid cutting technique. The soil shall be cut by small diameter, high-pressure jets of drilling fluid. The jets shall cut the soil in advance of the boring tool, impregnating and lining the tunnel wall with drilling fluid. The drilling fluid shall be inert and pose no environmental risk,

such as bentonite or a polymer-surfactant mixture producing a slurry of proper consistency.

D. The hydraulic power system shall be self-contained and free of leaks, with sufficient pressure and volume to power the drilling operation.

E. Calibration of the electronic detection system shall be verified by uncovering the tool (head) at the first ten (10) foot point.

F. The boring tool (head) shall be remotely steerable by means of an electronic detection system. The tool (head) location shall be monitored in three dimensions and logged every 10 feet from the drilling rig. The boring tool shall pull the carrier pipe through the fluid lined tunnel.

G. The rig shall have means to monitor and record the maximum pullback force during the pullback operation. The pulling strength of the boring equipment shall not exceed the pipe safety pull strength as per the manufacturer's recommendation.

H. The butt fusion machine used to join sections of HDPE pipe shall have controls and gauges for setting pressures and temperatures used for facing, heating, and fusing.
   1. Facing should be conducted at a pressure that produces properly faced pipe ends.
   2. Heating pressure should be set so that the pipe ends maintain contact against the heater, but are not forced against the heater (zero contact pressure).
   3. Fusing pressure shall be as recommended by the pipe manufacturer and fusion equipment supplier.
   4. Heater surfaces must be clean and free of contaminants such as dirt, oil, grease, and melted or charred plastic. To clean the heater, only wooden implements and clean, dry, lint-free non-synthetic cloths should be used.
   5. The heater should be checked periodically for uniform surface temperature using a surface pyrometer.

2.02 DIRECTIONAL BORE PIPE

A. Pipe shall be High Density Polyethylene (HDPE) as per AWWA C906.

B. Carrier: HDPE pipe, as specified.

C. Color Coding: The piping shall be permanently coded to provide service identification. Stripes along the entire outside length of the pipe, 120 degrees apart, shall be made by co-extrusion or impregnation in accordance with the

following schedule. Fully colored pipe co-extruded from permanently pigmented material is also acceptable.

SERVICE	STRIPED PIPE	SOLID-COLORED PIPE
Wastewater	Green stripes	Green
Water	Blue stripes	Blue

D. Markings on the pipe shall include the following:
   1. Nominal size and OD base.
   2. Standard material code designation.
   3. Dimension.
   4. Pressure class.
   5. AWWA designation.
   6. Material test category of pipe.

2.03 DRILLING FLUID ("MUD")

A. All drilling fluid must be homogenous in nature.

B. All drilling fluid must have a pH of 8.5 to 10.0.

C. "Mud" viscosity must meet minimum viscosity as set by the manufacturer for soil conditions expected to be encountered.

D. Contractor shall have appropriate additives for drilling fluid available for different soil conditions (clay, sand, silt, etc.) that may be encountered.

2.04 TRACER WIRE

A. All piping shall be installed with two continuous, insulated, solid #8 gauge (or larger) solid copper wire for force main location purposes by means of an electronic line tracer.

B. The wire insulation shall be solid color in accordance with the coding described in 2.02.C above. Green coated for wastewater (blue coated for water), 2 (two) - #8 gauge UF (Underground Feeder per National Electric Code Article 339) solid tracer wire must be taped along all pipes. The tracer wire shall be routed to the nearest access point (valve box). Sections of wire shall be spliced together using Buchanon connectors or similar approved method for splicing. Twisting the wires together is not acceptable (wire nuts).

C. Upon completion of the directional bore, the Contractor shall demonstrate to the Engineer that the wire is continuous and unbroken through the entire run of the pipe by providing full signal conductivity (including splices) when energizing for

the entire run in the presence of the Engineer. If the wire is broken, the Contractor shall repair or replace it.

2.05 FITTINGS, RESTRAINERS, AND VALVES

A. Pipe flange joints shall be made using a flange adapter which is butt fused to the HDPE pipe, if used.
   1. A back-up ring shall be fitted behind the flange adapter sealing surface flange for bolting to the mating flange. Standard back-up rings shall be AWWA C207 Class D for 160 psi and lower pressure ratings.
   2. One edge of the back-up ring must be chamfered to fit up against the back of the sealing surface flange.

B. Mechanical joints to polyethylene pipe shall be fully constrained by compressing the pipe OD against a rigid tube or stiffener in the pipe bore.
   1. The stiffener shall be stainless steel.
   2. Approved joint restraining devices are Mega-Lug and Mechanical Joint Restrainer (MJR).

PART 3 –EXECUTION

3.01 GENERAL

A. All directional bore operations shall be contained within right-of-way and/or easements shown on the Drawings.

B. Work shall not start until the Contractor has all necessary permits from the appropriate governing regulatory agencies, and not until the Engineer has been given two (2) working days prior notification to inspect construction materials. Any material may be rejected if out of specification or damaged (i.e. out-of-round, deep cuts, etc.).

C. Contractor shall not begin drilling operation until the Engineer is present. The Engineer must be present during the entire boring operation once the ground is penetrated.

   The Contractor is to schedule the directional bore such that the Engineer is on site and that the bore is completed before 4:00 PM. Directional bores shall not start after 1:00 PM or subject to permit conditions unless approved by the Owner and Engineer.

3.02 CONTRACTOR RESPONSIBILITIES

A. The Contractor shall provide the following materials and services for directional bore unless otherwise specified by Owner:
   1. Traffic control.
   2. Tracer wire for carrier pipe (#4 gauge or larger, solid), per standards.
   3. Site preparation and excavation.
   4. Dewatering – Groundwater Pump or Well Point System as needed.
   5. Sheeting and shoring, as necessary.
   6. All fusion welding.
   7. Preliminary site restoration (fill open pits, grading).
   8. Site clean up including removal and proper disposal of all waste materials and drilling fluid.
   9. Must have a vacuum truck on job site for proper clean up of drilling fluid. This will be required as the conditions warrant or at the direction of the Owner.
   10. All fittings, couplings, and carrier pipe (unless otherwise specified).
   11. Final site restoration (sod, seed, mulch, concrete/asphalt repair).
   12. Required Right-Of-Way Permits.

B. The Contractor shall record data on the bore log (see attached) and shall also ensure the following items are monitored and controlled:
   1. Calibrate locator/tracking system
   2. Field verify calibration by field measurement of actual location of first rod
   3. Ensure that the flow of bentonite is continuous
   4. Ensure pulling pressure does not exceed pipe manufacturer's specifications
   5. Fusing of pipe is within pipe manufacturer's specifications
   6. Cool down time is calculated and complied with
   7. Pipe is fused prior to start of extended bores (ie. Greater than 100 linear feet).

C. The Contractor shall record location and depth measurements every ten (10) feet over the course of the bore and provide that data to the Owner. Data collected by the Engineer does not relieve the Contractor from the responsibility of recording his own data. The Contractor shall log all necessary data from the locator/tracking system:
   1. Position.
   2. Roll Angle.
   3. Tilt Angle.
   4. Depth – Every ten (10) feet.
   5. Temperature of Data Transmitter.
   6. Remaining Battery Life.
   7. Pull Back Force (Maximum pull back force shall be recorded).
   8. Drilling Fluid Pressure

D. The Engineer shall witness and verify the Contractor's logging of pertinent data. The Engineer may log his own data for the Owner's use.

E. Contractor shall notify all involved agencies prior to start of construction. The Contractor is responsible for verifying that all permits are current and not expired. The Contractor shall notify the Engineer of Record and the Owner if expired.

F. The Contractor shall call "Sunshine State One-Call" (phone number: 800-432-4770) two (2) full days prior to performing any excavation. The Contractor shall confirm the location of utilities before starting the directional bore. This shall be done by hand digging within the tolerance zone of marked utilities.

G. The Contractor shall perform directional bore in accordance with the approved project Drawings. In no case shall the bore extend into private property unless an easement is provided prior to start of construction. Tolerances shall be as specified in Section 3.03. These tolerances shall be met unless required separations for other utilities must be met and puts the bore in conflict. Failure to meet tolerances, if not pre-approved by Engineer, may be grounds for rejecting the bore. The Contractor may, at the discretion of the Engineer, be required to abandon the bore and re-drill a new one at Contractor's own expense.

H. The Contractor shall provide all structures, safety equipment, and professional services required for the health and safety of the general public and of personnel involved in directional boring work in accordance with the requirements of the Federal, State, and Local Authorities. This includes proof of construction personnel certificates of trench safety training at the time of construction.

I. The Contractor shall take all measures necessary to protect surrounding public and private property, adjacent buildings, roads, drives, sidewalks, drains, sewers, utilities, trees, structures, and appurtenances from damage due to directional bore work.

J. The Contractor shall exercise due care at all times and shall not apply more than the safe pull force to the carrier pipe recommended by the Engineer.

K. The Contractor will be responsible to provide a tracer wire that tests positive for continuity the entire length of the bore prior to acceptance by the Engineer.

L. The Contractor shall be fully responsible for all steerable, fluid lined directional boring operation. Any noticeable surface defects resulting from operation of this boring equipment shall be repaired by the Contractor at his expense. The Contractor is recommended to take preconstruction videos of the construction site to avoid unwarranted claims for damages resulting from the construction.

3.03 DRILLING REQUIREMENTS

A. The horizontal alignment shall be as shown on the drawings, plus or minus 1 foot. The vertical alignment shall be as shown on the drawings, plus or minus 1 foot. If the Contractor cannot meet these tolerances for whatever reason, he shall confer with the Engineer prior to the start of the bore and the Engineer shall approve any changes.

B. The pipe shall have a minimum cover of 36 inches.

C. Compound curvatures should be minimized as the safe pulling strength of the pipe may be significantly reduced by the additional tensile stresses due to curvatures. This is limited by the maximum deflection as set forth by the pipe manufacturer or AWWA Standards, whichever is more stringent.

D. The entry angle should be 12° to 14° ideally (not to exceed 15°). Exit angle should be 6° to 12° (maximum) to facilitate the pullback operation.

E. Erosion and sedimentation control measures and on-site containers shall be installed to prevent drilling mud from spilling out of entry and/or exit pits.

F. Drilling mud shall be disposed of off-site in accordance with applicable local, State and Federal requirements and/or permit conditions. It is the Contractor's responsibility to test the drilling mud material to determine if it is hazardous. If determined to be hazardous, drilling muds are to be pumped into a container. The mud shall then be transported by a licensed hazardous waste hauler to a waste disposal firm. The Contractor, as part of this Contract, is responsible for the cost of all mud disposal including, hauling, testing, and final disposal.

G. Pilot holes shall be drilled on bore path with no deviation greater than plus or minus 1 foot horizontally or vertically from the design over a length of 100 feet. In the event that the allowable deviation is exceeded, the Contractor shall notify the Engineer, and the Owner may require the Contractor to pull back and re-drill from a location along the bore path before the deviation. Contractor shall use appropriate reamer type (winged, fluted, barrel, etc) for expected soil conditions.

H. Upon successful completion of the pilot hole, the borehole shall be reamed to a minimum of 25 percent greater than the outside diameter of the pipe being installed. For bores with more than two radii of curvature (entrance and exit), the borehole should be reamed up to 50 percent larger than the outside diameter of the carrier pipe. Prereaming may be necessary dependent on size of material to be pulled.

All pipe to be pulled (6" and larger) shall be prereamed prior to pullback.

Additional passes for prereaming may be required for larger pipe. Incremental increases of 4" to 6"shall be used as needed until appropriate bore hole size has been achieved.

Prereaming does not constitute pull back of product with final size reamer head attached. Prereaming must be accomplished with no product attached to the reamer head on all bore pipe 6" and larger. The bore product maybe pulled back on final pass of prereaming, granted the reamer head is no larger than 6" from the previous pass.

All bore pipe to be pulled back on final pass shall have a "breakaway" device installed. The breakaway limit shall be as recommended by the pipe manufacturer.

I. The Contractor shall not attempt to ream at a rate greater than the drilling equipment and mud system are designed to safely handle.

J. In the event of a drilling hole blowout, the Contractor shall be responsible for restoring to original condition any damaged property and cleaning up the environment in the vicinity of the blowout.

3.04 PIPE INSTALLATION

A. After reaming the borehole to the required diameter, the pipe shall be pulled through the hole. In front of the pipe shall be a swivel and barrel reamer to compact the borehole walls.

B. Once pullback operations have commenced, the operation shall continue without interruption until the pipe is completely pulled into the borehole. The frictional resistance is the highest just prior to movement and decreases with movement. When pullback ceases, frictional forces and drag forces increase due to the thixotropic nature of drilling mud. The mud starts to gel when it is undisturbed. Therefore, PULLBACK SHALL NEVER BE STOPPED, EXCEPT FOR DRILLING ROD REMOVAL AND PIPE FUSION, UNTIL THE PIPE IS COMPLETELY PULLED INTO ITS PERMANENT POSITION.

C. Adequate lengths of pipe shall be provided at both the launching and receiving ends to facilitate service connection assemblies.

D. After pullback, pipe may take several hours to recover from the axial strain, if using HDPE. When pulled from the reamed borehole, the pull-nose should be pulled out 3-4 percent longer than the total length of the pull to avoid having the

pull-nose sucked back below the borehole exit level due to stretch recovery and thermal contraction to an equilibrium temperature.

E. The pipe entry and exit area shall be graded as needed (by Contractor) to provide support for the pipe and to allow free movement into the borehole. The pipe shall be guided into the borehole to avoid deformation of, or damage to, the pipe.

F. The pipe shall be installed in a manner that does not cause upheaval, settlement, cracking, and movement or distortion of surface features. Any damages caused by the Contractor's operations shall be corrected by the Contractor.

G. In the event that unexpected subsurface conditions impeding drilling operations are encountered, the procedure shall be stopped and not continued until the Owner has been consulted. The pipe shall be pulled back through the borehole using the wet insertion construction technique.

H. If the final grade of the finished bore is not satisfactory to the Owner or any other jurisdictional entity, the pipe shall be abandoned, full pressure grouted in place in accordance with the jurisdictional entity, and an alternate installation shall be made. The abandoned pipe shall be properly shown on "as-built" drawings to be submitted following conclusion of the construction work.

I. The Engineer shall observe the installed pipe for roundness and/or damage. Evidence of over-pulling or significant surface scratching shall be brought to the attention of the Owner. Deformations of more than 10 percent may be grounds to abandon the bore and have the Contractor re-drill another line.

3.05 BUTT FUSION PROCEDURE

A. Fusion welds shall be performed by an experienced technician that has been properly trained to meet the pipe manufacturer's procedures. All welds shall meet the pipe manufacturer's recommendations.

B. As the pipe ends are melted against the heater during the heating period, the molten plastic will swell and form melt beads around the pipe ends. The melt beads should be the same size on both pipe ends, and uniformly sized all the way around.

C. After melting has been completed, the ends should be separated just enough to remove the heater, observed for uniformity of the beads and quickly (within three seconds) brought together with the recommended pressure.
   1. If melted plastic sticks to heater, the two ends should not be joined. The ends should be allowed to cool and the procedure started over.

2. Excess pressures should not be used as this will squeeze too much melt out of the fusion area and result in a weakened joint.

D. The Contractor may do a preliminary pressure test on the completed string of pipe prior to installation. A pressure test shall be required on the completed directional bore prior to final acceptance.

3.06 CONDITIONS FOR REJECTION OF DIRECTIONAL BORE

A. If the Engineer is not present during the entire bore.

B. If the installed "Breakaway" devices should fail during pull back.

C. If the drilling fluid is "lost" during the pull back of the product and can not be regained within the required timeframe of the manufacturer or if more than a reasonable amount of fluid is used to fill an unknown void and flow can not be regained. No pipe shall be pulled without visible flow of drilling fluid.

D. If the pipe shall fail a hydraulic pressure test as specified by the manufacturer.

E. If at any time when the product is pulled back and any exposed areas have a greater than allowable "gouging" or visible marring of the pipe.

F. If the vertical and horizontal limits are not within tolerances.

G. Any other defect in material or workmanship which would affect the quality, performance, or installation life of the installed pipeline.

3.07 POST-CONSTRUCTION

A. General
1. The as-built variance from the specified bore path shall not exceed plus or minus 1 foot in the vertical plane and plus or minus 1 foot in the horizontal plane.
2. The Contractor shall be considered as having completed the requirements of the directional bore when he has successfully completed the work, including pressure testing, to the satisfaction of the Engineer and the Owner.
3. The completed force main shall be pressure tested at 150 psig for two hours for final acceptance and meet the test requirements of Section 33 34 00.

B. As-Builts

When the directional bore is completed, the Contractor shall provide data log sheets and marked up as built drawings to the Engineer, as required.

Directional Bore Log

Project Name: _____

Project Number: _____ **Date:** _____

Contractor/Site Representative: _____

Bore Location/Number: _____ **Size/Material:** _____

Starting Location: _____ **Bore Rod Length:** _____

	Total Length Bored	Distance from Start Point	Depth	Pull Back Pressure	Drilling fluid Pressure	Comments
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						
11.						
12.						
13.						
14.						
15.						
16.						
17.						
18.						
19.						
20.						
21.						
22.						
23.						
24.						

***Lengths to be measured in rod length increments**

Owner's Representative: _____ **Contractor:** _____

SECTION 33 11 00
WATER UTILITY DISTRIBUTION PIPING

PART 1 - GENERAL

1.01 WORK INCLUDED

A. Pipe

B. Fittings

C. Thrust Restraints

D. Valves

E. Valve Boxes

F. Fire Hydrants

G. Installation

H. Testing

1.02 RELATED WORK

A. Section 31 23 33 – Trenching and Backfilling

B. Section 33 13 00 – Disinfecting of Water Utility Distribution

1.03 REFERENCE STANDARDS

A. Materials manufactured in United States of America.

B. AASHTO T180 - Moisture-Density Relations of Soils Using a 10-lb. (4.54 kg) Rammer and an 18-in. (457 mm) Drop.

C. ANSI/ASTM D2466 - Poly (Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 40.

D. ANSI/AWWA C104 - Cement-Mortar Lining for Ductile-Iron Pipe and Fittings for Water.

E. ANSI/AWWA C105 - Polyethylene Encasement for Ductile-Iron Piping for Water and Other Liquids.

F. ANSI/AWWA C111 - Rubber-Gasket Joints for Ductile-Iron and Gray-Iron Pressure Pipe and Fittings.

G. ANSI/AWWA C151 - Ductile-Iron Pipe, Centrifugally Cast in Metal Molds or Sand-Lined Molds, for Water or Other Liquids.

H. ANSI/AWWA C502 - Dry Barrel Fire Hydrants.

I. ANSI/AWWA C504 - Rubber Seated Butterfly Valves.

J. ANSI/AWWA C509 - Resilient Seated Gate Valves three (3) inches through twelve (12) inches NPS, for Water and Sewage Systems.

K. ANSI/AWWA C550 - Protective Epoxy Interior Coating for Valves and Hydrants.

L. ANSI/AWWA C600 - Installation of Ductile-Iron Water mains and Appurtenances.

M. ANSI/AWWA C605 - Underground Installation of Polyvinyl Chloride (PVC) Pressure Pipe and Fittings for Water.

N. ANSI/AWWA C900 - Standard for Polyvinyl Chloride (PVC) Pressure Pipe, four (4) inches through 48 inches, for Water.

O. ANSI/AWWA C909 – Standard for Molecularly Oriented Polyvinyl Chloride.

P. ANSI/AWWA C906 – Standard for Polyethylene (PE) Pressure Pipe and Fittings, 4 in. Through 63 in. For Water Distribution and Transmission.

Q. AWWA M23 - PVC Pipe - Design and Installation.

R. ASTM D1784-02 – Standard Specifications for Rigid PVC and CPVC Compounds.

S. ASTM D1785 - Poly (Vinyl Chloride) (PVC) Plastic Pipe, Schedules 40, 80, and 120.

T. ASTM D2241 - Poly (Vinyl Chloride) (PVC) Plastic Pipe (SDR-PR).

U. ASTM D2855 - Making Solvent-Cemented Joints with Poly (Vinyl Chloride) (PVC) Pipe and Fittings.

V. AWWA C651 - Standard for Disinfecting Water Mains.

W. AWWA C901 - Polyethylene (PE) Pressure Pipe, Tubing, and fittings, one-half (1/2) inch through three (3) inches, for Water.

X. Uni-B-3 - Recommended Practice for the Installation of Polyvinyl Chloride (PVC) Pressure Pipe.

Y. Conform to reference standard by date of issue current on date of Contract Documents.

1.04 SUBMITTALS

A. Submit under provisions of Section 01 30 00.

B. Product Data: Provide data on pipe materials, pipe fittings, valves, hydrants, and accessories.

C. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.

1.05 PROJECT RECORD DOCUMENTS

A. Submit documents under provisions of Section 01 70 00.

B. Accurately record actual locations of piping mains, fittings, valves, connections, and invert elevations.

C. Identify and describe unexpected variations to subsoil conditions or discovery of uncharted utilities.

1.06 QUALITY ASSURANCE

A. Valves: Manufacturer's name and pressure rating marked on valve body.

B. All materials in contact with water shall comply with NSF Standard 61 and certified accordingly.

1.07 DELIVERY, STORAGE, AND HANDLING

A. Deliver, store, protect and handle products to site under provisions of Section 01 60 00.

B. Deliver and store valves in shipping containers with labeling in place.

PART 2 - PRODUCTS

2.01 PIPE

A. Polyvinyl Chloride (PVC)
1. Four (4) through 48 inches in diameter - AWWA C900, DR 18, pressure class 235.
2. Molecularly Oriented Polyvinyl Chloride (PVCO) Pipe meeting AWWA C909 shall be an acceptable alternate. Pipe shall have a minimum pressure class of 150 psi. Provide an affidavit of compliance with AWWA specifications.
3. Each length should be clearly labeled so as to allow identification and specification conformance. Pipe shall bear the National Sanitation Foundation Seal for potable water pipe.
4. All PVC pipe shall be blue in color or bear an acceptable indelible blue marking in three (3) locations for the length of the pipe.
5. Connection for PVC water pipe two (2) inches and larger shall be rubber compression ring type. Bell shall consist of an integral wall section with a solid cross-section elastomeric ring which meets the requirements of ASTM D-1869.
6. Three (3) inches diameter and smaller - ASTM-2241 with an SDR of 21, pressure class 200.
7. Trace wire shall be 14-gauge UF blue insulated solid core copper wire with joint seal.

B. Polyethylene (HDPE)
1. For service piping only: AWWA C901, ASTM D–3350, PE 4710, Pressure Class 250, DR-9.
2. For Distribution and Transmission piping: AWWA C906, PE 4710 Pressure Class 200, DR – 11, ductile iron outside diameter.
3. Each length shall be clearly labeled to ensure identification and specification conformance. All materials shall bear the NSF seal for potable water pipe.
4. All PE pipe shall be blue in color or have a blue color stripe co-extruded with the pipe.
5. Fittings shall have the same pressure class as adjoining pipe.
6. All thermal butt fusion shall be performed by trained workers in conformance to AWWA C906 and manufacturer's instructions.

2.02 FITTINGS

A. All fittings shall be rated for not less than 150 psi working pressure.

B. Grade for ductile-iron fittings shall conform with ANSI/AWWA Standard C110 or ANSI/AWWA C111/A21.11, and shall be cement lined inside and

bituminous coated outside. Mechanical joint ductile-iron fittings complying with AWWA C153 are acceptable.

C. Bolts for all flanged and mechanical joints shall be high strength, low alloy steel bolts only, meeting the current provisions of AWWA C111. Bolt manufacturer's certification of compliance must accompany each shipment, with copy to Engineer.

D. Malleable iron fittings shall be galvanized conforming to the applicable provision of Federal Specification WW-P-521D, Type II, and may be used in sizes two (2) inches and under only.

E. Polyvinyl chloride (PVC) fittings shall be minimum Schedule 40 and may be used in size two (2) inches and under only.

2.03 THRUST RESTRAINTS

A. All mechanical joint fittings shall be restrained with retainer glands. Where indicated, pipe joints shall be restrained.

B. Retainer Glands for Fittings on PVC Pipe: Where PVC pipe is being connected to mechanical joint fittings, retainer glands shall be Ebaa Megalug Series 2000PV. Retainer glands shall be designed to meet Uni-Bell Standard "Uni-B-13". The restraint mechanism shall consist of a plurality of individually activated gripping surfaces to maximize restraint capability. Glands shall be manufactured of ductile iron conforming to ASTM A536. The gland shall be such that it can replace the standardized mechanical joint gland and can be used with the standardized mechanical joint bell conforming to AWWA C-111 and C-153. Twist-off nuts, sized same as tee-head bolts, shall be used to insure proper actuation of restraining devices. The retaining gland shall have a pressure rating equal to that of the PVC pipe on which it is used.

C. Retainer Glands for Fittings on Ductile Iron Pipe: Where ductile iron pipe is being connected to mechanical joint fittings, retainer glands shall be Ebaa Megalug Series 1100. Mechanical joint restraint shall be incorporated in the design of the follower gland and shall include a restraining mechanism which, when actuated, imparts a multiple wedging action against the pipe, increasing its resistance as pressure increases. Glands shall be manufactured of ductile iron conforming to ASTM A536. Restraining devices shall be of ductile iron heat treated to a minimum Brinnell hardness of 370. The gland shall be such that it can replace the standardized mechanical joint gland and can be used with the standardized mechanical joint bell conforming to AWWA C-111 and C-153. Twist-off nuts, sized same as tee-head bolts, shall be used to insure proper actuation of restraining devices. The retaining gland shall have a pressure rating of at least 250 psi with a minimum safety factor of 2.

D. Retainers for PVC Pipe: Where PVC pipe is indicated as being restrained, retainers for new C900 pipe, 4 to 12-inch diameter, shall be Ebaa Series 1500 and for new C900 pipe, greater than 14-inch diameter, shall be Ebaa Series 2800. Retainers for existing C900 pipe 4 to 12- inch diameter shall be Ebaa Series 1500 and retainers for existing C900 pipe greater than 14-inch diameter shall be EBAA Series 1100HV. Retainers shall be manufactured of 60-42-10 ductile iron. The retainer shall have sufficient number of ductile tie bolts to restrain working and test pressures as stated by the manufacturer. Each ductile clamp shall have serrations on the I.D. sufficient to hold working and test pressures.

E. Retainers for Mechanical Joint Ductile Iron Pipe: Where mechanical joint ductile iron pipe is indicated as being restrained, retainer glands shall be as specified for mechanical joint fittings above.

2.04 VALVES

A. Gate Valves four (4) inches and over shall be of the resilient wedge type and shall be in accordance with ANSI/AWWA C509 (latest edition) with O-ring type stem seal and two (2) inch square operating nut for buried services. Valves shall be mechanical joint unless otherwise noted and open left (counter clockwise). Bolts, studs and nuts shall be made from corrosion - resistant materials.

B. Gate Valves two (2) inches and under shall conform with Federal Specifications WW-V-54, Type II, solid wedge disc, rising stem, secured joints and of bronze construction. Valves shall have malleable iron hand wheels.

C. All valves shall be American made, minimum 150 psi cold water rates and shall be cast with manufacturer's name and pressure rating. All valves shall receive interior coating conforming to AWWA C550.

2.05 VALVE BOXES

A. Boxes shall be cast iron of standard design with adjustable drop section to fit disc or cover over valve. Interior diameter shall be not less than five (5) inches, with cast iron cover marked "WATER".

2.06 FIRE HYDRANTS

A. ANSI/AWWA C502 and the following requirements:
   1. Dry barrel compression type.
   2. 0-ring seal at operating nut stem and means for lubrication.
   3. Traffic model with frangible sections at ground line.
   4. Open left (counter clockwise).

5. Two 2-1/2 inch hose nozzles and one 4-1/2 inch pump nozzle with National Standard threads.
6. Main valve openings shall be not less than 5-1/4 inches.
7. Paint shall match applicable City standard.
8. Pipe inlet shall be six (6) inch mechanical joint.
9. Operating nut shall be pentagonal measuring 1-1/2 inch point to flat.
10. All bolts, studs and nuts shall be made from a corrosion-resistant material.
11. Drain outlet shall not be omitted.
12. All hydrant leads shall be valved.
13. All hydrants shall be installed plumb and in true alignment with the connection pipe to the water main.

B. Acceptable are Mueller Centurion or Engineer Approved Equal.

2.07 BEDDING MATERIALS

A. Bedding: Silica Sand or local materials meeting requirements of Section 902, Standard Specifications for Road and Bridge Construction, latest edition. All bedding material imported to site shall be tested for corrosivity prior to usage and shall be rated as "mildly aggressive".

2.08 ACCESSORIES

A. Concrete for Thrust Blocks: 2500 psi minimum compressive strength.

PART 3 - EXECUTION

3.01 EXAMINATION

A. Verify existing conditions.

B. Verify that municipal utility water main size, location and invert are as indicated.

3.02 PREPARATION

A. Ream pipe and tube ends and remove burrs, as required.

B. Remove scale and dirt, on inside and outside, before assembly.

C. Prepare pipe connections to equipment with flanges or unions.

3.03 BEDDING

A. Excavate and backfill pipe trench in accordance with Section 31 23 33 for Work of this Section. Hand trim excavation for accurate placement of pipe to elevations indicated.

B. Maintain optimum moisture content of bedding material to attain required compaction density.

3.04 INSTALLATION - PIPE

A. Maintain 10 ft. minimum horizontal or 18-in. minimum vertical separation of water main from sewer piping in accordance with State requirements.

B. Install pipe to indicated elevation to within tolerance of 5/8 inches.

C. Install ductile iron piping and fittings to ANSI/AWWA C600. Install PVC piping to AWWA C605. Install PE piping to AWWA C906.

D. Route pipe in straight line, except as noted.

E. Install pipe to allow for expansion and contraction without stressing pipe or joints.

F. Install access fittings to permit disinfection of water system.

G. Establish elevations of buried piping to ensure not less than 36 inches of cover, unless otherwise shown on the drawings.

H. Backfill trench in accordance with Section 31 23 33 – Trenching and Backfilling.

I. Installation and restoration operation under roads, shoulders or other level areas shall be performed in compliance with any City, County or State requirement which may apply.

J. Every effort shall be made to cover pipe ends during installation and a watertight plug or other approved seal must be used when installation is not in progress.

K. All stubbed valves shall be installed with retaining glands, tied off or with a minimum of sixty (60) feet of pipe.

L. Allowable deflection shall be no greater than stated in the applicable AWWA standard.

M. No pipe shall be laid when, in the opinion of the inspector, trench conditions are unsuitable. Pipe shall be laid in a dry trench unless otherwise authorized by the inspectors of the City which will own the water line.

N. Length of open trench on existing roads may be limited to minimize public inconvenience or danger to life or property.

3.05 PIPE IDENTIFICATION

A. A plastic dig-warning tape shall be buried 24 inches above the top, but no shallower than 12 inches from the top of the final grade, for the pipe's full length. The tape shall be at least 3 inches wide. The tape shall have colored lettering or background color and worded to indicate the presence and the contents of the pipeline. Color shall be blue for water.

B. Install solid strand tracer wire and joint seal (Kearney Aquaseal, Bishop, or approved equal) along all non-metallic pipe and services. Tracer wire shall be blue (water) coated (#) 14 gauge UF (Underground Feeder per National Electric Code Article 339) and must be taped below the spring line of the pipe and stubbed up at valves and hydrants. At each valve, the wire shall be installed along the outside of the valve box to the adjustable top piece. Sections of wire shall be spliced together using Buchanan connectors. Twisting the wire together is not acceptable. The tracer wire must provide full signal conductivity (including splices) for line locating equipment. Tape wire at 5-ft intervals during installation to prevent shifting during backfilling.

C. Each segment of tracer wire shall be demonstrated to be electrically continuous between turn-ups after backfilling and before the pipe is accepted as complete.

3.06 INSTALLATION - VALVES AND HYDRANTS

A. Set valves on solid bearing.

B. Center and plumb valve box over valve. Set box cover flush with finished grade. Pour concrete pad around valve box in accordance with standard details.

C. Set hydrants plumb and locate pumper nozzle perpendicular to roadway.

D. Set hydrants to grade, with nozzles at least 20 inches above ground.

E. Locate control valve adjacent to hydrant. Control valve shall be attached directly to the water main by a gland or swivel tee as approved by the Engineer. Restraining rods shall be at least 3/4" stock and shall be galvanized or stainless steel.

F. Paint hydrants in accordance with applicable City requirements.

G. After installation, each hydrant shall be flow tested and results reported to Owner.

3.07 SERVICE LINES

A. Water installation shall include service stubs at alternate lot lines or other locations as shown on the plan and at sizes indicated.

B. In all cases, a gate valve shall immediately adjoin the main connection and a second gate valve, equivalent in size to the service crossing, shall be provided at termination adjacent to the property line or other specified point. This valve should be approximately 12-in. deep, buried and staked. No valve box required in either case unless the valve is located in a paved area.

3.08 CONNECTIONS TO EXISTING LINES

A. Connections to existing lines owned by the City shall be made by the Contractor under supervision of the Water Department.

B. Whenever it is proposed to interrupt existing water supplies to residences or businesses, the Contractor shall notify all concerned parties or agencies at least 24 hours prior to such cut-off.

3.09 TESTING

A. A 48-hour notice shall be provided to Engineer and the City prior to testing. After installation is completed, the system shall be filled with water and flushed at the highest obtainable velocity and at the furthest points. Velocity must be at least 2.5 feet per second. All air must be expelled. A pressure at least equal to 90 psi should be maintained for a period of one (1) hours. Should the system appear tight, the leakage test may begin.

B. The Contractor will pump his lines to a pressure equal to or greater than 150 psi. Should pressure fall below 150 psi during the test period, it shall be voided and restarted. Test period shall be two hours. Allowable leakage for ductile iron pipe shall be computed on the basis of Table 6, Section 4, AWWA C600, latest revision, or the applicable formula for installed pipe lengths other than eighteen (18) feet. Allowable leakage for PVC pipe shall be computed on the basis of Table 22, AWWA M23.

C. The following table approximates the above for a 1,000 foot segment of PVC at 150 psi and may be used in lieu thereof:

ALLOWABLE LEAKAGE PER 1,000 FEET OF PIPELINE

Pipe Size (inches)	Allowable Leakage (Gallon/hr.)
2"	0.16
4"	0.33
6"	0.50
8"	0.66
10"	0.83
12"	0.99
14"	1.16
16″	1.32
18″	1.49

D. All reports to be reported on Florida Department of Health standard form. Copies may be obtained from Engineer.

3.10 FIELD QUALITY CONTROL

A. Field inspection and testing will be performed under provisions of Section 01 40 00.

B. Compaction testing will be performed in accordance with AASHTO T180.

C. If tests indicate Work does not meet specified requirements, remove Work, replace and retest at no cost to Owner.

D. Frequency of Tests: per Section 31 23 33 – Trenching and Backfilling.

END OF SECTION

SECTION 33 13 00
DISINFECTING OF WATER UTILITY DISTRIBUTION

PART 1 - GENERAL

1.01 WORK INCLUDED

A. Disinfection of potable water transmission and distribution lines.

B. Disinfection of tanks, wells, pumps, and other facilities that will come in contact with potable water.

C. Testing and reporting results.

1.02 RELATED SECTIONS

A. Section 01 30 00 – Administrative Requirements

B. Section 01 40 00 - Quality Requirements

1.03 REFERENCES

A. AWWA B300 - Standard for Hypochlorites; American Water Works Association.

B. AWWA B301 - Standard for Liquid Chlorine; American Water Works Association.

C. AWWA C651 - Disinfecting Water Mains; American Water Works Association.

D. AWWA C652 - Disinfection of Water Storage Facilities

E. AWWA C654 - Disinfection of Wells

F. Florida Administrative Code, Chapter 62-555.345.

1.04 SUBMITTALS

A. Submit under provisions of Section 01 30 00.

B. Test Reports: Indicate results comparative to specified requirements.

C. Disinfection report:
   1. Type and form of disinfectant used.
   2. Date and time of disinfectant injection start and time of completion.

3. Test locations.
4. Initial and 24-hour disinfectant residuals (quantity in treated water) in ppm for each outlet tested.
5. Date and time of flushing start and completion.
6. Disinfectant residual after flushing in ppm for each outlet tested.

D. Bacteriological report:
1. Date issued, project name, and testing laboratory name, address, and telephone number.
2. Time and date of water sample collection.
3. Name of person collecting samples.
4. Test locations.
5. Initial and 24-hour disinfectant residuals in ppm for each outlet tested.
6. Coliform bacteria test results for each outlet tested.
7. Certification that water conforms, or fails to conform, to bacterial standards of Florida Department of Environmental Protection.
8. Authorized signature by the laboratory performing the test.

1.05 REGULATORY REQUIREMENTS

A. All disinfection of water facilities shall be done in accordance with the rules and regulations of the Florida Department of Environmental Protection.

B. No water facilities will be permitted to be placed into service until they have been cleared by the Florida Department of Environmental Protection.

C. Perform Work in accordance with AWWA C651 for piping, AWWA C652 for storage facilities or AWWA C654 for wells.

1.06 QUALIFICATIONS

A. Testing Firm: FDEP certified laboratory specializing in testing potable water systems.

PART 2 - PRODUCTS

2.01 DISINFECTION CHEMICALS

A. Chemicals: AWWA B300, Hypochlorite and AWWA B301, Liquid Chlorine.

PART 3 - EXECUTION

3.01 EXAMINATION

A. Verify that facilities to be disinfected have been cleaned, inspected, and pressure tested.

B. Schedule disinfecting activity to coordinate with start-up, testing, adjusting and balancing, demonstration procedures, including related systems.

3.02 EXECUTION

A. Provide and attach required equipment to perform the work of this Section.

B. Inject or otherwise apply disinfectant into facilities, following procedures that assure full contact with all surfaces.

C. Maintain disinfectant in system for 24 hours. Obtain prior approval for alternate disinfection procedures that may allow different disinfection time.

D. Flush, circulate, and clean until required cleanliness is achieved; use municipal domestic water.

E. Replace permanent system devices removed for disinfection.

3.03 FIELD QUALITY CONTROL

A. Perform field inspection and testing in accordance with Section 01 40 00.

B. Test samples in accordance with AWWA C651 for piping, AWWA C652 for storage facilities, or AWWA C654 for wells.

END OF SECTION

SECTION 33 16 19
ELEVATED WATER UTILITY STORAGE TANKS

PART 1 - GENERAL

1.01 DESCRIPTION OF WORK

A. The work to be performed under this section includes furnishing all labor, materials, tools, equipment, labor and incidentals necessary for the design, manufacture, delivery, site work, electrical, piping, erection, painting, disinfection, and testing of a single pedestal, welded steel elevated storage tank

B. The tank is to be complete with all accessories specified herein, and is to be erected on foundations to be designed and constructed by the Tank Contractor. The tank shall meet all requirements of AWWA D100-11 Standard for Welded Carbon Steel Tanks for Water Storage.

1.02 RELATED WORK

A. Section 31 23 33 – Trenching and Backfilling

B. Section 33 13 00 – Disinfecting of Water Utility Distribution

C. Section 33 16 19.01 – Coating Systems for Elevated Water Utility Storage Tank

1.03 REFERENCE STANDARDS

A. AWWA D100 – Standard for Welded Carbon Steel Tanks for Water Storage.

B. AWWA D102 – Standard for Painting Steel Water Storage Tanks.

C. AWWA C652 – Standard for Disinfection of Water Storage Facilities.

D. AWS D1.1 – Structural Welding Code – Steel.

E. NSF 61 – Materials in Contact with Potable Water.

F. ACI 318 – Building Code Requirements for Reinforced Concrete.

G. ACI 301 – Specifications for Structural Concrete.

H. OSHA – Occupational Safety and Health Standards.

I. ASCE 7 – Minimum Design Loads and Associated Criteria for Buildings and Other Structures.

J. Steel Structures Painting Council Manual – Volume 1 – Good Painting Practice.

K. Steel Structures Painting Council Manual – Volume 2 – Systems and Specifications.

L. ANSI/AWWA C600 - Installation of Ductile-Iron Water mains and Appurtenances.

1.04 QUALIFICATIONS

A. The Tank Contractor shall own their fabrication facilities. Divided responsibilities between erection and fabrication will not be allowed.

B. The Tank Contractor shall have completed the design, construction and commissioning of at least three single pedestal elevated tanks of equal or greater capacity in the last seven years. Each bidder shall provide a list of such projects stating location, completion date, contact names, and telephone numbers.

C. All tank contractors are required to have an Experience Modification Rate (EMR) below 0.75 and a Total Recordable Incident Rate (TRIR) below 2.5 for the last three (3) years. Bidders are required to verify the above requirement by providing with their bid a statement from their insurance carrier confirming the EMR requirement, and their last three (3) years of OSHA 300 Logs to confirm the TRIR requirement.

D. A qualified supervisor employed by the Tank Contractor shall be on site at all times during construction of the steel support structure and water tank.

E. The Tank Contractor shall not subcontract the design or erection of the steel tank, pedestal and base cone support structure.

F. Names and resumes of full-time health and safety personnel, with minimum acceptable level of certification being Certified Health and Safety Technician (CHST).

1.05 SUBMITTALS

A. Submit under provisions of Section 01 30 00.

B. Each bidder shall submit with their bid a design sketch of the tank and foundation they propose to furnish. The general plan of the structure must show all major dimensions including the tank diameter, the height to low and high water levels, the sizes of all principal and secondary members, thickness of all plates, arrangement of members, and size of the tank foundation, including approximate quantities of concrete and rebar.

C. Prior to construction, the Tank Contractor shall furnish construction drawings of the tank, support structure and foundation sealed by a Professional Structural Engineer licensed in the State of Florida. Construction drawings for the foundation shall show applicable design and construction standards, materials of construction, design loads and allowable soil bearing or pile capacity.

D. Plans or procedures for control of fabrication, material verification, and required inspections and testing.

E. Welder's certifications shall be submitted in accordance with AWWA D100.

F. Provide an operating and maintenance manual containing operating instructions, maintenance instructions, as-built construction drawings, cleaning and painting instructions, a gage table, and catalog cuts of equipment supplied.

1.06 PROJECT RECORD DOCUMENTS

A. Submit documents under provisions of Section 01 70 00.

1.07 QUALITY ASSURANCE

A. Valves: Manufacturer's name and pressure rating marked on valve body.

B. All materials in contact with water shall comply with NSF Standard 61 and certified accordingly.

1.08 DELIVERY, STORAGE, AND HANDLING

A. Deliver, store, protect and handle products to site under provisions of Section 01 60 00.

B. Deliver and store valves in shipping containers with labeling in place.

PART 2 - PRODUCTS

2.01 GENERAL

A. Furnish an elevated water storage tank as shown on the drawings and as specified in this section. The design, materials, fabrication, construction, testing and inspection of the tank, support structure and foundation shall comply with AWWA D100, except as modified herein. Tank capacity, head range, height to TCL and top of foundation elevation shall be as shown on the drawings. Tank net capacity shall be 150,000 gallons.

2.02 DESIGN CRITERIA

A. Dead load shall be the estimated weight of all permanent construction and fittings.

B. Water load shall be the weight of water when the tank is filled to the overflow. The unit weight of water shall be 62.4 pounds per cubic foot.

C. Wind loads shall be based on AWWA D100 for a basic wind speed, V, of 153 miles per hour and Exposure Category C in accordance with ASCE 7 for Category IV (essential facility) structures.

D. Horizontal and vertical seismic loads shall be based on AWWA D100 for Category IV (essential facility) structures, using tank center coordinates of N27° 32′ 01.89″ latitude and W81° 50′ 12.48″ longitude.

E. The structural effects of the applied loads shall be considered with the loads defined according to ASCE 7. Load combinations used for allowable stress design and strength design shall conform to AWWA D100.

F. The design for all sections of the steel tank shall be per the classes of materials and unit tension/compression stresses specified in AWWA D100.

G. All openings in the support structure shall be properly reinforced. Loads imposed by openings in the base of the support structure shall be accommodated in the foundation design.

H. The overturning moment used in designing the support structure and foundation shall include the moment due to eccentricity of the gravity loads caused by deflection of the structure under wind or seismic conditions.

I. Minimum thickness of plates in contact with water: 0.25 inch.

2.03 FOUNDATION

A. The design of the foundation shall conform to ACI 318 except as modified herein.

B. The foundation design shall be by the Tank Contractor and shall conform to the recommendations given in the geotechnical report. The Tank Contractor shall employ the geotechnical engineer (Madrid CFTL, 2020 SR 60 East, Bartow, FL tel. (863) 533-9007) to verify the adequacy of the bearing stratum after the Contractor has carried out the excavation and before any concrete or reinforcement is placed.

C. Foundation piling shall conform to the design and detailing requirements of International Building Code (IBC) Section 1810, including the supplemental design and detailing requirements based on the assigned Seismic Design Category.

2.04 APPURTENANCES

A. Access Door
One 36-inch by 80-inch plate access door with flush threshold shall be provided and located in the base of the support structure complete with a handle, drip cover, and dead bolt lock. The door shall be fabricated from steel plate with adequate stiffening and specifically designed for use with the tank. A step-over threshold is not acceptable.

B. Inlet/Outlet Piping
A 12-inch diameter standard weight steel that extends vertically from the bottom of the tank to a flanged connection at the base of the support structure. The inlet/outlet pipe shall have an expansion joint above the base bend to accommodate differential movement due to settlement or thermal cycling. Inlet/outlet pipe shall not extend above the low water level.

C. Overflow Pipe
An 8" overflow pipe equipped with an anti-vortex entrance detail shall be provided. The overflow pipe shall be designed to carry the maximum design flow rate of 1,000 GPM. The overflow pipe shall be steel with welded connections. The overflow shall extend down the inside of the access tube and support structure and discharge at a point approximately two feet above finish grade onto a concrete splash pad. The end of the overflow shall be covered with a removable #24 mesh stainless steel screen.

D. Tank Vent

The tank vent shall be located on the tank roof above the maximum weir crest elevation. The tank vent shall have an intake and relief capacity sufficiently large that excessive pressure or vacuum will not be developed during maximum flow rate. The maximum flow rate shall be based on a break in the inlet/outlet pipe at the base of the tank when the tank is full. The open area of the overflow shall not be considered as a venting area. The vent shall be designed, constructed and screened so as to prevent the ingress of wind driven debris, insects, birds, and animals.

E. Access, Ladders, and Platforms
   1. Provide a ladder system which extends from grade to the upper shaft platform.
   2. Provide a ladder on the interior of the access tube from the upper shaft platform to the tank roof.
   3. Ladders shall be equipped with a fall arrest system meeting OSHA regulations. The system shall be supplied complete with safety harnesses, locking mechanisms, lanyards and accessories for two persons.
   4. A steel condensate ceiling with drain shall be supplied, located at the junction of the pedestal shaft and base bell. The condensate ceiling shall be equipped with a drain pipe connected to the overflow pipe.
   5. An upper platform shall be located at the top of the support pedestal to provide access from the pedestal ladder to the roof access ladder located on the interior of the access tube. The platform shall include an access hatch with opening to allow the ladder and safety device to continue 48" minimum above the platform floor.
   6. Access, ladders, platforms shall be aluminum, including all fastening hardware.

F. Manholes and Hatches
   1. One 24-inch diameter painter's access manhole shall be provided giving access to the exterior painter's rails located at the top of the support structure.
   2. One 24-inch diameter exhaust hatch located adjacent to the access tube and so constructed that an exhaust fan may be connected to ventilation during painting operations.
   3. Two 30-inch diameter hinged rain proof hatches at the top of the access tube and adjacent to the access tube.
   4. One 24-inch diameter tank bottom manhole shall be provided in the tank bottom with access by ladder from the upper platform.
   5. Two 30-inch diameter manholes; one in the condensate ceiling and the other in the upper platform.

G. Roof Handrail

A roof handrail shall be provided surrounding the roof manholes, vents, and other roof equipment. Handrail shall comply with OSHA requirements.

H. Painter's Rails

Provide interior and exterior painter's rails.

I. Electrical

1. Interior waterproof light sockets with rigid conduit, wiring and switch shall be provided inside the support structure and access tube. Total number and location of lights shall be as shown on the drawings. All wiring shall be in conduit. The conduit and wiring shall terminate with a junction box in the base of the support structure. Duplex GFI outlets shall be installed inside and outside as shown on the drawings.
2. In accordance with the Owner's FAA Determination Letter, marking and lighting are not necessary for aviation safety.

J. Antenna Rail and Cable Details

Provide all labor, materials, equipment and installation to make all necessary provisions for future antenna cable(s) routing. This work includes but is not limited to the following:

1. Three (3) 4-inch diameter pipe penetrations (with caps) in the support structure, located approximately two (2) feet above the tank floor.
2. Three (3) 4-inch diameter pipe penetrations in the condensate ceiling and platform.
3. Three (3) 4-inch diameter pipe penetrations (with caps) in the access tube cover.
4. Suitable brackets welded to the inside of the support structure and access tube to safely secure future antenna cables. Bracket spacing shall not exceed 8 feet.
5. For safety considerations during antenna installation, and for maintenance, a 42-inch high handrail shall be furnished with a top rail, intermediate rail, and toe board. The handrail shall be approximately 20-feet in diameter and centered on the tank access tube roof hatch. The handrail shall also provide an attachment point for the antenna(s).

K. Gravel Floor

The interior of the support structure base shall be furnished with a six (6) inch crushed stone or gravel floor. All excavated areas under the crushed stone or gravel floor shall be backfilled with suitable material and compacted to 90 percent maximum dry density.

L. Tank Mixing System

Furnish and erect a passive tank mixing system. The storage tank mixing system shall accomplish thorough mixing of the tank contents. The mixing

system shall function without the use of mechanical pumps or blowers or other equipment with motor drives or other continuously moving parts. The energy needed to mix the storage tank shall be provided solely by the flow of water through the inlet pipe. The mixing system shall distribute the fresh, newly-disinfected incoming water throughout the tank, reducing microbial growth and related tastes and odor.

M. Galvanic Corrosion Protection
Dissimilar metals inside the tank and below the TCL shall be electrically isolated from carbon steel tank components to which they attach. Painting of dissimilar metals does not eliminate the requirement for isolation.

N. Identification Plate
A tank identification plate shall be mounted near the personnel door. The identification plate shall be corrosion resistant and contain the following information:
1. Tank Contractor
2. Contractor's project or file number
3. Tank capacity
4. Height to high water level
5. Date erected

PART 3 - EXECUTION

3.01 INSPECTION

Inspection and testing shall be in accordance with AWWA D100. Shop subassembly welds that require radiographic inspection shall be inspected in the shop or field. If radiographic inspection is performed in the shop, radiographs shall be provided to the Engineer prior to their delivery to the jobsite.

3.02 CONCRETE FOUNDATION

A. An inlet/outlet pipe extending a minimum of 3 feet outside the foundation wall shall be included as part of the foundation.

B. All concrete work shall comply with ACI 301.

C. Foundation piling, if required, shall conform to the design and detailing requirements of Internation Building Code (IBC) Section 1810, including the supplemental design and detailing requirements based on the assigned Seismic Design Category (SDC).

3.03 WELDING

A. All welding shall comply with AWWA D100.

B. All welding procedures, welders, and welding operators shall be qualified in accordance with ASME Section IX for the processes and positions utilized.

C. To minimize corrosion and rust staining on the underside of the roof, the roof plate laps and rafter-to-roof plate seams shall be seal welded. The minimum thickness for seal welding shall be 0.25-inch.

D. The edges or surfaces of the pieces to be joined by welding shall be prepared by flame cutting, plasma arc cutting, arc gouging, machining, shearing, grinding or chipping and shall be cleaned or detrimental oil, grease, scale, and rust. The edges of the pieces may have a protective coating applied to them which need not be removed before they are welded unless specifically prohibited by the welding procedures.

E. Field and ship welding may be done by the shielded metal arc welding process, the gas metal arc welding process, the flux core arc welding process and the submerged arc welding process.

F. Plates and component members of the tank shall be assembled and welded following erection methods which result in a minimum or distortion from weld shrinkage. Surfaces to be welded shall be free from loose scale, slag, heavy rust, grease, paint and other foreign material.

G. Full penetration butt-welded joints shall be inspected using the radiographic examination method. The number and location of the radiographs and the acceptance criteria shall be as required by AWWA D100. Inspection by sectional segments is not allowed.

H. In order to assist in the maximization of the paint's lifecycle, all welds on the tank exterior shall be ground smooth and blended to a NACE-D profile. All welds on the tank interior shall be ground smooth and blended to a NACE-D profile. Welds on the interior dry support column can remain in an as-welded condition but must have a profile adequate for the specified paint system. Engineer/Owner reserves the right to provide third-party inspection to ensure compliance to this requirement.

3.04 COATING AND FINISHES

A. Comply with Section 33 16 19.01 – Coatings Systems for Elevated Water Utility Storage Tanks.

3.05 LETTERING AND LOGO

A. Lettering and Logo design, size and location shall be indicated on the Drawings.

B. Lettering/Logo shall be applied using one coat of high gloss polyurethane.

C. Lettering/Logo color shall be selected by the Owner.

PART 4 – TESTING AND STERILIZATION

1. Sufficient cure, per the coatings manufacturer's recommendations, of the final coat on the interior wet surface shall be allowed before the elevated tank is sterilized and filled with water.
2. The tank shall be sterilized per the requirements of AWWA C652. Chlorination Method No. 2 or 3.
3. The Owner, free of charge to the Contractor, shall furnish and dispose of sufficient water for testing and sterilization. The water shall be at proper pressure to fill the tank to the maximum working level. Any leaks in the tank that are disclosed by this test shall be repaired by gouging out defective areas and re-welding. No repair work shall be done on any joint unless the water in the tank is at least 2 feet below the joint being repaired. Any paint damaged by repairs shall be properly restored.
4. Upon completion of the sterilization procedure, the Tank Contractor shall arrange and bear the cost of any bacteriological testing of water samples from the tank that may be required. The tank shall not be placed in service until acceptable test results are obtained.

PART 5 - GUARANTEE

5.01 DESCRIPTION OF WORK

The Contactor shall guarantee its work for a period of one year from the date of substantial completion. Substantial completion is defined as the date when the tank is placed, or available to be placed, into service. The Contractor will repair any defects of which they are notified during that period which may appear because of faulty design, workmanship or materials furnished under the specifications. Defects caused by damaging service conditions such as

electrolytic, chemical, abrasive or other damaging service conditions are not covered by this guarantee

END OF SECTION

SECTION 33 16 19.01
COATING SYSTEMS FOR ELEVATED WATER UTILITY STORAGE TANK

PART 1 – GENERAL

1.01 SECTION INCLUDES

A. Coating systems for steel water storage tanks.

1.02 RELATED SECTIONS

A. Section 33 16 19 – Elevated Water Utility Storage Tanks.

1.3 REFERENCES

A. ANSI/NSF 61 – Drinking Water System Components – Health Effects.

B. ASTM D 16 – Terminology Relating to Paint, Varnish, Lacquer, and Related Products.

C. AWWA C 652 – Disinfection of Water-Storage Facilities.

D. AWWA D 102 – Painting Steel Water Storage Tanks.

E. SSPC-SP 6/NACE 3 – Commercial Blast Cleaning.

F. SSPC-SP 10/NACE 2 – Near-White Metal Blast Cleaning.

1.4 DEFINITIONS

A. Definitions of Painting Terms: ASTM D 16, unless otherwise specified.

B. Dry Film Thickness (DFT): Thickness of coat of paint in fully cured state measured in mils (1/1000 inch).

1.5 SUBMITTALS

A. Product Data: Submit manufacturer's product data for each coating, including generic description, complete technical data, surface preparation, and application instructions.

B. Color Samples: Submit manufacturer's color samples showing full range of standard colors.

C. Manufacturer's Quality Assurance: Submit manufacturer's certification that coatings comply with specified requirements and are suitable for intended application.

D. Applicator's Quality Assurance: Submit list of a minimum of 5 completed projects of similar size and complexity to this work. Include for each project:

1. Project Name and location.
2. Name of owner.
3. Name of contractor.
4. Name of engineer.
5. Name of coating manufacturer.
6. Approximate area of coating applied.
7. Date of completion.

E. Warranty: Submit manufacturer's standard warranty.

1.6 QUALITY ASSURANCE

A. Manufacturer's Qualifications:

1. Specialize in manufacture of ANSI/NSF 61 coatings with a minimum of 10 years successful interior experience.
2. Single Source Responsibility: Coatings and coating application accessories shall be products of a single manufacturer.

B. Applicator's Qualifications:

1. Experienced in application of specified coatings for a minimum of 5 years on projects of similar size and complexity to this work.
2. Applicator's Personnel: Employ persons trained for application of coatings.

C. Preapplication Meeting: Convene a preapplication meeting before start of application of coating systems. Require attendance of parties directly affecting work of this section, including Contractor, Engineer, applicator, and manufacturer's representative. Review the following:

1. Environmental requirements.
2. Protection of surfaces not scheduled to be coated.

3. Surface preparation.
4. Application.
5. Disinfection.
6. Repair.
7. Field quality control.
8. Cleaning.
9. Protection of coatings systems.
10. One-year inspection.
11. Coordination with other work.

1.7 DELIVERY, STORAGE, AND HANDLING

A. Delivery: Deliver materials to site in manufacturer's original, unopened containers and packaging, with labels clearly identifying.

1. Coating or material name.
2. Manufacturer.
3. Color name and number.
4. Batch or lot number.
5. Date of manufacture.
6. Mixing and thinning instructions.

B. Storage:

1. Store materials in a clean dry area and within temperature range in accordance with manufacturer's instructions.
2. Keep containers sealed until ready for use.
3. Do not use materials beyond manufacturer's shelf-life limits.

C. Handling: Protect materials during handling and application to prevent damage or contamination.

1.8 ENVIRONMENTAL REQUIREMENTS

A. Weather:

1. Air and Surface Temperatures: Prepare surfaces and apply and cure coatings within air and surface temperature range in accordance with manufacturer's instructions.
2. Surface Temperature: Minimum of 5 degrees F (3 degrees C) above dew point and rising.
3. Relative Humidity: Prepare surfaces and apply and cure coatings within relative humidity range in accordance with manufacturer's instructions.

4. Precipitation: Do not prepare surfaces or apply coatings in rain, snow, fog or mist.

B. Dust and Containments:
   1. Schedule coating work to avoid excessive dust and airborne contaminants.
   2. Protect work areas from excessive dust and airborne contaminants during coating application and curing.

PART 2.0 – PRODUCTS

2.1 MANUFACTURER

A. Induron or approved equal.

2.2 COATING SYSTEMS FOR STEEL

A. Exterior:

1. System Type: Epoxy/Urethane/Fluorourethane.
2. Surface Preparation: SSPC-SP 6/NACE 3.
3. Primer: Ceramaprime. DFT 2.0 – 3.0 mils.
4. Stripe Coat: Ceramaprime.
5. Intermediate Coat: Indurethane 6600. DFT 2.0 to 3.0 mils.
6. Finish Coat: Permagloss. DFT 2.0 to 3.0 mils.
7. Total DFT: 6.0 to 9.0 mils.
8. Finish Color: To be selected by Owner from manufacturer's standard colors.

B. Interior:
   1. System Type: Epoxy/epoxy.
   2. AWWA D 102 Paint System:
   3. ANSI/NSF 600 Certified: For use inside potable water storage tanks.
   4. Surface Preparation : SSPC-SP 10/NACE 2.
   5. Primer: Ceramaprime. DFT 2.0 to 3.0 mils.
   6. Stripe Coat: Ceramaprime.
   7. Finish Coat: Ceramapure TL 70 DFT 10.0 to 15.0 mils.
   8. Total DFT: 12.0 to 18.0 mils.

C. Interior Alternate 1.
   1. System Type: 100% Solids Ceramic Epoxy.
   2. AWWA D 102 Paint System:
   3. ANSI/NSF 600 Certified: For use inside potable water storage tanks.
   4. Surface Preparation: SSPC-SP 10/NACE 2.

5. Primer: Ceramaprime. DFT 2.0 to 3.0 mils.
6. Stripe Coat: Cermaprime.
7. Finish Coat: Perma-Clean 100. DFT 25.0 to 30.0 mils.
8. Total DFT: 27.0 to 33.0 mils.

D. Interior Alternate 2
   a. System Type: Epoxy/epoxy.
   b. AWWA D 102 Paint System:
   c. ANSI/NSF 600 Certified: For use inside potable water storage tanks.
   d. Surface Preparation : SSPC-SP 10/NACE 2.
   e. Primer: Ceramaprime. DFT 2.0 to 3.0 mils.
   f. Stripe Coat: Ceramaprime.
   g. Intermediate Coat: PE-70. DFT 4.0 to 6.0 mils
   h. Finish Coat: PE-70. DFT 4.0 to 6.0 mils.
   i. Total DFT: 10.0 to 15.0 mils.

PART 3.0 – EXECUTION

3.1 EXAMINATION

A. Examine areas and conditions under which coating systems are to be applied. Notify Engineer of areas or conditions not acceptable. Do not begin surface preparation or application until unacceptable areas or conditions have been corrected.

3.2 PROTECTION OF SURFACES NOT SCHEDULED TO BE COATED

A. Protect surrounding areas and surfaces not scheduled to be coated from damage during surface preparation and application of coatings.

B. Immediately remove coatings that fall on surrounding areas and surfaces not scheduled to be coated.

3.3 SURFACE PREPERATION OF STEEL

A. Prepare steel surfaces in accordance with manufacturer's instructions.

B. Fabrication Defects:

1. Correct steel and fabrication defects revealed by surface preparation.
2. Remove weld spatter and slag.

3. Smooth weld undercuts and recesses.
4. Grind down porous welds to pinhole-free metal.
5. Remove weld flux from surface.

C. Ensure surfaces are dry.

D. Interior, Wet Substrate: Remove visible oil, grease, dirt, dust, mill scale, rust, paint, oxides, corrosion products, and other foreign matter in accordance with SSPC-SP 10/NACE 2.

E. Exterior: Remove visible oil, grease, dirt, dust, mill scale, rust, paint, oxides, corrosion products, and other foreign matter in accordance with SSPC-SP 6/NACE 3.

F. Abrasive Blast-Cleaned Surfaces: Coat abrasive blast-cleaned surfaces with primer before visible rust forms on surface, or any other conditions necessary for compliance with the relevant surface preparation standard are violated.

G. Shop Primer: Prepare shop primer to receive field coat in accordance with manufacturer's instructions.

3.4 APPLICATION

A. Apply coatings in accordance with manufacturer's instructions.
B. Mix and thin coatings, including multi-component materials, in accordance with manufacturer's instructions.

C. Keep containers closed when not in use to avoid contamination.

D. Do not use mixed coatings beyond pot life limits.

E. Use application equipment, tools, pressure settings, and techniques in accordance with manufacturer's instructions.

F. Uniformly apply coatings at spreading rate required to achieve specified DFT. Thickness of coatings and paint shall be checked with a non-destructive, magnetic-type thickness gauge, as per SSPC-PA 2 "Measurement of Dry Film Thickness with Magnetic Gages". References in PA 2 which allow 80% of the minimum thickness specified are not acceptable. Use an instrument such as a Tooke Gauge if a destructive test is deemed necessary by the Engineer.

G. Apply coatings to be free of film characteristics or defects that would adversely affect performance or appearance of coating systems.

H. Stripe paint with brush critical locations on steel such as welds, corners, and edges using specified primer.

3.5 DISINFECTION

A. Disinfection of Water Contact Surfaces and Filling of Water Storage Tanks:

1. Do not disinfect water contact surfaces or fill water storage tanks until application of coating systems is complete, coatings have fully cured, and field quality control inspection is complete.
2. Allow number of days in accordance with manufacturer's instructions and as directed by Engineer for full cure of coating systems on water contact surfaces before flushing, disinfecting, or filling with water.
3. Disinfection: AWWA C 652 Method 3.

3.6 REPAIR

A. Damaged Materials: Repair or replace damaged materials and surfaces not scheduled to be coated.

B. Damaged Coatings: Touch-up or repair damaged coatings. Touch-up of minor damage shall be acceptable where result is not visibly different from adjacent surfaces. Recoat entire surface where touch-up result is visibly different, either in sheen, texture, or color.

C. Coating Defects: Repair in accordance with manufacturer's instructions coatings that exhibit film characteristics or defects that would adversely affect performance of appearance of coating systems.

3.7 FIELD QUALITY CONTROL

A. Inspector's Services:

1. Verify coatings and other materials are as specified.
2. Verify surface preparation and application are as specified.
3. Verify DFT of each coat and total DFT of each coating systems are as specified using wet film and dry film gauges.
4. Coating Defects: Check coatings for film characteristics or defects that would adversely affect performance or appearance of coating systems.

a. Check for holidays on interior steel immersion surfaces using holiday detector.

B. Manufacturer's Field Services: Manufacturer's representative shall provide technical assistance and guidance to surface preparation and application of coating systems.

3.8 CLEANING

A. Remove temporary coverings and protection of surrounding areas and surfaces.

3.9 PROTECTION OF COATING SYSTEMS

A. Protect surfaces of coating systems from damage during construction.

3.10 ONE-YEAR INSPECTION

A. Owner will set date for one-year inspection of coating systems.

B. Inspection shall be attended by Owner, Contractor, Engineer, and manufacturer's representative.

C. Repair deficiencies in coating systems as determined by Engineer in accordance with manufacturer's instructions.

END OF SECTION

DIVISION 6
TECHNICAL SPECIFICATIONS

APPENDIX 1
GEOTECHNICAL REPORT

Madrid CPWG

Geotechnical Engineering Report

Wauchula Water Storage Tank
Hardee County, Florida



Prepared for:

Chastain Skillman

Prepared by:

MADRID ENGINEERING GROUP, INC., dba MADRID CPWG
2030 State Road 60 East
Bartow, FL 33830
863-533-9007

Project No. 15217
September 2023

MADRID CPWG
2030 State Road 60 E
Bartow FL 33830-4268
Ph: (863) 533-9007
Fax: (863) 533-8997

September 20, 2023

Mr. Doug Jones
Chastain Skillman
205 East Orange Street, Suite 110
Lakeland, FL 33801

Re: Geotechnical Engineering Report
Wauchula Water Storage Tank
Hardee County, Florida
Madrid Project No. 15217

Dear Mr. Jones,

Madrid Engineering Group, Inc., dba Madrid CPWG, (Madrid) is pleased to submit this Geotechnical Engineering Report summarizing the results of our geotechnical subsurface exploration and engineering evaluation services completed for the above referenced project. The work was completed in general accordance with the authorized scope of work in our cost estimate proposal dated June 28, 2023. This report briefly discusses our understanding of the project at the time of the subsurface exploration, describes the geotechnical consulting services provided by Madrid, and presents our findings, conclusions, and recommendations.

We appreciate the opportunity to be of service to you on this project and look forward to working with you on future projects. If you have any questions, please do not hesitate to contact us.

Sincerely,
Madrid Engineering Group, Inc. (EB 6509)

ANDRE KNIAZEFF LICENSE No 81315 STATE OF FLORIDA PROFESSIONAL ENGINEER

Andre Kniazeff, P.E.
Geotechnical Engineering Division Leader
Florida P.E. No. 81315

John Delashaw, P.E.
Principal Engineer
Florida P.E. No. 48154

Attachment: Geotechnical Engineering Report

EXECUTIVE SUMMARY

Project Description

Project Features Relative to This Report	
Proposed Development	The proposed development will consist of the construction of a new elevated water storage tank near Altman Road in Wauchula, Florida. We understand the 34-foot-diameter tank will contain approximately 150,000 gallons of water and will be supported on a shallow foundation with a ring wall footing diameter about the same as the tank diameter. The maximum allowable settlement was not provided to Madrid at the time of the issuance of this report. We anticipate that up to 2 feet of fill will be added within the proposed structure footprint.

Field Activities

- One (1) SPT boring (B-1) to a depth of 60 feet below grade surface (bgs) at the center of the proposed tank structure and three (3) Standard Penetration Test (SPT) borings (B-2, B-3, and B-4), each to a depth of 40 feet bgs, along the tank's perimeter.

Summary of Findings

The subsurface soils encountered in the test borings generally consisted of mixed strata of very loose to very dense sands to clayey sands (USCS classifications SP, SP-SM, SP-SC, SM, and SC) from the existing ground surface elevation to depths of 37 feet to 60 feet bgs. We note that very stiff to hard highly plastic silt (MH) was found in all borings at varying depths of about 37 feet to 47 feet bgs.

Groundwater was encountered in the test borings at a depth of about 3 feet at the time of our subsurface exploration. Based on our review of the subsurface conditions encountered in the test borings, it appears that the normal permanent seasonal high groundwater (SHGW) table will occur within approximately 1½ feet above the groundwater levels measured at each boring location during our field exploration.

After the recommended site/subgrade preparation and fill placement, we recommend that the proposed tank structure be supported on a conventional shallow foundation system bearing upon compacted native soils and/or compacted structural fill. The tank foundation may be designed for a net allowable soil bearing pressure of **2,000 pounds per square foot (psf)**. We note that sufficient fill should be added to the site to provide a minimum separation of at least 2 feet between the SHGW table and the bottom-of-footing elevation for the lowest footings planned for the proposed tank structure.

TABLE OF CONTENTS

1.0 INTRODUCTION AND PROJECT DESCRIPTION 2
1.1 General 2
1.2 Site Location and Description 2
1.3 Soil Survey Review 3
2.0 FIELD EXPLORATION 3
2.1 Standard Penetration Test Borings 3
3.0 SUBSURFACE CONDITIONS AND LABORATORY TESTING 4
3.1 Subsurface Soil Conditions 4
3.2 Groundwater Conditions and Seasonal High Ground Water 4
3.3 Laboratory Testing 4
4.0 EVALUATION AND GENERAL RECOMMENDATIONS 5
4.1 General Considerations 5
4.2 Site Preparation 6
4.3 Foundation Recommendations 6
4.4 Modulus of Subgrade Reaction 8
4.6 Quality Assurance 9
5.0 LIMITATIONS 9

FIGURES

Figure 1 Site Location Map
Figure 2 USGS Topographic Map
Figure 3 NRCS/USDA Soil Map
Figures 4 Boring Location Plan

APPENDICES

Appendix A Soil Boring Logs
Appendix B Laboratory Test Results

1.0 INTRODUCTION AND PROJECT DESCRIPTION

1.1 General

Madrid Engineering Group (Madrid), Inc., dba Madrid CPWG is pleased to submit this report summarizing the results from our subsurface soil exploration and geotechnical engineering evaluation for the proposed water tank structure in Wauchula, Hardee County, Florida.

Madrid understands the following regarding the proposed development:

Table 1.1

Project Features Relative to This Report	
Proposed Development	The proposed development will consist of the construction of a new elevated water storage tank near Altman Road in Wauchula, Florida. We understand the 34-foot-diameter tank will contain approximately 150,000 gallons of water and will be supported on a shallow foundation with a ring wall footing diameter about the same as the tank diameter. The maximum allowable settlement was not provided to Madrid at the time of the issuance of this report. We anticipate that up to 2 feet of fill will be added within the proposed structure footprint.

The purpose of this exploration was to collect subsurface soil and groundwater information to provide an evaluation of the existing subsurface conditions at the boring locations and to identify constraints or limitations (to the extent possible) that the subsurface conditions may impose on the planned construction. A marked-up site plan with boring locations was provided to Madrid and this was used to plan our field exploration.

The scope of work for this investigation included review of existing geological data, a field exploration and laboratory testing program, evaluation of soil testing results, evaluating site suitability, and providing general geotechnical recommendations for the proposed development.

1.2 Site Location and Description

The subject site is located near Altman Road in Wauchula, Hardee County, Florida as shown on **Figure 1**, **Site Location Map**.

The topographic survey map published by the United States Geological Survey (USGS) was reviewed. Based on this review, the natural ground surface elevation at the project

site is approximately +115 feet National American Datum (NAD, 1983). GIS topographic information is provided on **Figure 2, USGS Topographic Map.**

1.3 Soil Survey Review

The Natural Resources Conservation Services (NRCS) Soil Survey reports provide a general description of the typical shallow soil strata (about 6 feet) encountered within each particular soil mapping unit and reports typical depth to seasonal high-water levels. The NRCS defines seasonal high water as "a zone of saturation at the highest average depth during the wettest season that is at least six inches thick, persists for more than a few weeks, and is within six feet of the soil surface." The Soil Survey for Polk County indicates the shallow soils at the site are comprised of **Myakka fine sand** (map unit 16) as shown on **Figure 3, NRCS/USDA Soils Map.**

Table 1.3 below summarizes the soil survey review.

Table 1.3 Soil survey review summary

Map Unit Name	Slope (%)	Depth (inches)	Soil Description	USDA - Seasonal High Groundwater Table Depth (inches)
16 – Myakka fine sand	0 to 2	0 - 80	Fine sand	6 - 18

2.0 FIELD EXPLORATION

2.1 Standard Penetration Test Borings

Madrid explored subsurface conditions at the site by drilling four (4) Standard Penetration Test (SPT) borings with truck mounted drilling equipment to depths ranging from 40 feet to 60 feet bgs within the proposed structure footprint. A GPS hand unit (typical accuracy of +/- 10 feet) was utilized in the field for location purposes. Boring locations are shown at the bottom of the boring logs in **Appendix A**. The boring locations are plotted on **Figure 4, Boring Location Plan**, and should be considered approximate.

Disturbed samples from the SPT borings were obtained using a split-spoon sampler in general accordance with ASTM Specification D 1586, using a 1.4-inch I.D. split-spoon sampler driven with a 140-pound slide hammer (auto hammer) falling a distance of 30 inches. An engineering technician familiar with soil classification and field evaluations

logged the borings in the field and placed samples in sealed containers and returned them to Madrid's laboratory for further classification. Upon completion, the boreholes were backfilled in general accordance with industry standards. The boring logs have been included with this report in **Appendix A**. Soil samples will be retained for a period of 3 months from the date of this report unless otherwise notified.

3.0 SUBSURFACE CONDITIONS AND LABORATORY TESTING

3.1 Subsurface Soil Conditions

The subsurface soils encountered in the test borings generally consisted of mixed strata of very loose to very dense sands to clayey sands (USCS classifications SP, SP-SM, SP-SC, SM, and SC) from the existing ground surface elevation to depths of 37 feet to 60 feet bgs. We note that very stiff to hard highly plastic silt (MH) was found in all borings at varying depths of about 37 feet to 47 feet bgs.

No losses of drilling fluid circulation were reported. The general soil profiles described above and as presented on the boring logs are based on our interpretation of subsurface conditions encountered at the boring locations only. Boundaries between soil layers are approximate and for illustration purposes only. Variations in soil conditions in both horizontal and vertical directions different from those presented are likely to exist between boring locations.

3.2 Groundwater Conditions and Seasonal High Ground Water

Groundwater was encountered in the test borings at a depth of about 3 feet bgs at the time of our subsurface exploration. Based on our review of the subsurface conditions encountered in the test borings, it appears that the normal permanent seasonal high groundwater (SHGW) table will occur within approximately 1½ feet above the groundwater levels measured at each boring location during our field exploration.

In general, the estimated normal seasonal high groundwater level is not intended to define a limit or ensure that future seasonal fluctuations in groundwater levels will not exceed the estimated levels. Groundwater conditions will vary with environmental changes and seasonal conditions, such as, the frequency and magnitude of rainfall patterns, as well as man-made influences, such as swales, drainage ponds, underdrains, stormwater collection systems and areas of covered soil (buildings, paved parking lots, sidewalks, etc.). We recommend that the Contractor determine the actual groundwater level at the site at the time of the construction activities.

3.3 Laboratory Testing

Laboratory tests for natural water content (ASTM D2216), percent passing the No. 200 sieve (ASTM D1140), organic content (FM 1-T267), and Atterberg limits (AASHTO

T89/90) were performed on selected samples retrieved during the field exploration from the soil borings to verify the visual and tactile soil classifications. **Table 3.3a** below shows a summary of some laboratory tests. In addition, laboratory test reports are included in **Appendix B**.

Table 3.3a Summary of the laboratory tests

Lab Summary	
<#200 Sieve	7.8% - 95.9%
% Moisture	20.9% - 114%
Organic Content	1.6%
Liquid Limit	162 - 206
Plastic Limit	64 - 76

4.0 EVALUATION AND GENERAL RECOMMENDATIONS

4.1 General Considerations

After the recommended site/subgrade preparation and fill placement, we recommend that the proposed tank structure be supported on a conventional shallow foundation system bearing upon compacted native soils and/or compacted structural fill. The tank foundation may be designed for a net allowable soil bearing pressure of 2,000 pounds per square foot (psf). We note that sufficient fill should be added to the site to provide a minimum separation of at least 2 feet between the SHGW table and the bottom-of-footing elevation for the lowest footings planned for the proposed tank structure.

Site preparation activities should be conducted under the full-time supervision of a Madrid representative to observe that the subgrade has been prepared and earthwork operations completed in accordance with this report and project plans and specifications.

Once final design plans and specifications are available, it is strongly recommended that Madrid be retained to perform a general review as a means to check that the evaluations made in preparation of this report are correct and that earthwork and foundation recommendations are properly interpreted and incorporated into the project documents.

4.2 Site Preparation

The following are our recommendations for general site preparation. These recommendations should be used as a guideline for the project general specifications prepared by the design engineer.

1. Prior to proceeding with construction, all topsoil, surficial vegetation, trees, associated root systems and any other deleterious non-soil materials found to be present should be stripped from the proposed construction. Debris-laden materials (if encountered) should be excavated, transported, and disposed of off-site in accordance with appropriate solid waste rules and regulations.

2. Following site stripping, the exposed subgrade should be compacted to a minimum of 98% of the soil's Modified Proctor maximum dry density (ASTM D-1557). Areas where the recommended compaction cannot be achieved should be undercut to firm soils and replaced with compacted engineered fill.

3. Following the initial compaction, development areas may be brought up to finished subgrade levels using engineered fill. The on-site near surface sands to slightly silty sands (SP, SP-SM) can be used for structural fill provided they are free of organic or deleterious materials. Imported fill (engineered fill) should consist of fine sand with less than 12% passing the No. 200 sieve, free of significant rocks/rubble, organics, clay, debris, and other unsuitable material. Fill should be tested and approved prior to acquisition. Approved sand fill should be placed in loose lifts not exceeding 12 inches in thickness and should be compacted to a minimum density of 98% of the Modified Proctor maximum dry density. The top 12 inches of all footing excavations should be compacted to at least 98%. Density tests to confirm compaction should be performed in each fill lift before the next lift is placed.

A representative from our firm should be retained to provide full-time, on-site observation of earthwork and excavation activities. It is important that Madrid be retained to observe that the subsurface conditions are as we have discussed herein, and that fill placement is in accordance with our recommendations.

4.3 Foundation Recommendations

In accordance with our scope of work, an evaluation of shallow foundations was completed. The following discussions and recommendations are based on our understanding of the proposed development, the data obtained from the site exploration, experience with similar conditions, and generally accepted principles and practices of geotechnical engineering.

Bearing Capacity and Settlement Estimates

Our previous experience with elevated tank structures such as this suggests that a reinforced concrete ring-wall footing is the typical foundation of choice, which is consistent with information provided by the Client. Based on our evaluation, bearing capacity should not be a concern for this structure and settlement will be the controlling design factor. If an allowable bearing capacity/pressure is needed for design, the strip (ring) footing around the perimeter of the tank may be designed with an allowable bearing capacity of 2,000 psf with at least 24 inches minimum embedment below final grade.

Specific loading information was not provided but the estimated product (water) load results in a uniform bearing pressure of about 1,500 psf. A total design loading of about 2,000 psf applied uniformly across the entire tank/foundation diameter was used for our settlement analysis to account for additional loading from the structure and anticipated 2 feet of fill distributed across the footprint.

Settlement predictions under the assumed design load were based on equivalent soil parameters derived from empirical correlations with SPT blow count data, soil type, and laboratory test results. Settlement estimates were performed assuming subsurface conditions encountered in each of the borings including one center and three perimeter borings. Maximum ground surface settlements were recorded for each of the boring locations in a similar manner. Results of the settlement analyses are summarized in the table below.

SETTLEMENT ESTIMATE SUMMARY				
Boring No./ Location	**Total Settlement (in)**	**Settlement in Clayey Soils (in)**	**Percent Immediate Settlement**	**Total Immediate Settlement (in)**
B-1 (center)	2.6	0.3	88%	2.3
B-2 (Edge)	1.6	0.4	75%	1.2
B-3 (Edge)	1.5	0.3	80%	1.2
B-4 (Edge)	1.7	0.4	76%	1.3
Max. Differential (center-to-edge):		1.1	Max. Differential (center-to-edge) due to Immediate Settlement:	1.1
Min. Differential (center-to-edge):		0.9	Max. Differential (center-to-edge) due to clayey soil Settlement:	0.0
Uniform Settlement of Entire Tank:		1.5	Max. Planar Tilt (edge-to-edge):	0.2

Notes:

1. Settlements presented herein are estimates only based on boring conditions encountered and a uniform floor load of 2,000 psf. Actual settlements measured in the field are likely to vary.

2. Immediate settlements are likely to occur during loading; some rebound during unloading may also be experienced.

As shown in the table above, we estimate total settlement (greatest settlement) of about 2.6 inches at SPT-1 near the center of the tank, and ranges from about 1.5 to 1.7 inches at the edges, depending on the edge boring used in the analysis. The analyses result in estimated maximum center-to-edge differential settlements on the order of about +/- 1 inch.

At this site, it is anticipated that about 75 to 80 percent of the total settlement will occur immediately, generally as the load is applied. The remaining clayey soil settlements are expected to occur more slowly in the (generally) clayey sands and silts found at depth. Based on our experience with similar clayey soils in central Florida, most of the long-term settlement should occur in a period of a few months after first loading.

It should be noted that given the potential variability of subsurface conditions, limited field and laboratory data, and limitations of the software model, settlement predictions developed by Madrid should be considered approximate. Actual settlements observed during loading will depend on variations in subsurface conditions across the tank footprint, final tank design and construction details, and loading rate.

Lateral loads may be resisted by the friction between the foundation bottom and the supporting subgrade. An allowable friction coefficient of 0.5 between the foundation and supporting subgrade may be used.

Overturning moments and uplift loading can be resisted by the weight of the foundation, weight of the structure, and any soil overlying the ringwall. A soil unit weight of 120 pounds per cubic foot (pcf) may be assumed for on-site soils or select fill that are placed above the ringwall and compacted as recommended in this report.

4.4 Modulus of Subgrade Reaction

Reinforced concrete ground floor slabs are typically designed utilizing the modulus of subgrade reaction (k). For the design of slabs subject to sustained loads of up to 150 psf, a long-term modulus of subgrade reaction of 100 pounds per cubic inch (pci) is recommended. For short-term transient loads such as traffic or wheel loads, slabs, or pavements may be designed considering a subgrade reaction modulus of 150 pci. These values are based on estimated storage loadings, current grade levels, flexible floor slabs, and implementation of the site preparation recommendations provided

herein. If higher modulus values are required, Madrid should be contacted for further evaluations.

4.6 Quality Assurance

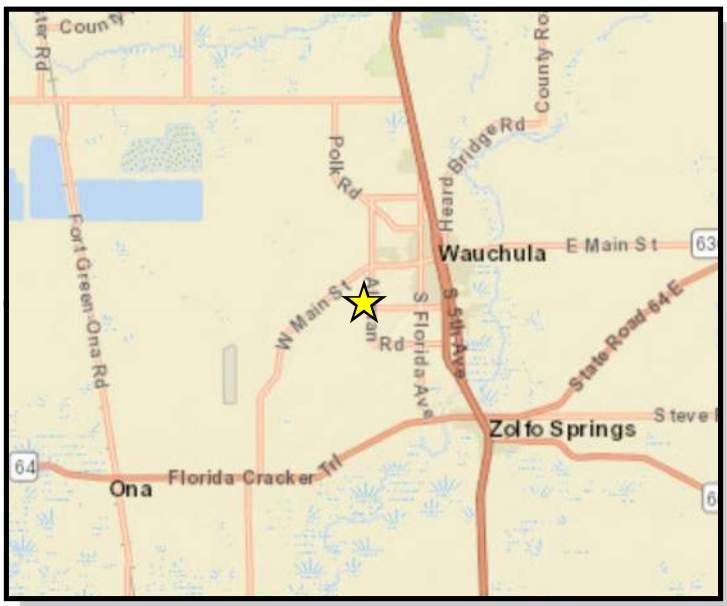
We recommend implementing a comprehensive quality assurance program to verify that all site preparation and foundation construction is conducted in accordance with the recommendations herein and the appropriate plans and specifications. It is strongly recommended that Madrid be retained to perform materials testing and inspection services to observe that the subsurface conditions are as we have discussed herein and that foundation construction, ground densification and fill placement is in accordance with our recommendations. Madrid cannot accept responsibility for any conditions which deviate from those described in this report if not engaged to provide construction observation and testing for this project. An on-site engineering technician should monitor all site preparation to verify that all deleterious materials have been removed and should observe earthwork activities to verify that the foundation and pavement subgrade soils conform to the recommendations herein. In-situ density tests should be conducted during filling activities and below all footings, pavement areas and structure bottoms to verify that the required densities have been achieved. In-situ density values should be compared to laboratory Proctor moisture-density results for in-situ and fill soils to confirm they meet minimum compaction requirements.

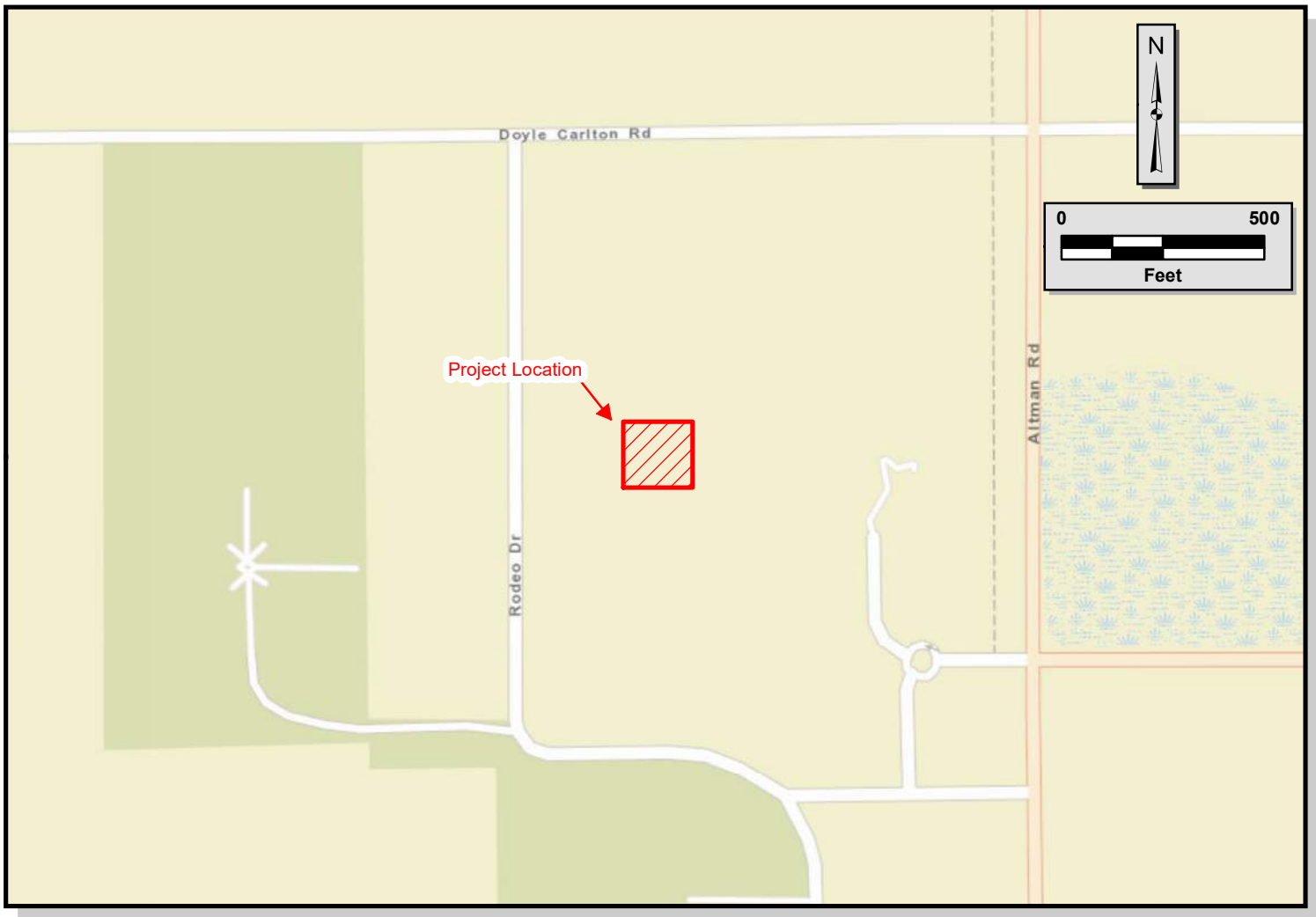
5.0 LIMITATIONS

This report has been prepared for Chastain Skillman for the proposed development in Wauchula, Hardee County, Florida. The information in this report is intended for the sole use of the addressees and their assigns/agents and may not be relied upon or used by any third party without expressed written consent. Evaluations and recommendations presented herein are based on Madrid's interpretation and understanding of site conditions and information provided by the Client. This report is not a specification document and is not intended for use as a part of the specifications. Varying degrees of non-uniformity of the horizontal and vertical soil conditions may exist at the site. This study is not intended to be an evaluation of sinkhole risk. This study does not include an evaluation of the environmental (ecological or hazardous/toxic material related) condition of the site and subsurface. The study reported herein has been conducted in accordance with the generally accepted standards, principles, and practices in the geotechnical engineering profession. No other warranty, expressed or implied, is made. Madrid is not responsible for the independent conclusions, opinions, and/or recommendations made by others based on the field investigation and laboratory

testing data presented in this report. Soil samples will be stored at our Bartow Office for a period of 3 months from the date of this report unless other arrangements are made.







Sources: GIS Information (ESRI)

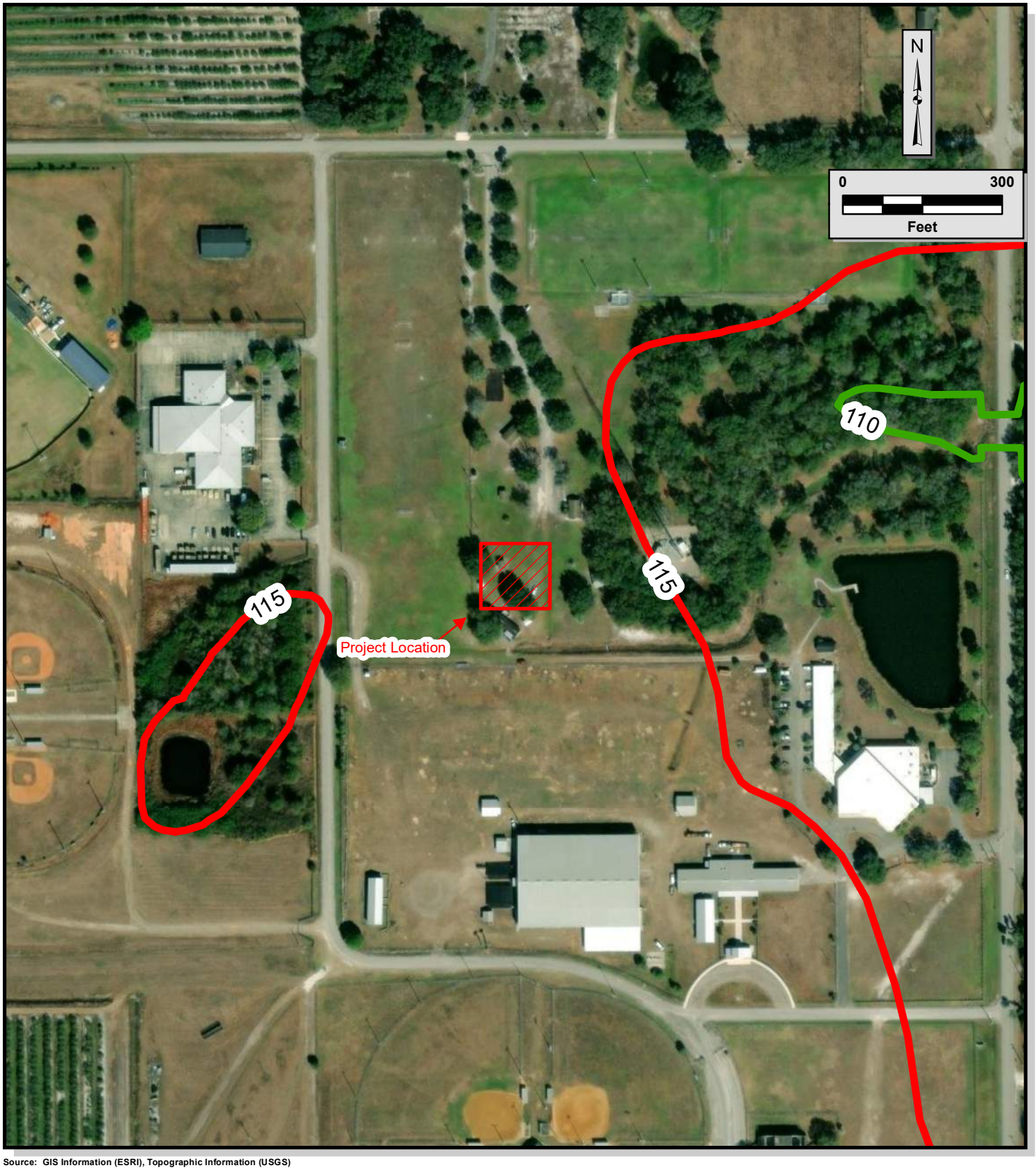
MADRID CPWG
2030 State Road 60 East
Bartow, Florida 33830
863 533-9007 Fax: 863 533-8997
EB-0006509

Chastain Skillman

FIGURE 1
Site Location Map
Wauchula Water Storage Tank
Wauchula, Florida

Project Number:
15217

Notes:	Drawn By: CJ	Checked By: AK



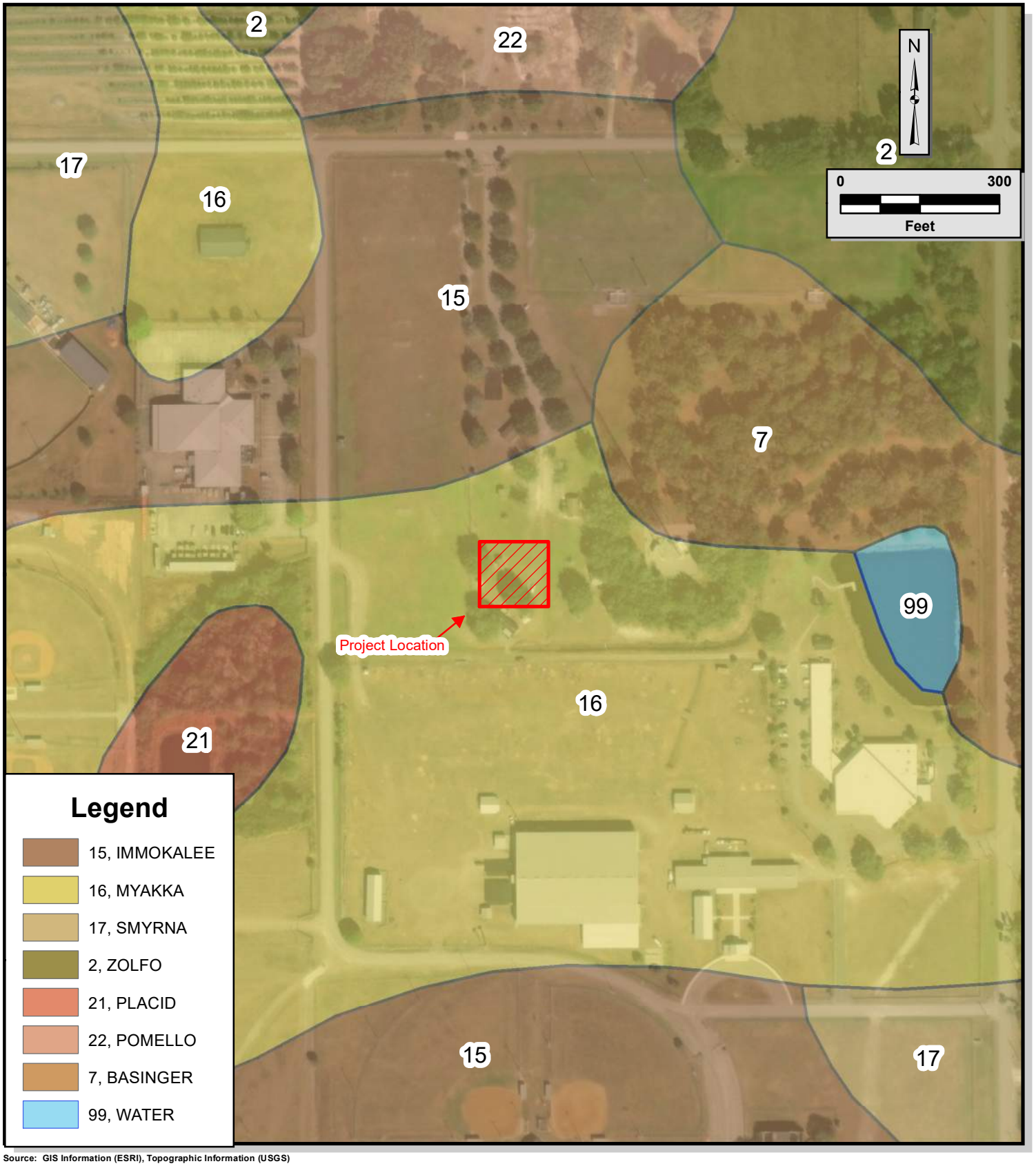
Source: GIS Information (ESRI), Topographic Information (USGS)

MADRID CPWG
2030 State Road 60 East
Bartow, Florida 33830
863 533-9007 Fax: 863 533-8997
EB-0006509

Chastain Skillman

FIGURE 2
USGS Topographic Map
Wauchula Water Storage Tank
Wauchula, Florida

Drawn By: CJ	Checked By: AK	Project Number: 15217



Source: GIS Information (ESRI), Topographic Information (USGS)

MADRID CPWG
2030 State Road 60 East
Bartow, Florida 33830
863 533-9007 Fax: 863 533-8997
EB-0006509

Chastain Skillman

FIGURE 3
NRCS/USDA Soils Map
Wauchula Water Storage Tank
Wauchula, Florida

Drawn By: CJ	Checked By: AK	Project Number: 15217



Aerial Data Source – 2021 Microsoft Corporation, 2021 CNES Distribution Airbus DS.

MADRID CPWG
2030 State Road 60 East
Bartow, Florida 33830
863 533-9007 Fax: 863 533-8997
EB-0006509

Chastain Skillman

FIGURE 4
Boring Location Plan
Wauchula Water Storage Tank
Wauchula, Florida

Project Number:
15217

Notes: Base map provided by Client.	Drawn By: CJ	Checked By: AK

Appendix A

BORING NO. B-1

DATE DRILLED 9/11/2023
PROJECT NUMBER 15217
PROJECT Wauchula Water Storage Tank

TEST BORING RECORD
Madrid CPWG

REMARKS: Water table encountered at 3' bgs. No loss of circulation occured. Auto hammer used.

Depth (ft)	DESCRIPTION	Blows	N-Value
0	Loose light gray slightly silty sand (SP-SM)	4-4-4-5	8
2	Medium dense very pale brown sand (SP)	5-7-5-6	12
4	Loose dark grayish brown slightly silty sand (SP-SM)	3-3-3-4	6
5	Medium dense dark grayish brown with trace organics <#200 = 11.1% organic content = 1.6% Grayish brown	4-5-5-7	10
		4-5-8-18	13
10	Very dense brown	14-22-27	49
15			
17	Medium dense very pale brown sand (SP)	6-9-9	18
20	Light gray	4-9-9	18
25			
27	Medium dense gray slightly clayey sand (SP-SC)	5-4-5	9
30	Very loose	3-1/12"	1
35			
37	Very stiff olive highly plastic silt (MH) <#200 = 95.4%	5-6-9	15
40		7-6-11	17
45			
47	Dense light gray clayey sand (SC)	8-11-22	33
50		3-16-10	26
55	Medium dense <#200 = 30.4%	5-6-7	13
60			

● STANDARD PENETRATION TEST
0 10 20 30 40 60 80 100

BORING LOCATION: 27.534109°,-81.836792°

MADRID CPWG STANDARD LOG 15217 BORING LOGS.GPJ NEW MEG TEMPLATE.GDT 9/18/23

BORING NO. B-2

DATE DRILLED 9/11/2023
PROJECT NUMBER 15217
PROJECT Wauchula Water Storage Tank

TEST BORING RECORD
Madrid CPWG

REMARKS: Water table encountered at 3' bgs. No loss of circulation occured. Auto hammer used.

Depth (ft)	DESCRIPTION	Blows	N-Value
0	Medium dense gray slightly silty sand (SP-SM)	3-4-5-7	9
	Grayish brown <#200 = 8.4%	5-7-7-7	14
5	Loose dark grayish brown	4-3-4-4	7
6	Medium dense dark grayish brown silty sand (SM)	4-4-5-6	9
10	Very dense <#200 = 15.2%	5-50/5	Refusal
12	Medium dense brown sand (SP)	3-6-5	11
15	Very pale brown		
20		8-12-11	23
22	Medium dense very pale brown slightly clayey sand (SP-SC)	5-6-6	12
25			
27	Medium dense gray clayey sand (SC)	3-5-6	11
30			
	Very pale brown with limestone	7-5-8	13
35			
37	Hard yellow highly plastic silt (MH) <#200 = 95.9% LL = 206 PL = 76 PI = 130	8-22-8	30
40			

● STANDARD PENETRATION TEST

0 10 20 30 40 60 80 100

BORING LOCATION: 27.534157°,-81.836792°

MADRID CPWG STANDARD LOG 15217 BORING LOGS.GPJ NEW MEG TEMPLATE.GDT 9/18/23

BORING NO. B-3

DATE DRILLED 9/11/2023
PROJECT NUMBER 15217
PROJECT Wauchula Water Storage Tank

TEST BORING RECORD
Madrid CPWG

REMARKS: Water table encountered at 3' bgs. No loss of circulation occured. Auto hammer used.

Depth (ft)	DESCRIPTION	Blows	N-Value
0	Loose light gray sand (SP)	2-3-4-4	7
2	Medium dense gray slightly silty sand (SP-SM) <#200 = 7.8%	4-6-6-6	12
	Dark grayish brown	4-7-7-8	14
6	Medium dense dark grayish brown silty sand (SM)	5-6-7-12	13
8	Very dense dark grayish brown slightly silty sand (SP-SM)	12-50/4	Refusal
12	Loose brown sand (SP)	2-3-4	7
	Dense very pale brown	8-11-14	25
22	Medium dense light gray slightly clayey sand (SP-SC)	7-7-7	14
	Olive gray	3-5-8	13
32	Loose olive gray clayey sand with limestone (SC)	2-3-4	7
37	Stiff olive highly plastic silt (MH) <#200 = 92.9%	2-3-7	10

Depth (ft): 0, 5, 10, 15, 20, 25, 30, 35, 40

Elev. (ft)

● STANDARD PENETRATION TEST
0 10 20 30 40 60 80 100

BORING LOCATION: 27.534085°,-81.836843°

MADRID CPWG STANDARD LOG 15217 BORING LOGS.GPJ NEW MEG TEMPLATE.GDT 9/18/23

BORING NO. B-4

DATE DRILLED 9/11/2023
PROJECT NUMBER 15217
PROJECT Wauchula Water Storage Tank

TEST BORING RECORD
Madrid CPWG

REMARKS: Water table encountered at 3' bgs. No loss of circulation occured. Auto hammer used.

Depth (ft)	DESCRIPTION	Blows	N-Value
0	Medium dense gray slightly silty sand (SP-SM)	2-5-6-8	11
	Dark brown	4-7-6-6	13
4	Medium dense dark grayish brown silty sand (SM) <#200 = 13.5%	4-3-6-6	9
5	Loose dark brown	1-1-2-11	3
	Very dense	7-50/5	Refusal
10			
12	Medium dense brown sand (SP)	8-7-6	13
15			
	Very pale brown	6-13-11	24
20			
		5-10-10	20
25			
27	Medium dense light grayish olive clayey sand (SC)	4-3-6	9
30			
	Very pale brown with limestone	11-7-11	18
35			
37	Stiff yellow highly plastic silt (MH) <#200 = 95.4% LL = 162 PL = 64 PI = 98	2-4-6	10
40			

● STANDARD PENETRATION TEST

0 10 20 30 40 60 80 100

BORING LOCATION: 27.534085°, 27.534085°

MADRID CPWG STANDARD LOG 15217 BORING LOGS.GPJ NEW MEG TEMPLATE.GDT 9/18/23

USCS SOIL CLASSIFICATION GUIDANCE & MEG SOIL DESCRIPTION INFORMATION

PARTICLE SIZES

Coarse Grained ← → *Fine Grained*

COBBLES	GRAVEL		SAND			SILT AND CLAY
	COARSE	FINE	COARSE	MEDIUM	FINE	

12"	3"	3/4"	4.76mm	2.0mm	0.42mm	0.074mm	*(Particle Diameter)*
			No. 4	*No. 10*	*No. 40*	*No. 200*	*(US Standard Sieve Size)*

Greater than 50% material (by weight) passing the US No. 200 Sieve = Fine Grained Soil (silt or clay)
Greater than 50% material (by weight) retained on the US No. 200 Sieve = Coarse Grained Soil (sand or gravel)

MODIFIERS

Based on Visual & Tactile Estimates (unless specific lab testing data is provided)

Estimates of Fines Content (Percent Passing US No. 200 Sieve)

FINES CONTENT	MODIFIERS	USCS SYMBOLS
0 to 5%	No Modifiers Used	SP, SW, GP, GW
5 to 12%	SLIGHTLY SILTY or SLIGHTLY CLAYEY	SP-SM, SP-SC
12 to 35%	SILTY or CLAYEY	SM, SC
35 to 45%	VERY SILTY or VERY CLAYEY	SM, SC
45 to 55%	Use Dual (e.g. CLAYEY SAND/SANDY CLAY)	SC/CL or SM/ML

Estimates of Organic Content (by weight)

ORGANIC CONTENT	MODIFIERS
1 to 3%	Trace Organics
3 to 10%	Slightly Organic
10 to 30%	Organic
> 30%	Highly Organic or Peat

Estimates of Other Materials
(e.g. shell, rock, phosphate, etc.)

OTHER MATERIALS	MODIFIERS
1 to 5%	Trace
5 to 12%	Some
> 12%	Abundant
> 15% sand or gravel	With sand or With gravel

CORRELATION OF "SPT N" WITH RELATIVE DENSITY AND CONSISTENCY

COARSE GRAINED SOILS		
SPT N		
Auto*	Safety	RELATIVE DENSITY
< 3	< 4	VERY LOOSE
3 - 8	4 - 10	LOOSE
9 - 24	11 - 30	MEDIUM DENSE
25 - 40	31 - 50	DENSE
41 +	51 +	VERY DENSE

*Based on 75% efficiency

FINE GRAINED SOILS		
SPT N		
Auto*	Safety	CONSISTENCY
< 1	< 2	VERY SOFT
1 - 3	2 - 4	SOFT
4 - 6	5 - 8	FIRM
7 - 12	9 - 15	STIFF
13 - 24	16 - 30	VERY STIFF
25 +	31 +	HARD

Madrid CPWG
PO Box 2506 Bartow, FL 33831 863-533-9007 Fax 863-533-8997

Appendix B

2030 State Road 60 East
Bartow, FL 33830
(863) 533-9007

ASTM D1140 MOISTURE / PERCENT < No. 200 SIEVE

Project Number: 15217 **Date Tested:** 9/13/2023
Project Name: Wauchula Water Storage Tank **Tested By:** BJN
Project Location: Wauchula, FL
Client: Chastain Skillman

Sample	Cont. Name	W_C+S_W (g)	W_C+S_D (g)	W_C (g)	Solids Content (%)	Moisture Content (%)	W_C+S_R (g)	<#200 (%)
B-1 6-8'	5	117.34	97.87	8.24	82.2%	21.7%	87.96	11.1%
B-1 38.5-40'	6	85.17	45.35	8.22	48.3%	107.2%	9.92	95.4%
B-1 58.5-60'	7	89.06	61.09	8.21	65.4%	52.9%	45.01	30.4%
B-2 2-4'	8	111.04	93.26	8.17	82.7%	20.9%	86.11	8.4%
B-2 8-10'	9	93.38	75.87	8.17	79.5%	25.9%	65.61	15.2%
B-2 38.5-40'	10	69.51	37.98	8.21	48.6%	105.9%	9.43	95.9%
B-3 2-4'	11	100.23	82.15	8.22	80.3%	24.5%	76.42	7.8%
B-3 38.5-40'	12	83.58	45.08	8.15	49.0%	104.3%	10.78	92.9%
B-4 4-6'	13	101.78	85.17	8.18	82.3%	21.6%	74.79	13.5%
B-4 38.5-40'	14	91.68	47.17	8.11	46.7%	114.0%	9.90	95.4%

W_C = Weight of Container
S_W = Weight of Wet Sample
S_D = Weight of Dry Sample
S_R = Weight of Sample Retained

$$\text{Solids Content } (\%) = \frac{S_D}{S_W} * 100$$

$$\text{Moisture Content } (\%) = \frac{W_{H_2O}}{S_D} * 100$$

$$< \#200 \text{ Sieve } (\%) = \frac{(S_D - S_R)}{S_D} * 100$$

2030 State Road 60 East
Bartow, Florida 33830
(863)533-9007

AASHTO T267 ORGANIC CONTENT

Project Number: 15217
Project Name: Wauchula Water Storage Tank
Project Location: Wauchula, FL
Client: Chastain Skillman
Date Tested: 9/13/2023
Technician: BJN

Sample	Container Name	W_C+S_W (g)	W_C+S_D (g)	W_C (g)	Solids Content (%)	Moist-ure Content (%)	Furnace Container Name	$W_{fC}+S_D$ (g)	$W_{fC}+S_{FD}$ (g)	W_{fC} (g)	Organic Content (%)
B-1 6-8'	135	101.51	84.91	8.30	82.2%	21.7%	2	131.62	130.37	55.23	1.6%

Average Organic Content (%): 1.6%

W_C = Weight of Container
S_W = Weight of Wet Sample
S_D = Weight of Dry Sample
W_{fC} = Weight of Furnace Container
S_{FD} = Weight of Furnace Dried Sample

$$\text{Solids Content (\%)} = \frac{S_D}{S_W} * 100$$

$$\text{Moisture Content (\%)} = \frac{(S_W - S_D)}{S_D} * 100$$

$$\text{Organic Content (\%)} = \frac{(S_D - S_{FD})}{S_D} * 100$$

MADRID ENGINEERING GROUP, INC.
2030 State Road 60 East
Bartow, Florida 33830
863/533-9007 FAX: 863/533-8997

ATTERBERG LIMITS DETERMINATION AASHTO T89/90

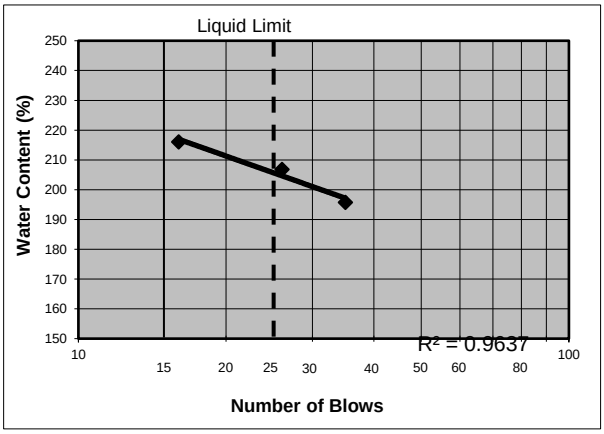
Project Number: 15217
Project Name: Wauchula Water Storage Tank
Project Location: Wauchula, FL
Client: Chastain Skillman

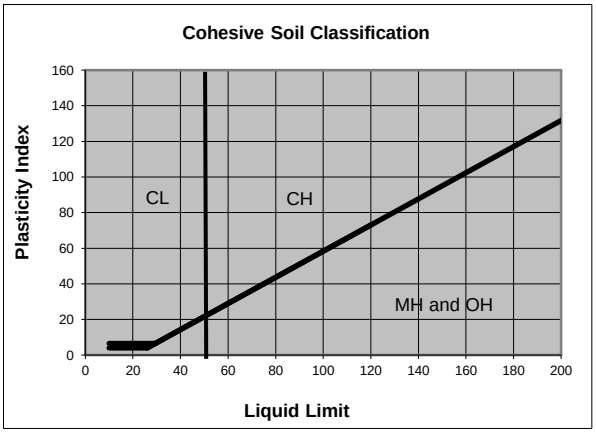
Date Tested: 9/13/2023
Technician: BJN

Sample Number: B-2
Soil Description: highly plastic silt

Sample Location: 38.5 TO 40'
USCS Code: MH

Liquid Limit					
Sample Number	14	23	27		
W_C+S_W (g)	21.47	22.21	21.48		
W_C+S_D (g)	16.38	16.50	16.38		
W_C (g)	13.78	13.74	14.02		
S_D (g)	2.60	2.76	2.36		
W_{H2O} (g)	5.09	5.71	5.10		
Number of Blows	35	26	16		
Moisture Content (%)	195.77	206.88	216.10		





Plastic Limit				
Sample Number	2	4	9	
W_C+S_W (g)	17.59	17.61	17.64	
W_C+S_D (g)	16.10	16.10	16.00	
W_C (g)	14.16	14.13	13.82	
S_D (g)	1.94	1.97	2.18	
W_{H2O} (g)	1.49	1.51	1.64	
Moisture Content (%)	76.80	76.65	75.23	

Summary	
% < #200 =	**95.9**
Liquid Limit =	**206**
Plastic Limit =	**76**
Plasticity Index =	**130**

W_C = Weight of Container
S_W = Weight of Wet Sample
S_D = Weight of Dry Sample

$$\text{Moisture Content (\%)} = \frac{W_{H_2O}}{S_D} * 100$$

σ = 0.71

MADRID ENGINEERING GROUP, INC.
2030 State Road 60 East
Bartow, Florida 33830
863/533-9007 FAX: 863/533-8997

ATTERBERG LIMITS DETERMINATION AASHTO T89/90

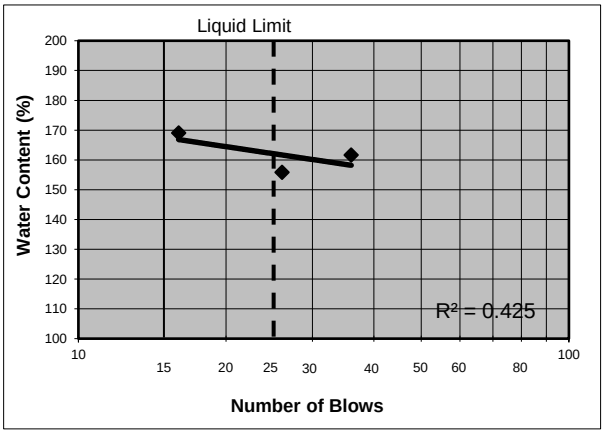
Project Number: 15217
Project Name: Wauchula Water Storage Tank
Project Location: Wauchula, FL
Client: Chastain Skillman

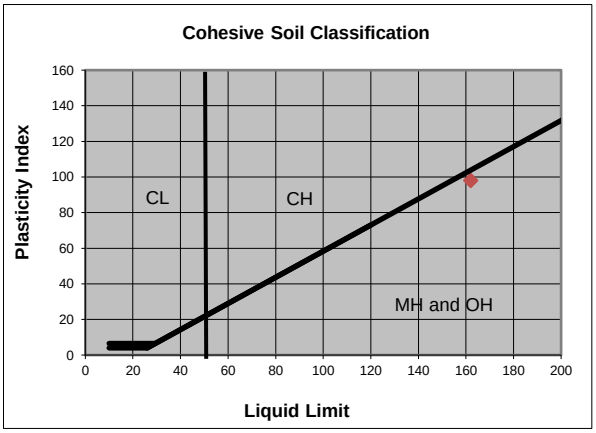
Date Tested: 9/14/2023
Technician: BJN

Sample Number: B-4
Soil Description: highly plastic silt

Sample Location: 38.5 TO 40'
USCS Code: MH

Liquid Limit					
Sample Number	11	14	27		
W_C+S_W (g)	21.95	22.10	21.96		
W_C+S_D (g)	17.10	17.05	16.97		
W_C (g)	14.10	13.81	14.02		
S_D (g)	3.00	3.24	2.95		
W_{H2O} (g)	4.85	5.05	4.99		
Number of Blows	36	26	16		
Moisture Content (%)	161.67	155.86	169.15		





Plastic Limit				
Sample Number	10	9		
W_C+S_W (g)	17.35	17.25		
W_C+S_D (g)	16.02	15.91		
W_C (g)	13.94	13.83		
S_D (g)	2.08	2.08		
W_{H2O} (g)	1.33	1.34		
Moisture Content (%)	63.94	64.42		

Summary	
% < #200 =	**95.4**
Liquid Limit =	**162**
Plastic Limit =	**64**
Plasticity Index =	**98**

W_C = Weight of Container
S_W = Weight of Wet Sample
S_D = Weight of Dry Sample

$$\text{Moisture Content (\%)} = \frac{W_{H_2O}}{S_D} * 100$$

σ = 0.24

DIVISION 6
TECHNICAL SPECIFICATIONS

APPENDIX 2
PERMITS

DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, JACKSONVILLE DISTRICT
701 SAN MARCO BOULEVARD
JACKSONVILLE, FLORIDA 32207

March 31, 2026

Regulatory Division
West Permits Branch
Tampa Section
SAJ-2025-02575(NWP-JLA)

City of Wauchula
Attn: Olivia Minshew
126 South 7th Avenue
Wauchula, Florida 33873
Sent via email: Ominshew@cityofwauchula.com

Dear Olivia Minshew:

The U.S. Army Corps of Engineers (Corps) has completed the review of your application for a Department of the Army permit received on September 11, 2025. Your application was assigned file number SAJ-2025-02575. A review of the information and drawings provided indicates that the proposed work would result in placement of 95-linear feet of a new 12-inch PVC water main via an 8-foot wide open trench and fill (761 square feet/138 cubic yards of fill) under a vegetated ditch/swale. The activities subject to this permit are authorized pursuant to authorities under Section 404 of the Clean Water Act (33 U.S.C. § 1344). The project is located within an unnamed linear wetland (drainage ditch) east of Rodeo Drive, Section 8, Township 34 South, Range 25 East, Wauchula, Hardee County, Florida. Center coordinates: Latitude: 27.53388º N, Longitude: -81.83748º W.

Your project, as depicted on the enclosed drawings, is authorized by Nationwide Permit (NWP) 58 (Utility Line Activities for Water and Other Substances). **This verification is valid until March 15, 2031.** In order for this NWP authorization to be valid, you must ensure that the work is performed in accordance with the Nationwide Permit general conditions, the Jacksonville District regional conditions, and the general and project-specific special conditions listed below. Furthermore, if you commence or are under contract to commence this activity before the date that the relevant NWP expires or is modified or revoked, you will have 12 months from the date of expiration, modification or revocation of the NWP to complete the activity under the present terms and conditions of this NWP. You can access the U.S. Army Corps of Engineers' (Corps) Jacksonville District's Regulatory web page for links to view NWP information at: https://www.sad.usace.army.mil/Missions/Regulatory/Florida/. Please be aware this Internet address is case sensitive and should be entered as it appears above. Once there, select “Permitting,” then “Nationwide Permits” for links to the federal register

containing the text of the 2026 NWPs and the associated NWP general conditions, as well as separate links to the Jacksonville District regional conditions.

General Conditions:

1. The time limit for completing the work authorized ends on **March 15, 2031**.

2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity, or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.

3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort of if the site is eligible for listing in the National Register of Historic Places.

4. If you sell the property associated with this permit you must obtain the signature of the new owner on the attached transfer form (Attachment 1) and forward a copy to this office to validate the transfer of this authorization.

5. You must allow a representative from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

Project Specific Special Conditions:

The following project specific special conditions are included with this verification:

1. **Reporting Address:** The Permittee shall submit all reports, notifications, documentation, and correspondence required by the general and special conditions of this permit to either (not both) of the following addresses:
   a. For electronic mail (preferred): SAJ-RD-Enforcement@usace.army.mil (not to exceed 15 MB).
   b. For standard mail: U.S. Army Corps of Engineers, Regulatory Division, Enforcement Section, P.O. Box 4970, Jacksonville, FL 32232-0019.

   The Permittee shall reference this permit numbers, SAJ-2025-02475 (NW-JLA) on all submittals.

2. **As-Built Certification with X-Y-Z Coordinates:** Within 60 days of completion of the work authorized by this permit, the Permittee shall submit as-built drawings of the authorized work and a completed "As-Built Certification by Professional Engineer or Surveyor" form (Attachment 3) to the Corps. The as-built drawings shall be signed and sealed by a registered professional engineer or surveyor and include the following:
   a. A plan view drawing of the location of the authorized work footprint (as shown on the permit drawings) on 8½-inch by 11-inch paper. The drawings shall include the X Y & Z State Plane coordination points of the object above the channel as it enters and exits the design edges of the authorized width of the channel, plus a minimum of 25 feet outside the channel edges.
   b. A list of any deviations between the work authorized by this permit and the work as constructed. In the event that the completed work deviates, in any manner, from the authorized work, describe on the attached "As-Built Certification by Professional Engineer" form the deviations between the work authorized by this permit and the work as constructed. Clearly indicate on the as-built drawings any deviations that have been listed. Please note that the depiction and/or description of any deviations on the drawings and/or "As-Built Certification by Professional Engineer" form does not constitute approval of any deviations by the Corps.
   c. The Department of the Army permit number on all sheets submitted.

3. **Cultural Resources/Historic Properties:**
   a. No structure or work shall adversely affect, impact, or disturb properties listed in the National Register of Historic Places (NRHP), or those eligible for inclusion in the NRHP.
   b. If, during permitted activities, items that may have historic or archaeological origin are observed the Permittee shall immediately cease all activities adjacent to the discovery that may result in the destruction of these resources and shall prevent his/her employees from further removing, or otherwise damaging, such resources. The applicant shall notify both the Florida Department of State, Division of Historical Resources, Compliance Review Section at (850)-245-6333 and the Corps, of the observations within the same business day (8 hours). Examples of submerged historical, archaeological or cultural resources include shipwrecks, shipwreck debris fields (such as steam engine parts, or wood planks and beams), anchors, ballast rock, concreted iron objects, concentrations of coal, prehistoric watercraft (such as log "dugouts"), and other evidence of human activity. The materials may be deeply buried in sediment, resting in shallow sediments or above them, or protruding into water. The Corps shall coordinate with the Florida State Historic Preservation Officer (SHPO) to assess the significance of the discovery and devise appropriate actions. Project activities shall not resume without verbal and/or written authorization from the Corps.

c. Additional cultural resources assessments may be required of the permit area in the case of unanticipated discoveries as referenced in accordance with the above Special Condition and, if deemed necessary by the SHPO or Corps, in accordance with 36 CFR 800 or 33 CFR 325, Appendix C (5). Based on the circumstances of the discovery, equity to all parties, and considerations of the public interest, the Corps may modify, suspend, or revoke the permit in accordance with 33 CFR Part 325.7. Such activity shall not resume on non-federal lands without written authorization from the SHPO for finds under his or her jurisdiction, and from the Corps.
d. In the unlikely event that unmarked human remains are identified on non-federal lands; they will be treated in accordance with Section 872.05 Florida Statutes. All work and ground disturbing activities within a 100-meter diameter of the unmarked human remains shall immediately cease and the Permittee shall immediately notify the medical examiner, Corps, and State Archaeologist within the same business day (8-hours). The Corps shall then notify the appropriate SHPO. Based on the circumstances of the discovery, equity to all parties, and considerations of the public interest, the Corps may modify, suspend, or revoke the permit in accordance with 33 CFR Part 325.7. Such activity shall not resume without written authorization from the SHPO and from the Corps.

4. **Eastern Indigo Snake Protection Measures and Inspection:** Permittee shall comply with U.S. Fish and Wildlife Service's "Standard Protection Measures for the Eastern Indigo Snake" dated May 2024, as provided in Attachment 4 of this permit. All gopher tortoise burrows, active or inactive, shall be evacuated prior to site manipulation in the vicinity of the burrow. If excavating potentially occupied burrows, active or inactive, individuals must first obtain state authorization via a Florida Fish and Wildlife Conservation Commission (FWC) Authorized Gopher Tortoise Agent permit. The excavation method selected shall minimize the potential for injury of an indigo snake. The Permittee shall follow the excavation guidance provided in the most current FWC Gopher Tortoise Permitting Guidelines found at http://myfwc.com/gophertortoise. If an indigo snake is encountered, the snake must be allowed to vacate the area prior to additional site manipulation in the vicinity. Holes, cavities, and snake refugia other than gopher tortoise burrows shall be inspected each morning before planned site manipulation of a particular area, and if occupied by an indigo snake, no work shall commence until the snake has vacated the vicinity of the proposed work.

5. **Erosion Control**: Prior to the initiation of any work authorized by this permit, the Permittee shall install erosion control measures along the perimeter of all work areas to prevent the displacement of fill material outside the work area into waters of the United States. The erosion control measures shall remain in place and be maintained until all authorized work is completed and the work areas are stabilized.

6. **Sidecast Material:** Material resulting from trench excavation may be temporarily sidecast (up to three months) into waters of the United States, provided that the material is not placed in such a manner that it is dispersed by currents or other forces. The top 6-12 inches of the trench shall only be backfilled with topsoil from the trench. Furthermore, the trench cannot be constructed in such a manner as to drain waters of the United States (e.g., backfilling with extensive gravel layers, creating a French drain effect). Any exposed slopes and stream banks must be stabilized immediately upon completion of the utility line crossing of each waterbody.

7. **Notification of Unmarked Utilities:** No work shall be performed until after the permittee provides notification to the owner(s) or operator(s) of any marked utilities in the work area, unless the permittee is the same entity as the owner(s) or operator(s).

8. **Fill Material:** The Permittee shall use only clean fill material for this project. The fill material shall be free from items such as trash, debris, automotive parts, asphalt, construction materials, concrete block with exposed reinforcement bars, and soils contaminated with any toxic substance in toxic amounts, in accordance with Section 307 of the Clean Water Act.

9. **Posting of Permit:** The Permittee shall have available and maintain for review a copy of this permit and approved plans at the construction site.

This letter of authorization does not include conditions that would prevent the 'take' of a state-listed fish or wildlife species. These species are protected under sec. 379.411, Florida Statutes, and listed under Rule 68A-27, Florida Administrative Code. With regard to fish and wildlife species designated as species of special concern or threatened by the State of Florida, you are responsible for coordinating directly with the Florida Fish and Wildlife Conservation Commission (FWC). You can visit the FWC license and permitting webpage (http://www.myfwc.com/license/wildlife/) for more information, including a list of those fish and wildlife species designated as species of special concern or threatened. The Florida Natural Areas Inventory (http://www.fnai.org/) also maintains updated lists, by county, of documented occurrences of those species.

This letter of authorization does not give absolute Federal authority to perform the work as specified on your application. The proposed work may be subject to local building restrictions mandated by the National Flood Insurance Program. You should contact your local office that issues building permits to determine if your site is located in a flood-prone area, and if you must comply with the local building requirements mandated by the National Flood Insurance Program.

This letter of authorization does not preclude the necessity to obtain any other Federal, State, or local permits which may be required.

Thank you for your cooperation with our permit program. The Corps' Jacksonville District Regulatory Division is committed to improving service to our customers. We strive to perform our duty in a friendly and timely manner while working to preserve our environment. We invite you to complete our automated Customer Service Survey at https://regulatory.ops.usace.army.mil/customer-service-survey/. Please be aware this Internet address is case sensitive and you will need to enter it exactly as it appears above. Your input is appreciated – favorable or otherwise.

Should you have any questions related to this NWP verification or have issues accessing the documents referenced in this letter, please contact Jennifer L. Alexander at the Tampa Permits Section at 10117 Princess Palm Avenue, Suite 120, Tampa, Florida 33610, by telephone at 813-769-7076, or by email at Jennifer.L.Alexander@usace.army.mil.

Sincerely,

Jennifer L Alexander

Jennifer L. Alexander
Project Manager

Enclosures
1. Transfer Form
2. Drawings
3. As-Built Certification Form
4. Standard Protection Measures for the Eastern Indigo Snake

Cc:
Agent – Craig Stout CStout@esassoc.com

DEPARTMENT OF THE ARMY PERMIT TRANSFER REQUEST

DA PERMIT NUMBER: SAJ-2026-02575(NWP-JLA)

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. Although the construction period for works authorized by Department of the Army permits is finite, the permit itself, with its limitations, does not expire.

To validate the transfer of this permit and the associated responsibilities associated with compliance with its terms and conditions, have the transferee sign and date below and mail to the U.S. Army Corps of Engineers, Enforcement Section, Post Office Box 4970, Jacksonville, FL 32232-0019 or submit via electronic mail to: SAJ-RD-Enforcement@usace.army.mil (not to exceed 15 MB).

_____
(TRANSFEREE-SIGNATURE)

_____
(DATE)

_____
(NAME-PRINTED)

_____

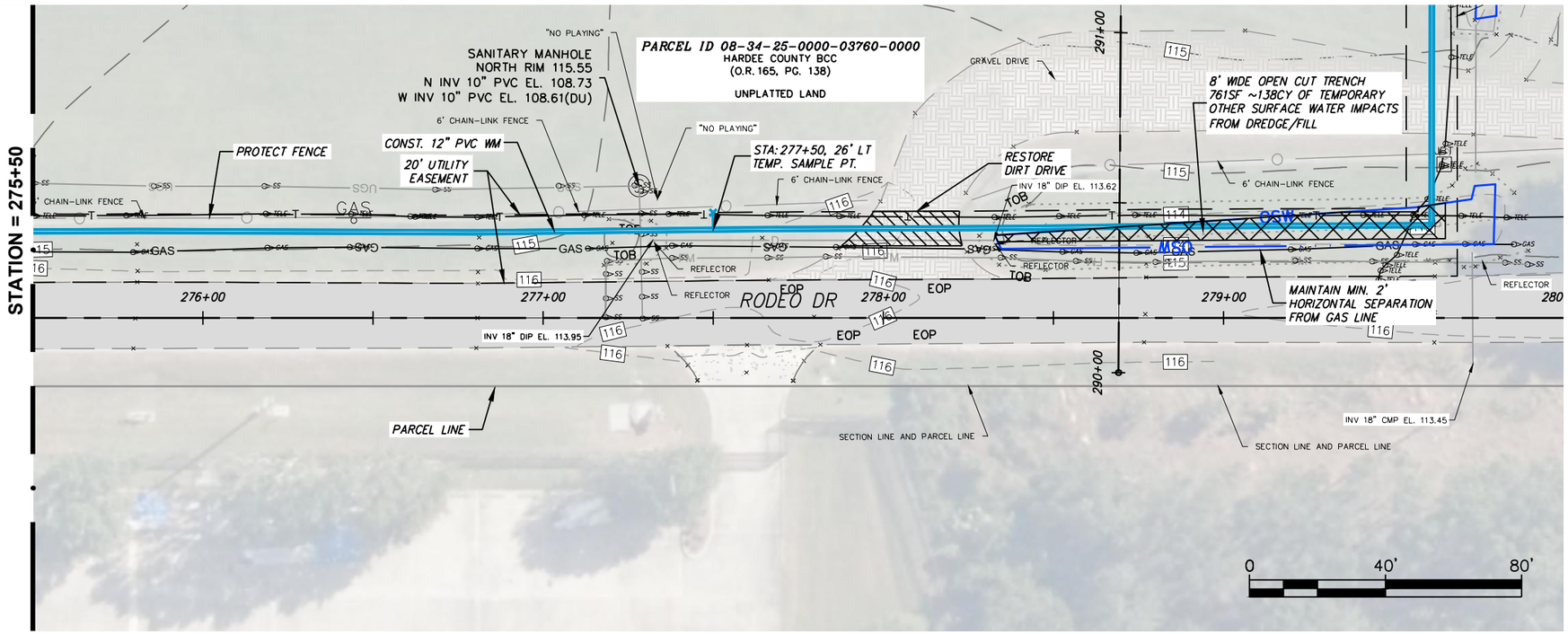
_____
(MAILING ADDRESS)

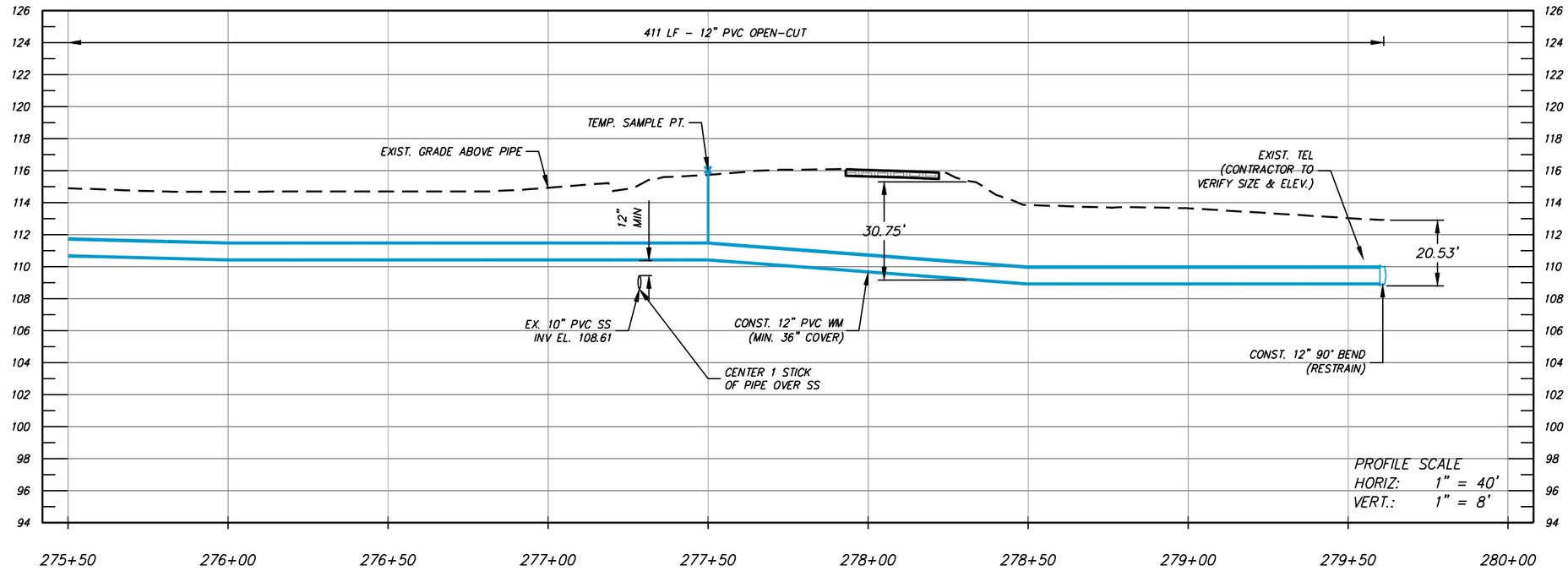
_____
(CITY, STATE, ZIP CODE)

_____
(SUBDIVISION)

_____ _____
(LOT) (BLOCK)

_____
(STREET ADDRESS)





NUMBER	DATE	DESCRIPTION
P-0	09/26/2025	ISSUED FOR PERMITTING

CHASTAIN-SKILLMAN, LLC
205 EAST ORANGE STREET
SUITE #110
LAKELAND, FL 33801-4611
(888) 646-1402

© 2025 CHASTAIN SKILLMAN REG. NO. 262

ChastainSkillman

DCCM

CITY OF WAUCHULA
SOUTHWEST AREA ELEVATED
TOWER & WATER LINE
WAUCHULA, FLORIDA
PLAN PROFILES

This item has been digitally signed and sealed by Vaughan S. Leer on the date adjacent to seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

ENGINEER: VAUGHAN S. LEER, P.E.
REG. NO.: 94781

PROJECT NUMBER: 10371.03

SHEET NUMBER: PP-46

P:\1037103\CAD\Water\1037103\Production Drawings\1037103-DEJ-2023-PP.dwg PP-46 Nov 04, 2025 10:10am by: rcarnahan

AS-BUILT CERTIFICATION BY PROFESSIONAL ENGINEER

Submit this form and one set of as-built engineering drawings to the U.S. Army Corps of Engineers, Enforcement Section, P.O. Box 4970, Jacksonville, FL 32232-0019. For electronic mail saj-rd-enforcement@usace.army.mil *(not to exceed 15 MB).*

1. Department of the Army Permit Number: SAJ-2025-02575

2. Permittee Information:

Name: _____

Address: _____

_____

3. Project Site Identification (physical location/address):

_____

_____

_____

4. As-Built Certification: I hereby certify that the authorized work, including any mitigation required by Special Conditions to the permit, has been accomplished in accordance with the Department of the Army permit with any deviations noted below. This determination is based upon on-site observation, scheduled, and conducted by me or by a project representative under my direct supervision. I have enclosed one set of as-built engineering drawings.

_____ _____

Signature of Engineer Name (*Please type*)

_____ _____

(FL, PR, or VI) Reg. Number Company Name

_____ _____ _____

City State ZIP

(Affix Seal)

_____ _____

Date Telephone Number

Date Work Started:_____ Date Work Completed:_____

Identify any deviations from the approved permit drawings and/or special conditions (attach additional pages if necessary):

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

STANDARD PROTECTION MEASURES FOR THE EASTERN INDIGO SNAKE

U.S. Fish and Wildlife Service

May 2024

The Standard Protection Measures for the Eastern Indigo Snake (Plan) below has been developed by the U.S. Fish and Wildlife Service (USFWS) in Florida and Georgia for use by project proponents and their construction personnel help minimize adverse impacts to eastern indigo snakes. However, implementation of this Plan does not replace any state of federal consultation or regulatory requirements. At least 30 days prior to any land disturbance activities, the project proponent shall notify the appropriate USFWS Field Office (see Field Office contact information) via e-mail that the Plan will be implemented as described below.

As long as the signatory of the e-mail certifies compliance with the below Plan (including use of the approved poster and pamphlet (USFWS Eastern Indigo Snake Conservation webpage), no further written confirmation or approval from the USFWS is needed regarding use of this Plan as a component of the project.

If the project proponent decides to use an eastern indigo snake protection/education plan other than the approved Plan below, written confirmation or approval from the USFWS that the plan is adequate must be obtained. The project proponent shall submit their unique plan for review and approval. The USFWS will respond via e-mail, typically within 30 days of receiving the plan, either concurring that the plan is adequate or requesting additional information. A concurrence e-mail from the appropriate USFWS Field Office will fulfill approval requirements.

STANDARD PROTECTION MEASURES

BEFORE AND DURING CONSTRUCTION ACTIVITIES:

- All Project personnel shall be notified about the potential presence and appearance of the federally protected eastern indigo snake (*Drymarchon couperi*).
- All personnel shall be advised that there are civil and criminal penalties for harassing, harming, pursuing, hunting, shooting, wounding, killing, capturing, or collecting the species, in knowing violation of the Endangered Species Act of 1973.
- The project proponent or designated agent will post educational posters in the construction office and throughout the construction site. The posters must be clearly visible to all construction staff and shall be posted in a conspicuous location in the

Project field office until such time that Project construction has been completed and time charges have stopped.

- Prior to the onset of construction activities, the project proponent or designated agent will conduct a meeting with all construction staff (annually for multi-year projects) to discuss identification of the snake, its protected status, what to do if a snake is observed within the project area, and applicable penalties that may be imposed if state and/or federal regulations are violated. An educational pamphlet including color photographs of the snake will be given to each staff member in attendance and additional copies will be provided to the construction superintendent to make available in the onsite construction office. Photos of eastern indigo snakes may be accessed on USFWS, Florida Fish and Wildlife Conservation Commission and/or Georgia Department of Natural Resources websites.
- Each day, prior to the commencement of maintenance or construction activities, the Contractor shall perform a thorough inspection for the species of all worksite equipment.
- If an eastern indigo snake (alive, dead or skin shed) is observed on the project site during construction activities, all such activities are to cease until the established procedures are implemented according to the Plan, which includes notification of the appropriate USFWS Office. The contact information for the USFWS is provided below and on the referenced posters and pamphlets.
- During initial site clearing activities, an onsite observer is recommended to determine whether habitat conditions suggest a reasonable probability of an eastern indigo snake sighting (example: discovery of snake sheds, tracks, lots of refugia and cavities present in the area of clearing activities, and presence of gopher tortoises and burrows).
- Periodically during construction activities, the project area should be visited to observe the condition of the posters and Plan materials and replace them as needed. Construction personnel should be reminded of the instructions (above) as to what is expected if any eastern indigo snakes are seen.
- For erosion control use biodegradable, 100% natural fiber, net-free rolled erosion control blankets to avoid wildlife entanglement.

POST CONSTRUCTION ACTIVITIES:

Whether or not eastern indigo snakes are observed during construction activities, a monitoring report should be submitted to the appropriate USFWS Field Office within 60 days of project completion (See USFWS Field Office Contact Information).

USFWS FIELD OFFICE CONTACT INFORMATION

Georgia Field Office: Phone: (706) 613-9493, email: gaes_assistance@fws.gov
Florida Field Office: Phone: (352) 448-9151, email: fw4flesregs@fws.gov

POSTER & PAMPHLET INFORMATION

Posters with the following information shall be placed at strategic locations on the construction site and along any proposed access roads (final posters for Plan compliance are available on our website in English and Spanish and should be printed on 11 x 17in or larger paper and laminated (USFWS Eastern Indigo Snake Conservation webpage). Pamphlets are also available on our webpage and should be printed on 8.5 x 11in paper and folded, and available and distributed to staff working on the site.

POSTER CONTENT (ENGLISH):

ATTENTION

Federally-Threatened Eastern Indigo Snakes may be present on this site!

Killing, harming, or harassing eastern indigo snakes is strictly prohibited and punishable under State and Federal Law.

IF YOU SEE A LIVE EASTERN INDIGO SNAKE ON THE SITE:

• Stop land disturbing activities and allow the snake time to move away from the site without interference. Do NOT attempt to touch or handle the snake.

• Take photographs of the snake, if possible, for identification and documentation purposes.

• Immediately notify supervisor/agent, and a U.S. Fish and Wildlife Service (USFWS) Ecological Services Field Office, with the location information and condition of the snake.

• If the snake is located near clearing or construction activities that will cause harm to the snake, the activities must pause until a representative of the USFWS returns the call (within one day) with further guidance.

IF YOU SEE A DEAD EASTERN INDIGO SNAKE ON THE SITE:

• Stop land disturbing activities and immediately notify supervisor/applicant, and a USFWS Ecological Services Field Office, with the location information and condition of the snake.

• Take photographs of the snake, if possible, for identification and documentation purposes.

• Thoroughly soak the dead snake in water and then freeze the specimen. The appropriate wildlife agency will retrieve the dead snake.

DESCRIPTION: The eastern indigo snake is one of the largest non-venomous snakes in North America, reaching up to 8 ft long. Named for the glossy, blue-black scales above and slate blue below, they often have orange to reddish color (cream color in some cases)

in the throat area. They are not typically aggressive.

SIMILAR SPECIES: The black racer resembles the eastern indigo snake. However, black racers have a white or cream chin, and thinner bodies.

LIFE HISTORY: Eastern indigo snakes live in a variety of terrestrial habitat types. Although they prefer uplands, they also use wetlands and agricultural areas. They will shelter inside gopher tortoise burrows, other animal burrows, stumps, roots, and debris piles. Females may lay from 4 to 12 white eggs as early as April through June, with young hatching in late July through October.

PROTECTED STATUS: The eastern indigo snake is protected by the USFWS, Florida Fish and Wildlife Conservation Commission, and Georgia Department of Natural Resources. Any attempt to kill, harm, harass, pursue, hunt, shoot, wound, trap, capture, collect, or engage eastern indigo snakes is prohibited by the U.S. Endangered Species Act. Penalties include a maximum fine of $25,000 for civil violations and up to $50,000 and/or imprisonment for criminal offenses. Only authorized individuals with a permit (or an Incidental Take Statement associated with a USFWS Biological Opinion) may handle an eastern indigo snake.

Please contact your nearest USFWS Ecological Services Field Office if a live or dead eastern indigo snake is encountered:

Florida Office: (352) 448-9151

Georgia Office: (706) 613-9493

POSTER CONTENT (SPANISH):

ATENCIÓN

¡Especie amenazada, la culebra Índigo del Este, puede ocupar el área!

Matar, herir o hostigar culebras Índigo del Este es estrictamente prohibido bajo la Ley Federal.

SI VES UNA CULEBRA ÍNDIGO DEL ESTE O UNA CULEBRA NEGRA VIVA EN EL ÁREA:

• Pare excavación y permite el movimiento de la culebra fuera del área sin interferir. NO atentes tocar o recoger la culebra.

• Fotografié la culebra si es posible para identificación y documentación.

• Notifique supervisor/agente, y la Oficina de Campo de Servicios Ecológicos del Servicio Federal de Pesca y Vida Silvestre (USFWS) apropiada con información acerca del sitio y condición de la culebra.

• Si la culebra está cerca de un área de construcción que le pueda causar daño, las actividades deben parar hasta un representante del USFWS regrese la llamada (dentro de un día) con más orientación.

SI VES UNA CULEBRA ÍNDIGO DEL ESTE MUERTA EN EL ÁREA:

• Pare excavación. Notifique supervisor/aplicante, y la Oficina de Campo de Servicios Ecológicos apropiada con información acerca del sitio y condición de la culebra.

• Fotografié la culebra si es posible para identificación y documentación.

• Emerge completamente la culebra en agua y congele la especie hasta que personal apropiado de la agencia de vida silvestre la recoja.

DESCRIPCIÓN. La culebra Índigo del Este es una de las serpientes sin veneno más grande en Norte América, alcanzando hasta 8 pies de largo. Su nombre proviene del color azul-negro brilloso de sus escamas, pero pueden tener un color anaranjado-rojizo (color crema en algunos casos) en su mandíbula inferior. No tienden a ser agresivas.

SERPIENTES PARECIDAS. La corredora negra, que es de color negro sólido, es la única otra serpiente que se asemeja a la Índigo del Este. La corredora negra se diferencia por una mandíbula inferior color blanca o crema y un cuerpo más delgado.

HÁBITATS Y ECOLOGÍA. La culebra Índigo del Este vive en una variedad de hábitats, incluyendo tierras secas, humedales, y áreas de agricultura. Ellas buscan refugio en agujeros o huecos de tierra, en especial madrigueras de tortugas de tierra. Las hembras ponen 4 hasta 12 huevos blancos entre abril y junio, y la cría emergen entre julio y octubre.

PROTECCIÓN LEGAL. La culebra Índigo del Este es clasificada como especie amenazada por el USFWS, la Comisión de Conservación de Pesca y Vida Silvestre de Florida y el Departamento de Recursos Naturales de Georgia. Intento de matar, hostigar, herir, lastimar, perseguir, cazar, disparar, capturar, colectar o conducta parecida hacia las culebras Índigo del Este es prohibido por la Ley Federal de Especies en Peligro de Extinción. Penalidades incluyen un máximo de $25,000 por violaciones civiles y $50,000 y/o encarcelamiento por actos criminales. Solos individuales autorizados con un permiso o Determinación de toma incidental (Incidental Take Statement) asociado con una Opinión Biológico del USFWS pueden recoger una Índigo del Este.

Por favor de contactar tu Oficina de Campo de Servicios Ecológicos más cercana si encuentras una culebra Índigo del Este viva o muerta:

Oficina de Florida: (352) 448-9151

Oficina de Georgia: (706) 613-9493

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2025-ASO-7273-OE

Issued Date: 04/16/2025

Olivia Minshew, City Manager
City of Wauchula
126 South 7th Avenue
Wauchula, FL 33873

****DETERMINATION OF NO HAZARD TO AIR NAVIGATION FOR TEMPORARY STRUCTURE****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Crane Crane
Location:	Wauchula, FL
Latitude:	27-32-01.89N NAD 83
Longitude:	81-50-12.48W
Heights:	116 feet site elevation (SE)
	200 feet above ground level (AGL)
	316 feet above mean sea level (AMSL)

This aeronautical study revealed that the temporary structure does not exceed obstruction standards and would not be a hazard to air navigation provided the condition(s), if any, in this letter is (are) met:

SEE ATTACHMENT FOR ADDITIONAL CONDITION(S) OR INFORMATION

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, will void this determination. Any future construction or alteration, including increase to heights, power or the addition of other transmitters, requires separate notice to the FAA. This determination includes all previously filed frequencies and power for this structure.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of a structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this temporary structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Aviation Administration Flight Procedures Office if the structure is subject to the issuance of a Notice to Airmen (NOTAM).

If you have any questions, please contact our office at (404) 305-6531, or darin.clipper@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2025-ASO-7273-OE

Signature Control No: 653034844-653973453 (TMP)
Darin Clipper
Specialist

Additional Condition(s) or Information for ASN 2025-ASO-7273-OE

Proposal: To construct and/or operate a(n) Crane to a height of 200 feet above ground level, 316 feet above mean sea level.

Location: The structure will be located 2.59 nautical miles northeast of CHN Airport reference point.

Part 77 Obstruction Standard(s) Exceeded and Aeronautical Impacts, if any:

Aeronautical study revealed that the temporary structure will not exceed any Part 77 obstruction standard. Aeronautical study confirmed that the temporary structure will have no effect on any existing or proposed arrival, departure or en route instrument/visual flight rules (IFR/VFR) operations or procedures. Additionally, aeronautical study confirmed that the temporary structure will have no physical or electromagnetic effect on the operation of air navigation and communications facilities and will not impact any airspace and routes used by the military. Based on this aeronautical study, the FAA finds that the temporary structure will have no adverse effect on air navigation and will not impact any aeronautical operations or procedures.

Preliminary FAA study indicates that the above mentioned structure would:
not exceed traffic pattern airspace

Based on this aeronautical study, the structure would not constitute a substantial adverse effect on aeronautical operations or procedures because it will be temporary. The temporary structure would not be considered a hazard to air navigation provided all of the conditions specified in this determination are strictly met.

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M Change 1, Obstruction Marking and Lighting, flags/red lights-Chapters 3(Marked),4,5(Red),14(Temporary),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that the manager of WAUCHULA MUNI, (863) 314-1300 be notified at least 3 business days prior to the temporary structure being erected and again when the structure is removed from the site.

This determination expires on 10/16/2026 unless extended, revised, or terminated by the issuing office.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed within 5 days after the temporary structure is dismantled.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

Sectional Map for ASN 2025-ASO-7273-OE



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2025-ASO-7274-OE

Issued Date: 04/16/2025

Olivia Minshew, City Manager
City of Wauchula
126 South 7th Avenue
Wauchula, FL 33873

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Water Tank Wauchula Water Tower
Location:	Wauchula, FL
Latitude:	27-32-01.89N NAD 83
Longitude:	81-50-12.48W
Heights:	116 feet site elevation (SE)
	140 feet above ground level (AGL)
	256 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

_____ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/ lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 M Change 1.

This determination expires on 10/16/2026 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.
(c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.This determination includes all previously filed frequencies and power for this structure.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

If we can be of further assistance, please contact our office at (404) 305-6531, or darin.clipper@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2025-ASO-7274-OE.

Signature Control No: 653036489-653972663 (DNE)
Darin Clipper
Specialist

Attachment(s)
Map(s)

Sectional Map for ASN 2025-ASO-7274-OE



FLORIDA DEPARTMENT OF Environmental Protection

Southwest District
13051 North Telecom Parkway Suite 101
Temple Terrace, Florida 33637-0926

Ron DeSantis
Governor

Jay Collins
Lt. Governor

Alexis A. Lambert
Secretary

October 21, 2025

ELECTRONIC CORRESPONDENCE

In the matter of an
Application for Permit by:

Olivia Minshew
City Manager
City of Wauchula
126 South 7th Avenue
Wauchula, FL 33873
ominshew@cityofwauchula.com

DEP File No. 0147708-039-WC/M1
County: Hardee

NOTICE OF PERMIT ISSUANCE

Enclosed is Permit Number 0147708-039-WC/M1 for Southwest Area Elevated Tower and Water Tower to construct water distribution system and water treatment plant components, issued pursuant to Section 403.861(9), Florida Statutes.

This action is final and effective on the date filed with the Clerk of the Department unless a petition for an administrative hearing is timely filed under Sections 120.569 and 120.57, F.S., before the deadline for filing a petition. On the filing of a timely and sufficient petition, this action will not be final and effective until further order of the Department. Because the administrative hearing process is designed to formulate final agency action, the hearing process may result in a modification of the agency action or even denial of the application.

Petition for Administrative Hearing

A person whose substantial interests are affected by the Department's action may petition for an administrative proceeding (hearing) under Sections 120.569 and 120.57, F.S. Pursuant to Rules 28-106.201 and 28-106.301, F.A.C., a petition for an administrative hearing must contain the following information:

(a) The name and address of each agency affected and each agency's file or identification number, if known;
(b) The name, address, any e-mail address, any facsimile number, and telephone number of the petitioner, if the petitioner is not represented by an attorney or a qualified representative; the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination;
(c) A statement of when and how the petitioner received notice of the agency decision;
(d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate;
(e) A concise statement of the ultimate facts alleged, including the specific facts that the petitioner contends warrant reversal or modification of the agency's proposed action;

(f) A statement of the specific rules or statutes that the petitioner contends require reversal or modification of the agency's proposed action, including an explanation of how the alleged facts relate to the specific rules or statutes; and
(g) A statement of the relief sought by the petitioner, stating precisely the action that the petitioner wishes the agency to take with respect to the agency's proposed action.

The petition must be filed (received by the Clerk) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, or via electronic correspondence at Agency_Clerk@FloridaDEP.gov. Also, a copy of the petition shall be mailed to the applicant at the address indicated above at the time of filing.

Time Period for Filing a Petition

In accordance with Rule 62-110.106(3), F.A.C., petitions for an administrative hearing by the applicant and persons entitled to written notice under Section 120.60(3), F.S., must be filed within 14 days of receipt of this written notice. Petitions filed by any persons other than the applicant, and other than those entitled to written notice under Section 120.60(3), F.S., must be filed within 14 days of publication of the notice or within 14 days of receipt of the written notice, whichever occurs first. You cannot justifiably rely on the finality of this decision unless notice of this decision and the right of substantially affected persons to challenge this decision has been duly published or otherwise provided to all persons substantially affected by the decision. While you are not required to publish notice of this action, you may elect to do so pursuant Rule 62-110.106(10)(a), F.A.C.

The failure to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention (in a proceeding initiated by another party) will be only at the discretion of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C. If you do not publish notice of this action, this waiver may not apply to persons who have not received a clear point of entry.

Extension of Time
Under Rule 62-110.106(4), F.A.C., a person whose substantial interests are affected by the Department's action may also request an extension of time to file a petition for an administrative hearing. The Department may, for good cause shown, grant the request for an extension of time. Requests for extension of time must be filed with the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, or via electronic correspondence at Agency_Clerk@dep.state.fl.us, before the deadline for filing a petition for an administrative hearing. A timely request for extension of time shall toll the running of the time period for filing a petition until the request is acted upon.

Mediation
Mediation is not available in this proceeding.

Judicial Review
Once this decision becomes final, any party to this action has the right to seek judicial review pursuant to Section 120.68, F.S., by filing a Notice of Appeal pursuant to Florida Rules of Appellate Procedure 9.110 and 9.190 with the Clerk of the Department in the Office of General Counsel (Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000) and by filing a copy of the Notice of Appeal

accompanied by the applicable filing fees with the appropriate district court of appeal. The notice must be filed within 30 days from the date this action is filed with the Clerk of the Department.

EXECUTION AND CLERKING

Executed in Hillsborough County, Florida

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

for Shannon Herbon
Program Administrator
Permitting & Waste Cleanup Program
Southwest District

Enclosures: Permit No. 0147708-039-WC/M1
Utilities Separation Requirements

CERTIFICATE OF SERVICE
The undersigned duly designated deputy agency clerk hereby certifies that this Notice of Permit Issuance and all copies were mailed/electronically transmitted before the close of business on October 21, 2025, to those persons listed.

Copies Furnished to:
Vaughan Leer, P.E., Chastain Skillman, LLC, vleer@dccm.com
Austin Hungate, Chastain Skillman, LLC, ahungate@DCCM.com
Douglas Jones, Chastain Skillman, LLC, djones@DCCM.com
John Eason, Deputy City Manager of the City of Wauchula, jeason@cityofwauchula.com
James Brock, DEP SWD, James.Brock@FloridaDEP.gov
Sarah West, DEP SWD, Sarah.J.West@FloridaDEP.gov

FILING AND ACKNOWLEDGMENT
FILED, on this date, pursuant to Section 120.52, F. S., with the designated Department Clerk, receipt of which is hereby acknowledged.

Clerk **Date** October 21, 2025

FLORIDA DEPARTMENT OF Environmental Protection

Southwest District
13051 North Telecom Parkway #101
Temple Terrace, Florida 33637-0926

Ron DeSantis
Governor

Jay Collins
Lt. Governor

Alexis A. Lambert
Secretary

ELECTRONIC CORRESPONDENCE

PERMITTEE:
City of Wauchula
Olivia Minshew, City Manager
126 South 7th Avenue
Wauchula, FL 33873
ominshew@cityofwauchula.com

PWS ID NUMBER: 625-0329
PERMIT NUMBER: 0147708-039-WC/M1
DATE OF ISSUE: October 21, 2025
EXPIRATION DATE: October 20, 2030
COUNTY: Hardee
PROJECT: Southwest Area Elevated Tower and Water Line

This permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-550, 62-555 and 62-560. The above-named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawings, plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

TO CONSTRUCT: A water distribution system and water treatment plant components to improve water pressure and fire protection of the southwest area served by the City of Wauchula.

PROPOSED CONSTRUCTION INCLUDES APPROXIMATELY: 600 linear feet of six-inch diameter water main pipe(s) and 25,400 linear feet of 12-inch diameter water main pipe(s).

A 150,000-gallon elevated storage tank.

Associated piping and appurtenances.

The permitted operating capacity is 2,160,000 MGD.

IN ACCORDANCE WITH: Preliminary design report, engineering drawings and related documents, prepared by Vaughan S. Leer, P.E., [Chastain Skillman, LLC].

LOCATION: The water line runs along West Main Street, Altman Road, Doyle Carlton Road, Rodeo Drive, and South Florida Avenue. It connects to the existing Wauchula water system on Main Street and South Florida Avenue. The elevated tank is located adjacent to Rodeo Drive near the Hardee County Sports Complex and Hardee Senior High School in Hardee County, Florida.

A. General Conditions

The permittee shall be aware of and operate under the Permit Conditions below. These applicable conditions are binding upon the permittee and enforceable pursuant to Chapter 403, Florida Statutes. [F.A.C. Rule 62-555.533(1)]

1. The terms, conditions, requirements, limitations and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 403.727, or 403.859 through 403.861, F.S. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.

3. As provided in Subsections 403.087(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations. This permit is not a waiver of or approval of any other department permit that may be required for other aspects of the total project which are not addressed in this permit.

4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.

5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times (reasonable time may depend on the nature of the concern being investigated), access to the premises where the permitted activity is located or conducted to:

    a. Have access to and copy any records that must be kept under conditions of the permit;
    b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
    c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

    a. A description of and cause of noncompliance; and
    b. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted

source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules. A reasonable time for compliance with a new or amended surface water quality standard, other than those standards addressed in Rule 62-302.500, shall include a reasonable time to obtain or be denied a mixing zone for the new or amended standard.

11. This permit is transferable only upon Department approval in accordance with Rule 62- 4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit also constitutes:

    a. Determination of Best Available Control Technology (BACT)
    b. Determination of Prevention of Significant Deterioration (PSD)
    c. Certification of compliance with State Water Quality Standards (Section 401, PL 92-500)
    d. Compliance with New Source Performance Standards

14. The permittee shall comply with the following:

    a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.

    b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.

    c. Records of monitoring information shall include:
        i. the date, exact place, and time of sampling or measurements;
        ii. the person responsible for performing the sampling or measurements;
        iii. the dates analyses were performed;
        iv. the person responsible for performing the analyses;
        v. the analytical techniques or methods used;
        vi. the results of such analyses.

15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

B. Regulatory Section

1. All construction must be in accordance with this permit. Before commencing work on project changes for which a construction permit modification is required per 62-555.536(1), the permittee shall submit to the Department a written request for a permit modification. Each such request shall be accompanied by one copy of a revised construction permit application, the proper processing fee and one copy of either a revised preliminary design report or revised drawings, specifications and design data. [F.A.C. Rule 62-555.536].

2. Permitted construction or alteration of public water supply systems must be supervised during construction

by a professional engineer registered in the State of Florida if the project was designed under the responsible charge of a professional engineer licensed in the State of Florida. The permittee must retain the service of a professional engineer registered in the State of Florida to observe that construction of the project is in accordance with the engineering plans and specifications as submitted in support of the application for this permit. [F.A.C. Rule 62-555.520(3)].

3. If prehistoric or historic artifacts, such as pottery or ceramics, stone tools or metal implements, dugout canoe remains, or any other physical remains that could be associated with Native American cultures, or early colonial or American settlement are encountered at any time within the project site area, the permitted project should cease all activities involving subsurface disturbance in the immediate vicinity of such discoveries. The permittee, or other designee, should contact the Florida Department of State, Division of Historical Resources, Compliance and Review Section at 850.245.6333 or 800.847.7278, as well as the appropriate permitting agency office. Project activities should not resume without verbal and/or written authorization from the Division of Historical Resources and the permitting agency. In the event that unmarked human remains are encountered during permitted activities, all work shall stop immediately and the proper authorities notified in accordance with Section 872.05, *Florida Statutes*.

4. If delays will cause project completion to extend beyond the expiration date of this permit, the permittee shall submit to the Department a request to extend the expiration date of this permit including the appropriate processing fee. This request shall specify the reasons for the delay and shall be submitted to the Department for approval prior to the expiration date of this permit. Note that no specific construction permit shall be extended so as to remain in effect longer than five years. [F.A.C. Rule 62-555.536(4)]. {OPTIONAL}

5. In accordance with General Condition #11 of this permit, this permit is transferable only upon Department approval. Persons proposing to transfer this permit must apply jointly for a transfer of the permit within 30 days after the sale or legal transfer of ownership of the permitted project that has not been cleared for service by the Department using form, 62-555.900(8), Application for Transfer of a PWS Construction Permit along with the appropriate fee. [F.A.C. Rule 62-555.536(5)]

6. This permit satisfies Drinking Water permitting requirements only and does not authorize construction or operation of this facility and distribution system prior to obtaining all other necessary permits from other program areas within the Department, or required permits from other state, federal, or local agencies.

7. This permit is for CONSTRUCTION ONLY of the distribution system project. This permit shall not infer that the clearance necessary for connection will be granted. Any such clearance shall be granted only when the connection point has been permitted and cleared for use by the Department and the public water system to which the water main extension will be connected, has the capacity necessary to meet the design water demands of all customers to be served by the water main extension. Partial clearance may be granted, if required.

8. If gasoline contamination is found at the construction site, work shall be stopped and the proper authorities notified. With the approval of the Department, ductile iron pipe and fittings, and solvent resistant gaskets materials shall be used in the contaminated area. The ductile pipe shall be used in the contaminated area. The ductile iron pipe shall extend 100 feet beyond any solvent noted. Any contaminated soil that is excavated shall be placed on an impermeable mat, covered with waterproof covering, and held for disposal. <u>If the site cannot be properly cleaned, then consultation with the Department is necessary prior to continuing with the project construction.</u>

9. This permit does not constitute approval of construction on jurisdictional wetland areas; therefore such approval must be obtained separately from the Water Management District or from DEP ERP Section, as applicable, Permittee shall provide a copy of the permit approval to the Department if water main installation involves activities on wetlands.

10. Permittee shall ensure that the well and drinking water treatment facilities will be protected to prevent tampering, vandalism, and sabotage as required by Rule 62-555.315(1) & 62-555.320(5), F.A.C.

C. Construction Standards

1. All products, including paints, which shall come into contact with potable water, either directly or indirectly, shall conform with National Sanitation Foundation (NSF) International, Water Chemicals Codex, Food Chemicals Codex, American Water Works Association (AWWA) Standards and the Food and Drug Administration, as provided in Rule 62-555.320(3), F.A.C.

2. Water supply facilities, including mains, pipe, fittings, valves, fire hydrants and other materials shall be installed in accordance with the latest applicable AWWA Standards and Department rules and regulations. The system shall be pressure and leak tested in accordance with AWWA Standard C600 C603, or C605, as applicable, and disinfected in accordance with AWWA Standard C651-653, as well as in accordance with Rule 62-555.340, F.A.C.

3. The installation or repairs of any public water system, or any plumbing in residential or nonresidential facilities providing water for human consumption, which is connected to a public water system shall be lead free in accordance with Rule 62-555.322, F.A.C.

4. When any existing asbestos cement (AC) pipes are replaced under this permit, the permittee shall do so in accordance with the applicable rules of Federal Asbestos Regulation and Florida DEP requirements. For specific requirements applicable to AC pipes, the permittee should contact the Air and Waste Management section managers prior to commencing any such activities at 813.470.5700. Please be aware that a notification is required to be submitted to the Department for a regulated project.

5. Setback distances between potable water wells and sanitary hazards shall be in accordance with 62-555.312, F.A.C. Reclaimed water land application areas must not be located within the setback distance from potable water supply wells established in Chapter 62-610, F.A.C.

6. Permittee shall maintain vertical clearance and horizontal separation between water mains and sanitary sewers, storm sewers, etc. unless approved otherwise by the Department, as provided in Rule 62-555.314, F.A.C., and Section 8.6 of *Recommended Standards for Water Works*, a manual adopted by reference in Rule 62-555.330(3), F.A.C.

7. The new or altered aboveground piping at the drinking water treatment plant shall be color coded and labeled as recommended in Section 2.14 of "Recommended Standards for Water Works, 1997 Edition". [F.A.C. Rule 62-555.320(10)]

8. Permittee shall ensure that there shall be no cross-connection with any non-potable water source in accordance with Rule 62-555.360, F.A.C.

9. The hydropneumatic tank greater than 120 gallons that will be utilized for this project must meet ASME code requirements for the construction and installation of unfired pressure vessels, as provided in Rule 62-555.320(20), F.A.C., and Section 7.2 of *Recommended Standards for Water Works*, a manual adopted by reference in Rule 62-555.330(3), F.A.C.

D. Operational Requirements

1. The facility has been classified as a Category II, Class B water treatment plant. Accordingly, the lead or chief operator must be Class C or higher. Proof of staffing by a Class C or higher operator for 16 hours/day for 7 days/week must be provided. [F.A.C. Rule 62-699.310]

2. The supplier of water shall operate and maintain the public water system so as to comply with applicable standards in F.A.C. Rule 62-550 and 62-555.350.

3. The permittee shall provide an operation and maintenance manual for the new or altered treatment facilities to fulfill the requirements under subsection 62-555.350(13), F.A.C. The manual shall contain operation and control procedures, and preventative maintenance and repair procedures, for all plant equipment and shall be made available for reference at the plant or at a convenient location near the plant. Bound and indexed equipment manufacturer manuals shall be considered sufficient to meet the requirements of the subsection.

5. The permittee shall have complete record drawings produced for the project in accordance with Rule 62-555.530(4), F.A.C.

6. The permittee or suppliers of water shall telephone the State Warning Point (SWP), at 1-800-320-0519 immediately (i.e., within two hours) after discovery of any actual or suspected sabotage or security breach, or any suspicious incident, involving a public water system in accordance with the F.A.C. Rule 62-555.350(10).

E. Monitoring Provisions

1. Permittee shall follow the guidelines of Chapters 62-550, 62-555, and 62-560, F.A.C., regarding public drinking water system standards, monitoring, reporting, permitting, construction, and operation.

   This facility is a Community Water System as defined in F.A.C. Rule 62-550.200(12) and shall comply with the applicable chemical, radiological, lead and copper, and bacteriological monitoring requirements of F.A.C. Rule 62-550. Such requirements shall be initiated within the quarter that the water treatment facility is placed into service (i.e. January—March or April—June, the preceding are examples of quarters) and the results submitted to the Department.

2. The water treatment plant shall maintain throughout the distribution system a minimum combined chlorine residual of 0.6 mg/l or its equivalent. A minimum system pressure of 20 psi must be maintained throughout the system. Also, safety equipment shall be provided and located outside of chlorine room.

F. Clearance Requirements

1. The permittee must instruct the engineer of record to request system clearance from the Department within sixty (60) days of completion of construction, testing and disinfecting the system. Bacteriological test results shall be considered unacceptable if the test were completed more than 60 days before the Department received the results. [F.A.C. Rule 62-555.340(2)(c)]

   Permitted construction or alteration of a public water system may not be placed into service until a letter of clearance has been issued by this Department. [F.A.C. Rule 62-555.345]

2. Prior to placing this project into service, Permittee shall submit, at a minimum, all of the following to the Department for evaluation and approval for operation, as provided in Rules 62-555.340 and 62-555.345, F.A.C.:

   <u>For Treatment Plant Components:</u>

   a. the engineer's *Certification of Construction Completion and Request for Clearance to Place Permitted PWS Components Into Operation* {DEP Form 62-555.900(9)};
   b. certified record drawings, if there are any changes noted for the permitted project.
   c. copy of a satisfactory pressure test of the process piping performed in accordance with AWWA Standards. [F.A.C. Rule 62-555.320(21)(a)(1)]
   d. two consecutive days of satisfactory distribution bacteriological analytical results.

   <u>For Distribution System Components:</u>

   a. the engineer's *Certification of Construction Completion and Request for Clearance to Place Permitted PWS Components Into Operation* {DEP Form 62-555.900(9)};
   b. certified record drawings, if there are any changes noted for the permitted project.
   c. two consecutive days of satisfactory bacteriological analytical results (see paragraph 3 below).
   d. copy of a satisfactory pressure test of the process piping performed in accordance with AWWA Standards. [F.A.C. Rule 62-555.320(21)(a)(1)]

In order to facilitate the issuance of a letter of clearance, the Department requests that all of the above information be submitted as one package.

3. The new facilities shall be cleaned, disinfected, and bacteriologically cleared in accordance with Chapter 62-555, F.A.C. The bacteriological clearance data representative of the storage tank (two samples on consecutive days), the well discharge piping and distribution system (in accordance with the instructions for Bacteriological Sampling Locations shown below) and the untreated well water (two samples per day for 5 consecutive days collected at least six hours apart for each of the two wells) shall be submitted to the Department with the engineer's certification of construction completion. [Section 62-555.340 and 62-555.315(6)(b), F.A.C.]

   Bacteriological Sampling Locations: Copies of satisfactory bacteriological analyses taken from locations within the distribution system or water main extension to be cleared, in accordance with Rules 62-555.315 (6), 62-555.340 and 62-555.330, F.A.C. and American Water Works Association (AWWA) Standard C 651-92 as follows:

   - Connection to existing system;
   - The endpoint of the proposed addition;
   - Any water lines branching off a main extension;
   - Every 1,200 feet of water main;
   - Each location shall be sampled on two separate days (at least 6 hours apart) with sample point locations and chlorine residual readings **clearly indicated** on the report and/or drawings.
   - Bacteriological sample results will be considered unacceptable if the tests were completed more than 60 days before the Department receives the results.

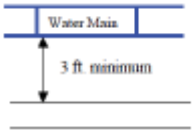
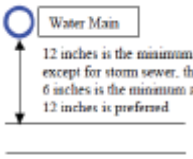
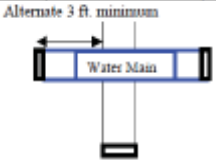
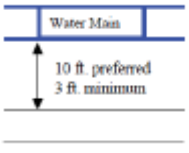
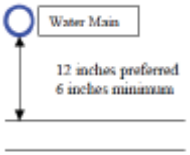
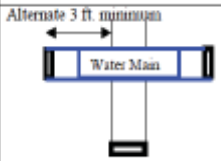
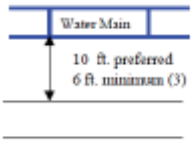
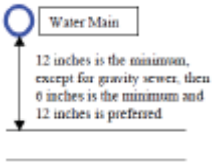
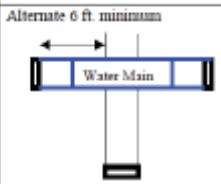
Executed in Hillsborough County, Florida

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION



for Shannon Herbon
Program Administrator
Permitting & Waste Cleanup Program
Southwest District

LOCATION OF PUBLIC WATER SYSTEM MAINS IN ACCORDANCE WITH RULE 62-555.314, F.A.C.

Other Pipe	Horizontal Separation	Crossings (1)	Joint Spacing @ Crossings (Full Joint Centered)
Storm Sewer, Stormwater Force Main, Reclaimed Water (2)			
Vacuum Sanitary Sewer			
Gravity or Pressure Sanitary Sewer, Sanitary Sewer Force Main, Reclaimed Water (4)			
On-Site Sewage Treatment & Disposal System	10 ft. minimum	---	---

(1) Water main should cross above other pipe. When water main must be below other pipe, the minimum separation is 12 inches.

(2) Reclaimed water regulated under Part III of Chapter 62-610, F.A.C.

(3) 3 ft. for gravity sanitary sewer where the bottom of the water main is laid at least 6 inches above the top of the gravity sanitary sewer.

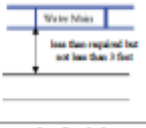
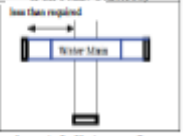
(4) Reclaimed water not regulated under Part III of Chapter 62-610, F.A.C.

EXCEPTIONS TO MINIMUM SEPARATION REQUIREMENTS

Where it is not technically feasible or economically sensible to comply with the requirements of 62-555.314(1) or (2), F.A.C., **the Department shall allow exceptions to these requirements if suppliers of water or construction permit applicants provide technical or economic justification for each exception and provide alternative construction features that afford a similar level of reliability and public health protection.**

Acceptable alternative construction features include the following:

LOCATION OF PUBLIC WATER SYSTEM MAINS IN ACCORDANCE WITH 62-555.314(5)(a), F.A.C.

Other Pipe	Horizontal Separation	Joint Spacing @ Crossings (Full Joint Centered)
Gravity or Pressure Sanitary Sewer, Sanitary Sewer Force Main, Reclaimed Water, Vacuum Sanitary Sewer, Storm Sewer, Stormwater Force Main		

Where an underground water main is being laid **less than the required minimum horizontal distance** from another pipeline and where an underground water main is **crossing another pipeline and joints in the water main are being located less than the required minimum distance from joints in the other pipeline**:

1. Use of pressure-rated pipe conforming to the American Water Works Association standards incorporated into Rule 62-555.330, F.A.C., for the other pipeline if it is a gravity- or vacuum-type pipeline;

2. Use of welded, fused, or otherwise restrained joints for either the water main or the other pipeline; **or**

3. Use of watertight casing pipe or concrete encasement at least four inches thick for either the water main or the other pipeline.

LOCATION OF PUBLIC WATER SYSTEM MAINS IN ACCORDANCE WITH 62-555.314(5)(b), F.A.C.

Other Pipe	Horizontal Separation	Crossings
Gravity or Pressure Sanitary Sewer, Sanitary Sewer Force Main, Reclaimed Water, Vacuum Sanitary Sewer, Storm Sewer, Stormwater Force Main		

Where an underground water main is being laid **less than three feet horizontally** from another pipeline and where an underground water main is **crossing another pipeline and is being laid less than the required minimum vertical distance from the other pipeline**:

Use of pipe, or casing pipe, having high impact strength (i.e., having an impact strength at least equal to that of 0.25-inch-thick ductile iron pipe) or concrete encasement at least four inches thick for both the water main **and** for the other pipeline if it is new and is conveying wastewater or reclaimed water.

Disclaimer – This document is provided for your convenience only. Please refer to Rule 62-555.314, F.A.C., for additional construction requirements.

FLORIDA DEPARTMENT OF Environmental Protection

Southwest District
13051 North Telecom Parkway #101
Temple Terrace, Florida 33637-0926

Ron DeSantis
Governor

Jay Collins
Lt. Governor

Alexis A. Lambert
Secretary

May 14, 2026

City of Wauchula
% Olivia Minshew
126 South 7th Avenue
Wauchula, Florida 33873
ominshew@cityofwauchula.com

File No.: 25-0463797-002-EG, Hardee County

Dear Olivia Minshew,

On April 29th, 2026, we received your notice of intent to use a General Permit (GP), pursuant to Rule 62-330.453, Florida Administrative Code (F.A.C.) to perform an installation of a water transmission line via horizontal directional drill and open-cut trenching within Thompson Branch, a Class III Florida Waterbody. The project starts near 904 West Main Street and ends near 1150 South Florida Avenue, Wauchula, Florida 33873, Section 04, 05, 08, 09, 16, 17, Township 34 South, Range 25 East, Hardee County.

Your intent to use a general permit has been reviewed by Department staff for three types of authorizations: (1) regulatory authorization, (2) proprietary authorization (related to state-owned submerged lands), and (3) federal authorization. The authority for review and the outcomes of the reviews are listed below. Please read each section carefully.

Your project did not qualify for the federal review portion of this verification request. Specifically, the activity is not covered by the State Programmatic General Permit. **Additional authorization must be obtained prior to commencement of the proposed activity**. This letter does not relieve you from the responsibility of obtaining other federal, state, or local authorizations that may be required for the activity. Please refer to the specific section(s) dealing with that portion of the review below for advice on how to proceed.

If you change the project from what you submitted, the authorization(s) granted may no longer be valid at the time of commencement of the project. Please contact us prior to beginning your project if you wish to make any changes.

If you have any questions regarding this matter, please contact Andrea Rengifo via email at Andrea.Rengifo@FloridaDEP.gov.

1. Regulatory Review – Approved

Based on the forms, drawings, and documents submitted with your notice, it appears that the project meets the requirements for the General Permit under Rule 62-330.453, F.A.C. Any activities performed under a general permit are subject to general conditions required in Rule 62-330.405,

F.A.C. (attached), and the specific conditions of Rule 62-330.453, F.A.C. (attached). Any deviations from these conditions may subject the permittee to enforcement action and possible penalties.

Please be advised that the construction phase of the GP must be completed within five years from the date the notice to use the GP was received by the Department. If you wish to continue this GP beyond the expiration date, you must notify the Department at least 30 days before its expiration.

Authority for review- Part IV of Chapter 373, F.S., Title 62, F.A.C. and in accordance with the operating agreements executed between the Department and the water management districts, as referenced in Chapter 62-113, F.A.C.

2. Proprietary Review – Not Required

The activity does not appear to be located on sovereign submerged lands, and does not require further authorization under Chapter 253 of the Florida Statutes, or Chapters 18-20 or 18-21 of the Florida Administrative Code.

3. Federal Review

3.1 SPGP - Not Approved

Your proposed activity as outlined in your application and attached drawings **does not qualify** for Federal authorization pursuant to the State Programmatic General Permit VI-R1. **SEPARATE permit(s)** or authorization **will be required** from the U.S. Army Corps of Engineers.

Authority for review - an agreement with the USACOE entitled "Coordination Agreement Between the U. S. Army Corps of Engineers (Jacksonville District) and the Florida Department of Environmental Protection (or Duly Authorized Designee), State Programmatic General Permit", Section 10 of the Rivers and Harbor Act of 1899, and Section 404 of the Clean Water Act.

3.2. Water Quality Certification Granted With Conditions

This permit also constitutes a *granted with conditions* water quality certification under Section 401 of the Clean Water Act, 33 U.S.C. Section 1341. Pursuant to Rule 62-330.062, F.A.C. State Water Quality Certification is granted when an activity meets all the terms and conditions of a general permit under Rule 62-330.052, F.A.C., and the applicable Rules 62-330.401 through 62-330.635, F.A.C.

Additional Information

Please retain this letter. The activities may be inspected by authorized state personnel in the future to ensure compliance with appropriate statutes and administrative codes. If the activities are not in compliance, you may be subject to penalties under Chapter 373, F.S., and Chapter 18-14, F.A.C.

NOTICE OF RIGHTS

This action is final and effective on the date filed with the Clerk of the Department unless a petition for an administrative hearing is timely filed under Sections 120.569 and 120.57, F.S., before the

deadline for filing a petition. On the filing of a timely and sufficient petition, this action will not be final and effective until further order of the Department. Because the administrative hearing process is designed to formulate final agency action, the hearing process may result in a modification of the agency action or even denial of the application.

Petition for Administrative Hearing

A person whose substantial interests are affected by the Department's action may petition for an administrative proceeding (hearing) under Sections 120.569 and 120.57, F.S. Pursuant to Rules 28-106.201 and 28-106.301, F.A.C., a petition for an administrative hearing must contain the following information:

(a) The name and address of each agency affected and each agency's file or identification number, if known;
(b) The name, address, any e-mail address, any facsimile number, and telephone number of the petitioner, if the petitioner is not represented by an attorney or a qualified representative; the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination;
(c) A statement of when and how the petitioner received notice of the agency decision;
(d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate;
(e) A concise statement of the ultimate facts alleged, including the specific facts that the petitioner contends warrant reversal or modification of the agency's proposed action;
(f) A statement of the specific rules or statutes that the petitioner contends require reversal or modification of the agency's proposed action, including an explanation of how the alleged facts relate to the specific rules or statutes; and
(g) A statement of the relief sought by the petitioner, stating precisely the action that the petitioner wishes the agency to take with respect to the agency's proposed action.

The petition must be filed (received by the Clerk) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, or via electronic correspondence at Agency_Clerk@dep.state.fl.us. Also, a copy of the petition shall be mailed to the applicant at the address indicated above at the time of filing.

Time Period for Filing a Petition

In accordance with Rule 62-110.106(3), F.A.C., petitions for an administrative hearing by the applicant and persons entitled to written notice under Section 120.60(3), F.S., must be filed within 21 days of receipt of this written notice. Petitions filed by any persons other than the applicant, and other than those entitled to written notice under Section 120.60(3), F.S., must be filed within 21 days of publication of the notice or within 21 days of receipt of the written notice, whichever occurs first. You cannot justifiably rely on the finality of this decision unless notice of this decision and the right of substantially affected persons to challenge this decision has been duly published or otherwise provided to all persons substantially affected by the decision. While you are not required to publish notice of this action, you may elect to do so pursuant Rule 62-110.106(10)(a).

The failure to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and

120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention (in a proceeding initiated by another party) will be only at the discretion of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C. If you do not publish notice of this action, this waiver will not apply to persons who have not received written notice of this action.

Extension of Time
Under Rule 62-110.106(4), F.A.C., a person whose substantial interests are affected by the Department's action may also request an extension of time to file a petition for an administrative hearing. The Department may, for good cause shown, grant the request for an extension of time. Requests for extension of time must be filed with the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, or via electronic correspondence at Agency_Clerk@dep.state.fl.us, before the deadline for filing a petition for an administrative hearing. A timely request for extension of time shall toll the running of the time period for filing a petition until the request is acted upon.

Mediation
Mediation is not available in this proceeding.

FLAWAC Review
The applicant, or any party within the meaning of Section 373.114(1)(a) or 373.4275, F.S., may also seek appellate review of this order before the Land and Water Adjudicatory Commission under Section 373.114(1) or 373.4275, F.S. Requests for review before the Land and Water Adjudicatory Commission must be filed with the Secretary of the Commission and served on the Department within 20 days from the date when the order is filed with the Clerk of the Department.

Judicial Review
Once this decision becomes final, any party to this action has the right to seek judicial review pursuant to Section 120.68, F.S., by filing a Notice of Appeal pursuant to Florida Rules of Appellate Procedure 9.110 and 9.190 with the Clerk of the Department in the Office of General Counsel (Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000) and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate district court of appeal. The notice must be filed within 30 days from the date this action is filed with the Clerk of the Department.

EXECUTION AND CLERKING

Executed in Hillsborough County, Florida.
STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Sincerely,



Sarah McWilliams
Environmental Manager
Permitting & Waste Cleanup Program
Southwest District

Enclosures:
62-330.453, F.A.C.
General Conditions for All General Permits, Ch. 62-330.405, F.A.C.

Attachments:
Project Plans Part 1, 21 pages
Project Plans Part 2, 20 pages
Project Plans Part 3, 20 pages

cc:
Andrea Rengifo, Southwest District, Andrea.Rengifo@FloridaDEP.gov
ERP Permitting, Southwest District, sw_erp@floridadep.gov
Craig Stout, Consultant, cstout@esassoc.com

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this document and all attachments were sent on the filing date below to the above listed persons.

FILING AND ACKNOWLEDGMENT

FILED, on this date, pursuant to 120.52(7), F.S., with the designated Department Clerk, receipt of which is hereby acknowledged.

Clerk  Date May 14, 2026

62-330.453 General Permit for Installation, Maintenance, Repair, and Removal of Utility Lines.

(1) A general permit is granted for the installation, maintenance, repair, and removal of underground utility lines, cable, conduit, or pipeline transmitting electricity, communication signals, potable water, raw water, reclaimed water, domestic wastewater, propane gas or natural gas.

(2) For the purposes of this general permit:

(a) "Directional drilling" means the linear or curvilinear excavation of a tunnel or conduit, in any direction, through the use of drilling equipment that can change direction during excavation; this also includes borehole reaming and pulling following primary drilling.

(b) "Jack-and-bore" means the linear, primarily lateral excavation of a tunnel, typically between excavated subgrade pits, through use of drilling equipment and encasement which is advanced under mechanical force, and includes similar methods commonly termed as "microtunneling."

(c) "Frac-out" means any release of drilling fluid or slurry which results in above-grade discharge of drilling fluid or slurry or significant loss of such fluid or slurry into the surrounding parent material.

(3) This general permit is limited as follows:

(a) No work occurs within Outstanding Florida Waters, Aquatic Preserves, or Class I waters.

(b) The installation of conduit or pipeline to drain wetlands or other surface waters is not authorized.

(c) Prior to work, existing pipelines shall be evacuated of substances which, if released, could result in a violation of state water quality standards.

(d) The maximum width of the disturbed corridor in wetlands shall not exceed 30 feet.

(e) The total area of forested wetland disturbance shall not exceed 0.5 acre per ten miles of cable, conduit, or pipeline.

(f) Minor above-grade improvements may be constructed in uplands under this general permit, but shall be limited to vents, valves, meter assemblies, relays, junction boxes, pads or similar structures that are directly connected to the utility line, do not create discharges, and which cumulatively comprise no more than 100 square feet of impervious surfaces per mile of utility line.

(g) Installation, maintenance, repair, and removal activities performed via trenching or methods other than directional drilling or jack-and-bore, are subject to the following special conditions:

1. The maximum width of the excavated trench shall not exceed eight feet, with temporary spoil storage banks not to exceed ten feet in width;

2. For a trench with a top width greater than three feet in herbaceous wetlands, the upper layer of the soil horizon shall initially be scraped and segregated into a spoil bank that is separated from the spoil bank resulting from the excavation of the trench for the utility line. The upper layer of the soil horizon shall be replaced as the last step of restored grades to facilitate natural revegetation;

3. Trenching in surface waters shall be limited to wetlands, artificial waters, and residential canal systems; and

4. Temporary spoil banks shall contain breaches that prevent impoundment or restriction of surface water flows;

(h) Installation, maintenance, repair, and removal conducted using directional drilling or jack-and-bore methods are subject to the following special conditions:

1. The maximum outside diameter of the cable, conduit or pipeline, including encasement, shall not exceed 30 inches.

2. A minimum depth of cover, equal to the greater of either five feet, or five times the maximum encased diameter of the utility line to be installed, shall be maintained between the top of the utility line and casing and the soil surface or submerged bottom of any wetland or waterbody being crossed.

3. All work areas associated with directional drilling or jack-and-bore activities, including

entrance and exit pits, drill rigs, tanks, pumps, drilling fluid mixing and settling pits, dewatering systems and staging areas for pipe, cables, and drill string, shall be located within uplands.

4. The use of drilling fluids shall not cause or contribute to a violation of state ground water quality criteria or standards, as defined in Chapter 62-520, F.A.C.

5. The permittee shall, at least 48 hours prior to commencement of any directional drilling or jack-and-bore activities, submit to the agency the name, as registered with the Florida Department of State, and all-hours telephone contact information of all contractors responsible for drilling and for containment and cleanup in the event of a drilling fluid frac-out or spill.

6. The contractor shall, at all times during directional drilling activities, maintain appropriate equipment and materials in a readily-accessible location and condition, to effectively contain and clean up a drilling fluid frac-out or spill.

7. The permittee or the permittee's contractor shall, at all times during directional drilling activities, ensure that appropriately-trained personnel monitor downhole equipment position, drilling fluid circulation and pressures, and actively monitor the entire utility line route for surface frac-out of drilling fluids.

8. Drilling activities shall be discontinued and the drilling fluid or slurry shall be contained using appropriate methods as soon as possible, in the event of a drilling fluid frac-out or spill. Removal of drilling fluid or slurry from wetlands and other surface waters shall be initiated and completed in the most expeditious manner practicable. Removed drilling fluid shall be contained or disposed of in an appropriate upland location. Any frac-out or spill of drilling fluid into wetlands or other surface waters shall be reported to Agency staff within 24 hours following detection of the spill or frac-out.

(i) Utilities must be located a minimum of 14 feet below the authorized depth of a federal navigation channel.

Rulemaking Authority 373.026(7), 373.043, 373.118(1), 373.406(5), 373.4131, 373.414(9), 373.418, 403.805(1) FS. Law Implemented 373.118(1), 373.406(5), 373.413, 373.4131, 373.414(9), 373.416, 373.418, 403.814(1) FS. History–New 10-3-95, Formerly 62-341.453, Amended 10-1-13, 6-1-18.

62-330.405 General Conditions for All General Permits

The following general permit conditions are binding upon the permittee and are enforceable under chapter 373, F.S. These conditions do not apply to the general permit for stormwater management systems under section 403.814(12), F.S.

(1) The general permit is valid only for the specific activity indicated. Any deviation from the specified activity and the conditions for undertaking that activity shall constitute a violation of the permit and may subject the permittee to enforcement action and revocation of the permit under chapter 373, F.S.

(2) The general permit does not eliminate the necessity to obtain any required federal, state, local and special district authorizations prior to the start of any construction, alteration, operation, maintenance, removal or abandonment authorized by this permit; and it does not authorize any violation of any other applicable federal, state, local, or special district laws (including, but not limited to, those governing the "take" of listed species).

(3) The general permit does not convey to the permittee or create in the permittee any property right, or any interest in real property, nor does it authorize any entrance upon or activities on property which is not owned or controlled by the permittee, or convey any rights or privileges other than those specified in the general permit.

(4) The general permit does not relieve the permittee from liability and penalties when the permitted activity causes harm or injury to: human health or welfare; animal, plant or aquatic life; or property. It does not allow the permittee to cause pollution that violates state water quality standards.

(5) Section 253.77, F.S., provides that a person may not commence any excavation, construction, or other activity involving the use of state-owned or other lands of the state, the title to which is vested in the Board of Trustees of the Internal Improvement Trust Fund without obtaining the required consent, lease, easement, or other form of authorization authorizing the proposed use. Therefore, the permittee is responsible for obtaining any necessary authorizations from the Board of Trustees prior to commencing activity on state-owned lands.

(6) The authorization to conduct activities under a general permit may be modified, suspended or revoked in accordance with chapter 120, F.S., and section 373.429, F.S.

(7) The general permit is not transferable to a new third party. To be used by a different permittee, a new notice to use a general permit must be submitted in accordance with rule 62-330.402, F.A.C. Activities constructed in accordance with the terms and conditions of a general permit are automatically authorized to be operated and maintained by the permittee and subsequent owners in accordance with subsection 62-330.340(1), F.A.C. Any person holding the general permit, persons working under the general permit, and owners of land while work is conducted under the general permit shall remain liable for any corrective actions that may be required as a result of any permit violations prior to sale, conveyance, or other transfer of ownership or control of the permitted project, activity, or the real property at which the permitted project or activity is located.

(8) Upon reasonable notice to the permittee, Agency staff with proper identification shall have permission to enter, inspect, sample and test the permitted system to ensure conformity with the plans and specifications approved by the general permit.

(9) The permittee shall maintain any permitted project or activity in accordance with the plans submitted to the Agency and authorized in the general permit.

(10) A permittee's right to conduct a specific activity under the general permit is authorized for a duration of five years.

(11) Activities shall be conducted in a manner that does not cause or contribute to violations of state water quality standards. Performance-based erosion and sediment control best management practices shall be implemented and maintained immediately prior to, during, and after construction as needed to stabilize all disturbed areas, including other measures specified in the permit to prevent adverse impacts to the water resources and adjacent lands. Erosion and sediment control measures shall be installed and maintained in accordance with the *State of Florida Erosion and Sediment Control Designer and Reviewer Manual (Florida Department of Environmental Protection and Florida Department of Transportation, June 2007)*, available at https://www.flrules.org/Gateway/reference.asp?No=Ref-04227, and the *Florida Stormwater Erosion and Sedimentation Control Inspector's Manual (Florida Department of Environmental Protection, Nonpoint Source Management Section, Tallahassee, Florida, July 2008)*, available at http://publicfiles.dep.state.fl.us/DEAR/Stormwater_Training_Docs/erosion-inspectors-manual.pdf.

(12) Unless otherwise specified in the general permit, temporary vehicular access within wetlands during construction shall be performed using vehicles generating minimum ground pressure to minimize rutting and other environmental impacts. Within forested wetlands, the permittee shall choose alignments that minimize the destruction of mature wetland trees to the greatest extent practicable. When needed to prevent rutting or soil compaction, access vehicles shall be operated on wooden, composite, metal, or other non-earthen construction mats. In all cases, access in wetlands shall comply with the following:

(a) Access within forested wetlands shall not include the cutting or clearing of any native wetland tree having a diameter four inches or greater at breast height;

(b) The maximum width of the construction access area shall be limited to 15 feet;

(c) All mats shall be removed as soon as practicable after equipment has completed passage through, or work has been completed, at any location along the alignment of the project, but in no case longer than seven days after equipment has completed work or passage through that location; and

(d) Areas disturbed for access shall be restored to natural grades immediately after the maintenance or repair is completed.

(13) Barges or other work vessels used to conduct in-water activities shall be operated in a manner that prevents unauthorized dredging, water quality violations, and damage to submerged aquatic communities.

(14) The construction, alteration, or use of the authorized project shall not adversely impede navigation or create a navigational hazard in the water body.

(15) Except where specifically authorized in the general permit, activities must not:

(a) Impound or obstruct existing water flow, cause adverse impacts to existing surface water storage and conveyance capabilities, or otherwise cause adverse water quantity or flooding impacts to receiving water and adjacent lands; or

(b) Cause an adverse impact to the maintenance of surface or ground water levels or surface water flows established pursuant to section 373.042, F.S., or a Works of the District established pursuant to section 373.086, F.S.

(16) If prehistoric or historic artifacts, such as pottery or ceramics, projectile points, stone tools, dugout canoes, metal implements, historic building materials, or any other physical remains that could be associated with Native American, early European, or American settlement are encountered at any time within the project site area, the permitted project shall cease all activities involving subsurface disturbance in the vicinity of the discovery. The permittee or other designee shall contact the Florida Department of State, Division of Historical Resources, Compliance Review Section (DHR), at (850)245-6333, as well as the appropriate permitting agency office. Project activities shall not resume without verbal or written authorization from the Division of Historical Resources. If unmarked human remains are encountered, all work shall stop immediately and the proper authorities notified in accordance with section 872.05, F.S.

(17) The activity must be capable, based on generally accepted engineering and scientific principles, of being performed and of functioning as proposed, and must comply with any applicable District special basin and geographic area criteria.

(18) The permittee shall comply with the following when performing work within waters accessible to federally- or state-listed aquatic species, such as manatees, marine turtles, smalltooth sawfish, and Gulf sturgeon:

(a) All vessels associated with the project shall operate at “Idle Speed/No Wake” at all times while in the work area and where the draft of the vessels provides less than a four-foot clearance from the bottom. All vessels will follow routes of deep water whenever possible.

(b) All deployed siltation or turbidity barriers shall be properly secured, monitored, and maintained to prevent entanglement or entrapment of listed species.

(c) All in-water activities, including vessel operation, must be shut down if a listed species comes within 50 feet of the work area. Activities shall not resume until the animal(s) has moved beyond a 50-foot radius of the in-water work, or until 30 minutes elapses since the last sighting within 50 feet. Animals must not be herded away or harassed into leaving. All onsite project personnel are responsible for observing water-related activities for the presence of listed species.

(d) Any listed species that is killed or injured by work associated with activities performed shall be reported immediately to the Florida Fish and Wildlife Conservation Commission (FWC) Hotline at 1(888)404-3922 and ImperiledSpecies@myFWC.com.

(e) Whenever there is a spill or frac-out of drilling fluid into waters accessible to the above species during a directional drilling operation, the FWC shall be notified at ImperiledSpecies@myfwc.com with details of the event within 24 hours following detection of the spill or frac-out.

(19) The permittee shall hold and save the Agency harmless from any and all damages, claims, or liabilities which may arise by reason of the construction, alteration, operation, maintenance, removal, abandonment or use of any activity authorized by the general permit.

(20) The permittee shall immediately notify the Agency in writing of any submitted information that is discovered to be inaccurate.

Rulemaking Authority 373.026(7), 373.043, 373.118(1), 373.406(5), 373.4131, 373.414(9), 373.4145, 373.418, 403.805(1) FS. Law Implemented 373.044, 373.118(1), 373.129, 373.136, 373.406(5), 373.413, 373.4131, 373.414(9), 373.4145, 373.416, 373.422, 373.423, 373.429, 403.814(1) FS. History–New 10-3-95, Amended 10-1-07, Formerly 62-341.215, Amended 10-1-13, 6-1-18.

· Call 48 hrs prior to starting work. $0
· Call after work is completed in row.

HARDEE COUNTY
PUBLIC WORKS DIVISION / COUNTY ENGINEER
IRRIGATION, UTILITY, TRACTOR, AND DRAGLINE CROSSING
RIGHT-OF-WAY USE PERMIT APPLICATION

-Tara Holton (863)857-7979

DATE: 10/02/2025 PERMIT NUMBER: 26-53
COUNTY ROAD NAME: Main Street, Florida Ave.
LOCATION: Main St between Illinois Ave & Altman Rd., Crossing Altman Rd. along Main St.
SECTION: 4, 5, 8, 9, 16, 17 TOWNSHIP: 34S RANGE: 25E

I, Olivia Minshew, hereinafter referred to as the "Permittee", hereby request permission from Hardee County, Florida, hereinafter called the County, to construct, operate, and/or maintain a(an) 12-inch diameter water main, over ____; under Altman Rd, Doyle Carlton Rd, Florida Ave; and/or along Main Street, Altman Rd, Florida Ave, the above County road rights-of-way.

1. The Permittee declares: That prior to filing this application, he/she has determined the location of all existing utilities both above ground and underground.
2. The following utilities/municipalities have been notified of the proposed project: City of Wauchula, Peace River Electric, TECO Peoples Gas, Comcast, Century Link
3. This permit is for permissive use only and the placing of facilities upon public road right-of-way shall not create or vest any property rights to said Permittee.
4. Whenever necessary for construction, repair, improvement, maintenance, and safe efficient operation, alteration, or relocation of the County road by Hardee County, as determined by the County Engineer or his designee, any or all poles, wires, pipes, cables, or other facilities authorized hereunder shall be removed for reset or relocated as required by the County Engineer or his designee, and at the expense of the Permittee.
5. All materials, equipment and work shall be subject to inspection by the County Engineer or his designated representative.
6. All installations shall conform to "Hardee County Resolution No.01-09."
7. The attached sketch, detailed plans and supporting information on the installation shall become part of this Permit.
8. All Hardee County property shall be restored to its original condition; as far as practical and in keeping with County Specifications.
9. It is understood and agreed that the permit herein granted is only to the extent of the County's right, title, and interest in the land to be entered upon and used by the Permittee, and the Permittee will, at all times assume all risks of construction and shall indemnify, defend, and hold harmless Hardee County employees and assignees from and against any and all loss, damage, cost or expense arising in any manner on account of the exercise or attempted exercise by the Permittee of the aforesaid rights and privileges.
10. The Hardee County Public Works Division shall be notified forty-eight (48) hours prior to the start of the project in writing to Tara Holton, Road & Bridge or by phone no. 863-773-3272.
11. In case of non-compliance with Hardee County's requirements, this permit is void and the facilities shall be brought into compliance or removed from Hardee County's rights-of-way.
12. A non-refundable processing fee of two hundred twenty-five dollars ($225.00) shall be charged for this application.
13. This permit shall be effective on the approval date indicated and expires in ninety (90) days.
14. The permittee shall be responsible for restoration of all disturbed areas.
15. Permittee shall comply with all applicable federal, county and local codes and regulations.

The Permittee hereby certifies that he/she understands and will comply with the above conditions.

Submitted By: Olivia Minshew Date: 4/28/26

Approved By: Tara Holton Date: 4/28/26

Expires: 7/28/26

DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, JACKSONVILLE DISTRICT
701 SAN MARCO BOULEVARD
JACKSONVILLE, FLORIDA 32207

March 31, 2026

Regulatory Division
West Permits Branch
Tampa Section
SAJ-2025-02575(NWP-JLA)

City of Wauchula
Attn: Olivia Minshew
126 South 7th Avenue
Wauchula, Florida 33873
Sent via email: Ominshew@cityofwauchula.com

Dear Olivia Minshew:

The U.S. Army Corps of Engineers (Corps) has completed the review of your application for a Department of the Army permit received on September 11, 2025. Your application was assigned file number SAJ-2025-02575. A review of the information and drawings provided indicates that the proposed work would result in placement of 95-linear feet of a new 12-inch PVC water main via an 8-foot wide open trench and fill (761 square feet/138 cubic yards of fill) under a vegetated ditch/swale. The activities subject to this permit are authorized pursuant to authorities under Section 404 of the Clean Water Act (33 U.S.C. § 1344). The project is located within an unnamed linear wetland (drainage ditch) east of Rodeo Drive, Section 8, Township 34 South, Range 25 East, Wauchula, Hardee County, Florida. Center coordinates: Latitude: 27.53388º N, Longitude: -81.83748º W.

Your project, as depicted on the enclosed drawings, is authorized by Nationwide Permit (NWP) 58 (Utility Line Activities for Water and Other Substances). **This verification is valid until March 15, 2031.** In order for this NWP authorization to be valid, you must ensure that the work is performed in accordance with the Nationwide Permit general conditions, the Jacksonville District regional conditions, and the general and project-specific special conditions listed below. Furthermore, if you commence or are under contract to commence this activity before the date that the relevant NWP expires or is modified or revoked, you will have 12 months from the date of expiration, modification or revocation of the NWP to complete the activity under the present terms and conditions of this NWP. You can access the U.S. Army Corps of Engineers' (Corps) Jacksonville District's Regulatory web page for links to view NWP information at: https://www.sad.usace.army.mil/Missions/Regulatory/Florida/. Please be aware this Internet address is case sensitive and should be entered as it appears above. Once there, select “Permitting,” then “Nationwide Permits” for links to the federal register

containing the text of the 2026 NWPs and the associated NWP general conditions, as well as separate links to the Jacksonville District regional conditions.

General Conditions:

1. The time limit for completing the work authorized ends on **March 15, 2031**.

2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity, or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.

3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort of if the site is eligible for listing in the National Register of Historic Places.

4. If you sell the property associated with this permit you must obtain the signature of the new owner on the attached transfer form (Attachment 1) and forward a copy to this office to validate the transfer of this authorization.

5. You must allow a representative from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

Project Specific Special Conditions:

The following project specific special conditions are included with this verification:

1. **Reporting Address:** The Permittee shall submit all reports, notifications, documentation, and correspondence required by the general and special conditions of this permit to either (not both) of the following addresses:
   a. For electronic mail (preferred): SAJ-RD-Enforcement@usace.army.mil (not to exceed 15 MB).
   b. For standard mail: U.S. Army Corps of Engineers, Regulatory Division, Enforcement Section, P.O. Box 4970, Jacksonville, FL 32232-0019.

   The Permittee shall reference this permit numbers, SAJ-2025-02475 (NW-JLA) on all submittals.

2. **As-Built Certification with X-Y-Z Coordinates:** Within 60 days of completion of the work authorized by this permit, the Permittee shall submit as-built drawings of the authorized work and a completed "As-Built Certification by Professional Engineer or Surveyor" form (Attachment 3) to the Corps. The as-built drawings shall be signed and sealed by a registered professional engineer or surveyor and include the following:
   a. A plan view drawing of the location of the authorized work footprint (as shown on the permit drawings) on 8½-inch by 11-inch paper. The drawings shall include the X Y & Z State Plane coordination points of the object above the channel as it enters and exits the design edges of the authorized width of the channel, plus a minimum of 25 feet outside the channel edges.
   b. A list of any deviations between the work authorized by this permit and the work as constructed. In the event that the completed work deviates, in any manner, from the authorized work, describe on the attached "As-Built Certification by Professional Engineer" form the deviations between the work authorized by this permit and the work as constructed. Clearly indicate on the as-built drawings any deviations that have been listed. Please note that the depiction and/or description of any deviations on the drawings and/or "As-Built Certification by Professional Engineer" form does not constitute approval of any deviations by the Corps.
   c. The Department of the Army permit number on all sheets submitted.

3. **Cultural Resources/Historic Properties:**
   a. No structure or work shall adversely affect, impact, or disturb properties listed in the National Register of Historic Places (NRHP), or those eligible for inclusion in the NRHP.
   b. If, during permitted activities, items that may have historic or archaeological origin are observed the Permittee shall immediately cease all activities adjacent to the discovery that may result in the destruction of these resources and shall prevent his/her employees from further removing, or otherwise damaging, such resources. The applicant shall notify both the Florida Department of State, Division of Historical Resources, Compliance Review Section at (850)-245-6333 and the Corps, of the observations within the same business day (8 hours). Examples of submerged historical, archaeological or cultural resources include shipwrecks, shipwreck debris fields (such as steam engine parts, or wood planks and beams), anchors, ballast rock, concreted iron objects, concentrations of coal, prehistoric watercraft (such as log "dugouts"), and other evidence of human activity. The materials may be deeply buried in sediment, resting in shallow sediments or above them, or protruding into water. The Corps shall coordinate with the Florida State Historic Preservation Officer (SHPO) to assess the significance of the discovery and devise appropriate actions. Project activities shall not resume without verbal and/or written authorization from the Corps.

c. Additional cultural resources assessments may be required of the permit area in the case of unanticipated discoveries as referenced in accordance with the above Special Condition and, if deemed necessary by the SHPO or Corps, in accordance with 36 CFR 800 or 33 CFR 325, Appendix C (5). Based on the circumstances of the discovery, equity to all parties, and considerations of the public interest, the Corps may modify, suspend, or revoke the permit in accordance with 33 CFR Part 325.7. Such activity shall not resume on non-federal lands without written authorization from the SHPO for finds under his or her jurisdiction, and from the Corps.
d. In the unlikely event that unmarked human remains are identified on non-federal lands; they will be treated in accordance with Section 872.05 Florida Statutes. All work and ground disturbing activities within a 100-meter diameter of the unmarked human remains shall immediately cease and the Permittee shall immediately notify the medical examiner, Corps, and State Archaeologist within the same business day (8-hours). The Corps shall then notify the appropriate SHPO. Based on the circumstances of the discovery, equity to all parties, and considerations of the public interest, the Corps may modify, suspend, or revoke the permit in accordance with 33 CFR Part 325.7. Such activity shall not resume without written authorization from the SHPO and from the Corps.

4. **Eastern Indigo Snake Protection Measures and Inspection:** Permittee shall comply with U.S. Fish and Wildlife Service's "Standard Protection Measures for the Eastern Indigo Snake" dated May 2024, as provided in Attachment 4 of this permit. All gopher tortoise burrows, active or inactive, shall be evacuated prior to site manipulation in the vicinity of the burrow. If excavating potentially occupied burrows, active or inactive, individuals must first obtain state authorization via a Florida Fish and Wildlife Conservation Commission (FWC) Authorized Gopher Tortoise Agent permit. The excavation method selected shall minimize the potential for injury of an indigo snake. The Permittee shall follow the excavation guidance provided in the most current FWC Gopher Tortoise Permitting Guidelines found at http://myfwc.com/gophertortoise. If an indigo snake is encountered, the snake must be allowed to vacate the area prior to additional site manipulation in the vicinity. Holes, cavities, and snake refugia other than gopher tortoise burrows shall be inspected each morning before planned site manipulation of a particular area, and if occupied by an indigo snake, no work shall commence until the snake has vacated the vicinity of the proposed work.

5. **Erosion Control**: Prior to the initiation of any work authorized by this permit, the Permittee shall install erosion control measures along the perimeter of all work areas to prevent the displacement of fill material outside the work area into waters of the United States. The erosion control measures shall remain in place and be maintained until all authorized work is completed and the work areas are stabilized.

6. **Sidecast Material:** Material resulting from trench excavation may be temporarily sidecast (up to three months) into waters of the United States, provided that the material is not placed in such a manner that it is dispersed by currents or other forces. The top 6-12 inches of the trench shall only be backfilled with topsoil from the trench. Furthermore, the trench cannot be constructed in such a manner as to drain waters of the United States (e.g., backfilling with extensive gravel layers, creating a French drain effect). Any exposed slopes and stream banks must be stabilized immediately upon completion of the utility line crossing of each waterbody.

7. **Notification of Unmarked Utilities:** No work shall be performed until after the permittee provides notification to the owner(s) or operator(s) of any marked utilities in the work area, unless the permittee is the same entity as the owner(s) or operator(s).

8. **Fill Material:** The Permittee shall use only clean fill material for this project. The fill material shall be free from items such as trash, debris, automotive parts, asphalt, construction materials, concrete block with exposed reinforcement bars, and soils contaminated with any toxic substance in toxic amounts, in accordance with Section 307 of the Clean Water Act.

9. **Posting of Permit:** The Permittee shall have available and maintain for review a copy of this permit and approved plans at the construction site.

This letter of authorization does not include conditions that would prevent the 'take' of a state-listed fish or wildlife species. These species are protected under sec. 379.411, Florida Statutes, and listed under Rule 68A-27, Florida Administrative Code. With regard to fish and wildlife species designated as species of special concern or threatened by the State of Florida, you are responsible for coordinating directly with the Florida Fish and Wildlife Conservation Commission (FWC). You can visit the FWC license and permitting webpage (http://www.myfwc.com/license/wildlife/) for more information, including a list of those fish and wildlife species designated as species of special concern or threatened. The Florida Natural Areas Inventory (http://www.fnai.org/) also maintains updated lists, by county, of documented occurrences of those species.

This letter of authorization does not give absolute Federal authority to perform the work as specified on your application. The proposed work may be subject to local building restrictions mandated by the National Flood Insurance Program. You should contact your local office that issues building permits to determine if your site is located in a flood-prone area, and if you must comply with the local building requirements mandated by the National Flood Insurance Program.

This letter of authorization does not preclude the necessity to obtain any other Federal, State, or local permits which may be required.

Thank you for your cooperation with our permit program. The Corps' Jacksonville District Regulatory Division is committed to improving service to our customers. We strive to perform our duty in a friendly and timely manner while working to preserve our environment. We invite you to complete our automated Customer Service Survey at https://regulatory.ops.usace.army.mil/customer-service-survey/. Please be aware this Internet address is case sensitive and you will need to enter it exactly as it appears above. Your input is appreciated – favorable or otherwise.

Should you have any questions related to this NWP verification or have issues accessing the documents referenced in this letter, please contact Jennifer L. Alexander at the Tampa Permits Section at 10117 Princess Palm Avenue, Suite 120, Tampa, Florida 33610, by telephone at 813-769-7076, or by email at Jennifer.L.Alexander@usace.army.mil.

Sincerely,

Jennifer L Alexander

Jennifer L. Alexander
Project Manager

Enclosures
1. Transfer Form
2. Drawings
3. As-Built Certification Form
4. Standard Protection Measures for the Eastern Indigo Snake

Cc:
Agent – Craig Stout CStout@esassoc.com

DEPARTMENT OF THE ARMY PERMIT TRANSFER REQUEST

DA PERMIT NUMBER: SAJ-2026-02575(NWP-JLA)

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. Although the construction period for works authorized by Department of the Army permits is finite, the permit itself, with its limitations, does not expire.

To validate the transfer of this permit and the associated responsibilities associated with compliance with its terms and conditions, have the transferee sign and date below and mail to the U.S. Army Corps of Engineers, Enforcement Section, Post Office Box 4970, Jacksonville, FL 32232-0019 or submit via electronic mail to: SAJ-RD-Enforcement@usace.army.mil (not to exceed 15 MB).

_____
(TRANSFEREE-SIGNATURE)

_____
(DATE)

_____
(NAME-PRINTED)

_____

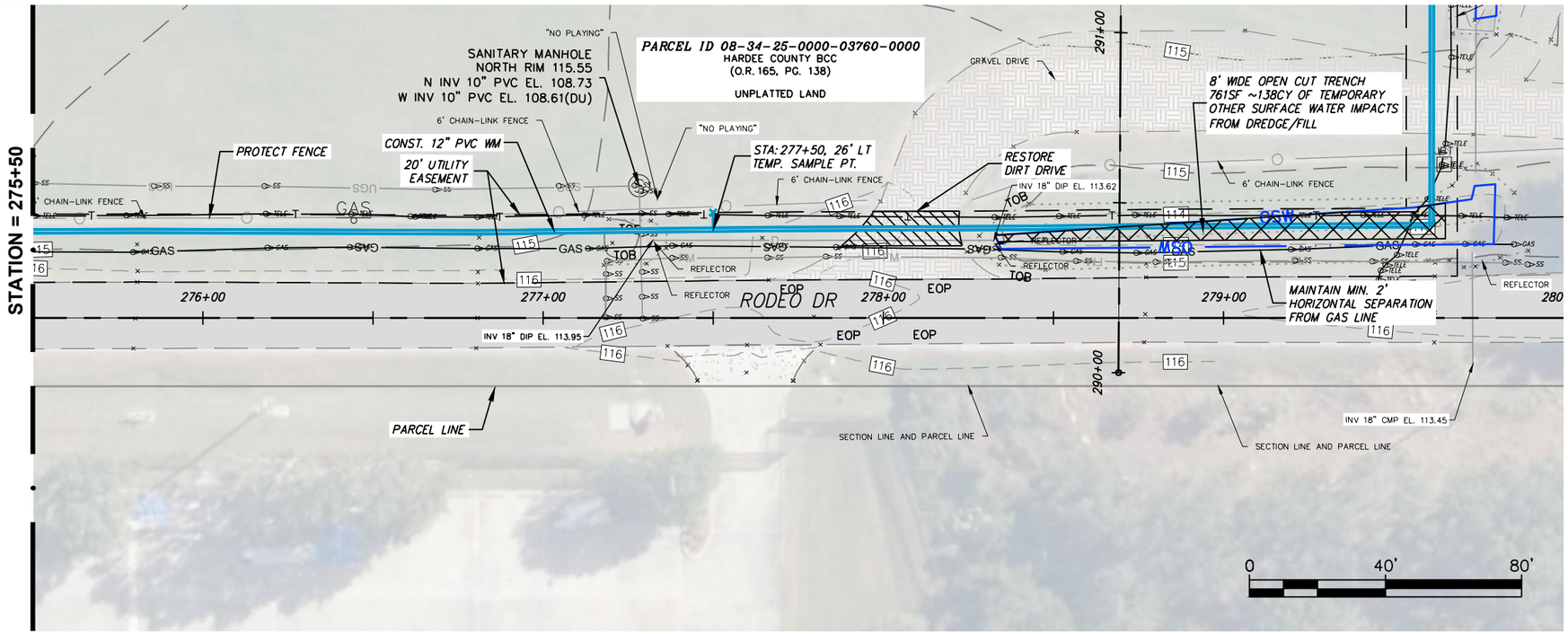
_____
(MAILING ADDRESS)

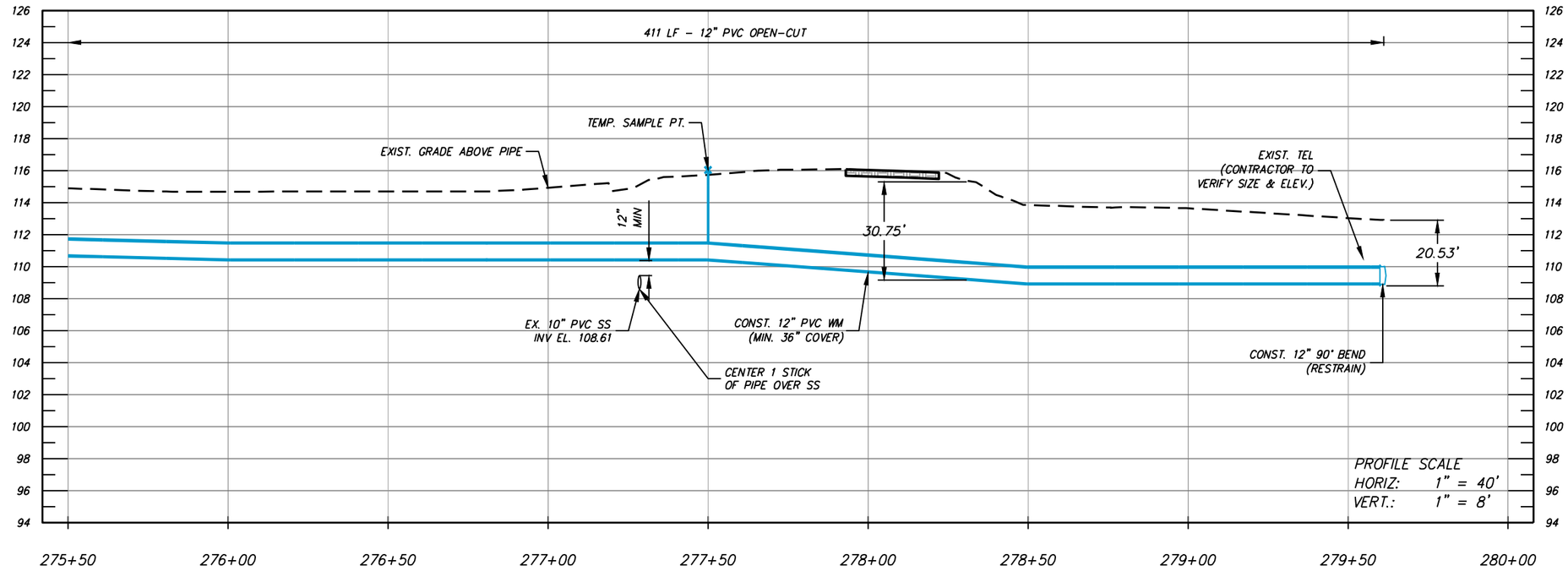
_____
(CITY, STATE, ZIP CODE)

_____
(SUBDIVISION)

_____ _____
(LOT) (BLOCK)

_____
(STREET ADDRESS)





NUMBER	DATE	DESCRIPTION
P-0	09/26/2025	ISSUED FOR PERMITTING

CHASTAIN-SKILLMAN, LLC
205 EAST ORANGE STREET
SUITE #110
LAKELAND, FL 33801-4611
(888) 646-1402

© 2025 CHASTAIN SKILLMAN REG. NO. 262

ChastainSkillman

DCCM

CITY OF WAUCHULA
SOUTHWEST AREA ELEVATED
TOWER & WATER LINE
WAUCHULA, FLORIDA
PLAN PROFILES

This item has been digitally signed and sealed by Vaughan S. Leer on the date adjacent to seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

ENGINEER: VAUGHAN S. LEER, P.E.
REG. NO.: 94781

PROJECT NUMBER: 10371.03

SHEET NUMBER: PP-46

P:\1037103\CAD\Water\1037103\Production Drawings\1037103-DEJ-2023-PP.dwg PP-46 Nov 04, 2025 10:10am by: rcarnahan

AS-BUILT CERTIFICATION BY PROFESSIONAL ENGINEER

Submit this form and one set of as-built engineering drawings to the U.S. Army Corps of Engineers, Enforcement Section, P.O. Box 4970, Jacksonville, FL 32232-0019. For electronic mail saj-rd-enforcement@usace.army.mil *(not to exceed 15 MB).*

1. Department of the Army Permit Number: SAJ-2025-02575

2. Permittee Information:

Name: _____

Address: _____

_____

3. Project Site Identification (physical location/address):

_____

_____

_____

4. As-Built Certification: I hereby certify that the authorized work, including any mitigation required by Special Conditions to the permit, has been accomplished in accordance with the Department of the Army permit with any deviations noted below. This determination is based upon on-site observation, scheduled, and conducted by me or by a project representative under my direct supervision. I have enclosed one set of as-built engineering drawings.

_____ _____

Signature of Engineer Name (*Please type*)

_____ _____

(FL, PR, or VI) Reg. Number Company Name

_____ _____ _____

City State ZIP

(Affix Seal)

_____ _____

Date Telephone Number

Date Work Started:_____ Date Work Completed:_____

Identify any deviations from the approved permit drawings and/or special conditions (attach additional pages if necessary):

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

STANDARD PROTECTION MEASURES FOR THE EASTERN INDIGO SNAKE

U.S. Fish and Wildlife Service

May 2024

The Standard Protection Measures for the Eastern Indigo Snake (Plan) below has been developed by the U.S. Fish and Wildlife Service (USFWS) in Florida and Georgia for use by project proponents and their construction personnel help minimize adverse impacts to eastern indigo snakes. However, implementation of this Plan does not replace any state of federal consultation or regulatory requirements. At least 30 days prior to any land disturbance activities, the project proponent shall notify the appropriate USFWS Field Office (see Field Office contact information) via e-mail that the Plan will be implemented as described below.

As long as the signatory of the e-mail certifies compliance with the below Plan (including use of the approved poster and pamphlet (USFWS Eastern Indigo Snake Conservation webpage), no further written confirmation or approval from the USFWS is needed regarding use of this Plan as a component of the project.

If the project proponent decides to use an eastern indigo snake protection/education plan other than the approved Plan below, written confirmation or approval from the USFWS that the plan is adequate must be obtained. The project proponent shall submit their unique plan for review and approval. The USFWS will respond via e-mail, typically within 30 days of receiving the plan, either concurring that the plan is adequate or requesting additional information. A concurrence e-mail from the appropriate USFWS Field Office will fulfill approval requirements.

STANDARD PROTECTION MEASURES

BEFORE AND DURING CONSTRUCTION ACTIVITIES:

- All Project personnel shall be notified about the potential presence and appearance of the federally protected eastern indigo snake (*Drymarchon couperi*).
- All personnel shall be advised that there are civil and criminal penalties for harassing, harming, pursuing, hunting, shooting, wounding, killing, capturing, or collecting the species, in knowing violation of the Endangered Species Act of 1973.
- The project proponent or designated agent will post educational posters in the construction office and throughout the construction site. The posters must be clearly visible to all construction staff and shall be posted in a conspicuous location in the

Project field office until such time that Project construction has been completed and time charges have stopped.

- Prior to the onset of construction activities, the project proponent or designated agent will conduct a meeting with all construction staff (annually for multi-year projects) to discuss identification of the snake, its protected status, what to do if a snake is observed within the project area, and applicable penalties that may be imposed if state and/or federal regulations are violated. An educational pamphlet including color photographs of the snake will be given to each staff member in attendance and additional copies will be provided to the construction superintendent to make available in the onsite construction office. Photos of eastern indigo snakes may be accessed on USFWS, Florida Fish and Wildlife Conservation Commission and/or Georgia Department of Natural Resources websites.
- Each day, prior to the commencement of maintenance or construction activities, the Contractor shall perform a thorough inspection for the species of all worksite equipment.
- If an eastern indigo snake (alive, dead or skin shed) is observed on the project site during construction activities, all such activities are to cease until the established procedures are implemented according to the Plan, which includes notification of the appropriate USFWS Office. The contact information for the USFWS is provided below and on the referenced posters and pamphlets.
- During initial site clearing activities, an onsite observer is recommended to determine whether habitat conditions suggest a reasonable probability of an eastern indigo snake sighting (example: discovery of snake sheds, tracks, lots of refugia and cavities present in the area of clearing activities, and presence of gopher tortoises and burrows).
- Periodically during construction activities, the project area should be visited to observe the condition of the posters and Plan materials and replace them as needed. Construction personnel should be reminded of the instructions (above) as to what is expected if any eastern indigo snakes are seen.
- For erosion control use biodegradable, 100% natural fiber, net-free rolled erosion control blankets to avoid wildlife entanglement.

POST CONSTRUCTION ACTIVITIES:

Whether or not eastern indigo snakes are observed during construction activities, a monitoring report should be submitted to the appropriate USFWS Field Office within 60 days of project completion (See USFWS Field Office Contact Information).

USFWS FIELD OFFICE CONTACT INFORMATION

Georgia Field Office: Phone: (706) 613-9493, email: gaes_assistance@fws.gov
Florida Field Office: Phone: (352) 448-9151, email: fw4flesregs@fws.gov

POSTER & PAMPHLET INFORMATION

Posters with the following information shall be placed at strategic locations on the construction site and along any proposed access roads (final posters for Plan compliance are available on our website in English and Spanish and should be printed on 11 x 17in or larger paper and laminated (USFWS Eastern Indigo Snake Conservation webpage). Pamphlets are also available on our webpage and should be printed on 8.5 x 11in paper and folded, and available and distributed to staff working on the site.

POSTER CONTENT (ENGLISH):

ATTENTION

Federally-Threatened Eastern Indigo Snakes may be present on this site!

Killing, harming, or harassing eastern indigo snakes is strictly prohibited and punishable under State and Federal Law.

IF YOU SEE A LIVE EASTERN INDIGO SNAKE ON THE SITE:

• Stop land disturbing activities and allow the snake time to move away from the site without interference. Do NOT attempt to touch or handle the snake.

• Take photographs of the snake, if possible, for identification and documentation purposes.

• Immediately notify supervisor/agent, and a U.S. Fish and Wildlife Service (USFWS) Ecological Services Field Office, with the location information and condition of the snake.

• If the snake is located near clearing or construction activities that will cause harm to the snake, the activities must pause until a representative of the USFWS returns the call (within one day) with further guidance.

IF YOU SEE A DEAD EASTERN INDIGO SNAKE ON THE SITE:

• Stop land disturbing activities and immediately notify supervisor/applicant, and a USFWS Ecological Services Field Office, with the location information and condition of the snake.

• Take photographs of the snake, if possible, for identification and documentation purposes.

• Thoroughly soak the dead snake in water and then freeze the specimen. The appropriate wildlife agency will retrieve the dead snake.

DESCRIPTION: The eastern indigo snake is one of the largest non-venomous snakes in North America, reaching up to 8 ft long. Named for the glossy, blue-black scales above and slate blue below, they often have orange to reddish color (cream color in some cases)

in the throat area. They are not typically aggressive.

SIMILAR SPECIES: The black racer resembles the eastern indigo snake. However, black racers have a white or cream chin, and thinner bodies.

LIFE HISTORY: Eastern indigo snakes live in a variety of terrestrial habitat types. Although they prefer uplands, they also use wetlands and agricultural areas. They will shelter inside gopher tortoise burrows, other animal burrows, stumps, roots, and debris piles. Females may lay from 4 to 12 white eggs as early as April through June, with young hatching in late July through October.

PROTECTED STATUS: The eastern indigo snake is protected by the USFWS, Florida Fish and Wildlife Conservation Commission, and Georgia Department of Natural Resources. Any attempt to kill, harm, harass, pursue, hunt, shoot, wound, trap, capture, collect, or engage eastern indigo snakes is prohibited by the U.S. Endangered Species Act. Penalties include a maximum fine of $25,000 for civil violations and up to $50,000 and/or imprisonment for criminal offenses. Only authorized individuals with a permit (or an Incidental Take Statement associated with a USFWS Biological Opinion) may handle an eastern indigo snake.

Please contact your nearest USFWS Ecological Services Field Office if a live or dead eastern indigo snake is encountered:

Florida Office: (352) 448-9151

Georgia Office: (706) 613-9493

POSTER CONTENT (SPANISH):

ATENCIÓN

¡Especie amenazada, la culebra Índigo del Este, puede ocupar el área!

Matar, herir o hostigar culebras Índigo del Este es estrictamente prohibido bajo la Ley Federal.

SI VES UNA CULEBRA ÍNDIGO DEL ESTE O UNA CULEBRA NEGRA VIVA EN EL ÁREA:

• Pare excavación y permite el movimiento de la culebra fuera del área sin interferir. NO atentes tocar o recoger la culebra.

• Fotografié la culebra si es posible para identificación y documentación.

• Notifique supervisor/agente, y la Oficina de Campo de Servicios Ecológicos del Servicio Federal de Pesca y Vida Silvestre (USFWS) apropiada con información acerca del sitio y condición de la culebra.

• Si la culebra está cerca de un área de construcción que le pueda causar daño, las actividades deben parar hasta un representante del USFWS regrese la llamada (dentro de un día) con más orientación.

SI VES UNA CULEBRA ÍNDIGO DEL ESTE MUERTA EN EL ÁREA:

• Pare excavación. Notifique supervisor/aplicante, y la Oficina de Campo de Servicios Ecológicos apropiada con información acerca del sitio y condición de la culebra.

• Fotografié la culebra si es posible para identificación y documentación.

• Emerge completamente la culebra en agua y congele la especie hasta que personal apropiado de la agencia de vida silvestre la recoja.

DESCRIPCIÓN. La culebra Índigo del Este es una de las serpientes sin veneno más grande en Norte América, alcanzando hasta 8 pies de largo. Su nombre proviene del color azul-negro brilloso de sus escamas, pero pueden tener un color anaranjado-rojizo (color crema en algunos casos) en su mandíbula inferior. No tienden a ser agresivas.

SERPIENTES PARECIDAS. La corredora negra, que es de color negro sólido, es la única otra serpiente que se asemeja a la Índigo del Este. La corredora negra se diferencia por una mandíbula inferior color blanca o crema y un cuerpo más delgado.

HÁBITATS Y ECOLOGÍA. La culebra Índigo del Este vive en una variedad de hábitats, incluyendo tierras secas, humedales, y áreas de agricultura. Ellas buscan refugio en agujeros o huecos de tierra, en especial madrigueras de tortugas de tierra. Las hembras ponen 4 hasta 12 huevos blancos entre abril y junio, y la cría emergen entre julio y octubre.

PROTECCIÓN LEGAL. La culebra Índigo del Este es clasificada como especie amenazada por el USFWS, la Comisión de Conservación de Pesca y Vida Silvestre de Florida y el Departamento de Recursos Naturales de Georgia. Intento de matar, hostigar, herir, lastimar, perseguir, cazar, disparar, capturar, colectar o conducta parecida hacia las culebras Índigo del Este es prohibido por la Ley Federal de Especies en Peligro de Extinción. Penalidades incluyen un máximo de $25,000 por violaciones civiles y $50,000 y/o encarcelamiento por actos criminales. Solos individuales autorizados con un permiso o Determinación de toma incidental (Incidental Take Statement) asociado con una Opinión Biológico del USFWS pueden recoger una Índigo del Este.

Por favor de contactar tu Oficina de Campo de Servicios Ecológicos más cercana si encuentras una culebra Índigo del Este viva o muerta:

Oficina de Florida: (352) 448-9151

Oficina de Georgia: (706) 613-9493

Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2025-ASO-7273-OE

Issued Date: 04/16/2025

Olivia Minshew, City Manager
City of Wauchula
126 South 7th Avenue
Wauchula, FL 33873

****DETERMINATION OF NO HAZARD TO AIR NAVIGATION FOR TEMPORARY STRUCTURE****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Crane Crane
Location:	Wauchula, FL
Latitude:	27-32-01.89N NAD 83
Longitude:	81-50-12.48W
Heights:	116 feet site elevation (SE)
	200 feet above ground level (AGL)
	316 feet above mean sea level (AMSL)

This aeronautical study revealed that the temporary structure does not exceed obstruction standards and would not be a hazard to air navigation provided the condition(s), if any, in this letter is (are) met:

SEE ATTACHMENT FOR ADDITIONAL CONDITION(S) OR INFORMATION

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, will void this determination. Any future construction or alteration, including increase to heights, power or the addition of other transmitters, requires separate notice to the FAA. This determination includes all previously filed frequencies and power for this structure.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of a structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this temporary structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Aviation Administration Flight Procedures Office if the structure is subject to the issuance of a Notice to Airmen (NOTAM).

If you have any questions, please contact our office at (404) 305-6531, or darin.clipper@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2025-ASO-7273-OE

Signature Control No: 653034844-653973453 (TMP)
Darin Clipper
Specialist

Additional Condition(s) or Information for ASN 2025-ASO-7273-OE

Proposal: To construct and/or operate a(n) Crane to a height of 200 feet above ground level, 316 feet above mean sea level.

Location: The structure will be located 2.59 nautical miles northeast of CHN Airport reference point.

Part 77 Obstruction Standard(s) Exceeded and Aeronautical Impacts, if any:

Aeronautical study revealed that the temporary structure will not exceed any Part 77 obstruction standard. Aeronautical study confirmed that the temporary structure will have no effect on any existing or proposed arrival, departure or en route instrument/visual flight rules (IFR/VFR) operations or procedures. Additionally, aeronautical study confirmed that the temporary structure will have no physical or electromagnetic effect on the operation of air navigation and communications facilities and will not impact any airspace and routes used by the military. Based on this aeronautical study, the FAA finds that the temporary structure will have no adverse effect on air navigation and will not impact any aeronautical operations or procedures.

Preliminary FAA study indicates that the above mentioned structure would:
not exceed traffic pattern airspace

Based on this aeronautical study, the structure would not constitute a substantial adverse effect on aeronautical operations or procedures because it will be temporary. The temporary structure would not be considered a hazard to air navigation provided all of the conditions specified in this determination are strictly met.

As a condition to this Determination, the structure is to be marked/lighted in accordance with FAA Advisory circular 70/7460-1 M Change 1, Obstruction Marking and Lighting, flags/red lights-Chapters 3(Marked),4,5(Red),14(Temporary),&15.

Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to (877) 487-6867 so a Notice to Airmen (NOTAM) can be issued. As soon as the normal operation is restored, notify the same number.

It is required that the manager of WAUCHULA MUNI, (863) 314-1300 be notified at least 3 business days prior to the temporary structure being erected and again when the structure is removed from the site.

This determination expires on 10/16/2026 unless extended, revised, or terminated by the issuing office.

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed within 5 days after the temporary structure is dismantled.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

Sectional Map for ASN 2025-ASO-7273-OE



Mail Processing Center
Federal Aviation Administration
Southwest Regional Office
Obstruction Evaluation Group
10101 Hillwood Parkway
Fort Worth, TX 76177

Aeronautical Study No.
2025-ASO-7274-OE

Issued Date: 04/16/2025

Olivia Minshew, City Manager
City of Wauchula
126 South 7th Avenue
Wauchula, FL 33873

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:	Water Tank Wauchula Water Tower
Location:	Wauchula, FL
Latitude:	27-32-01.89N NAD 83
Longitude:	81-50-12.48W
Heights:	116 feet site elevation (SE)
	140 feet above ground level (AGL)
	256 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

_____ At least 10 days prior to start of construction (7460-2, Part 1)
__X__ Within 5 days after the construction reaches its greatest height (7460-2, Part 2)

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/ lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 M Change 1.

This determination expires on 10/16/2026 unless:

(a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
(b) extended, revised, or terminated by the issuing office.
(c) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.This determination includes all previously filed frequencies and power for this structure.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

If we can be of further assistance, please contact our office at (404) 305-6531, or darin.clipper@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2025-ASO-7274-OE.

Signature Control No: 653036489-653972663 (DNE)
Darin Clipper
Specialist

Attachment(s)
Map(s)

Sectional Map for ASN 2025-ASO-7274-OE



FLORIDA DEPARTMENT OF Environmental Protection

Southwest District
13051 North Telecom Parkway Suite 101
Temple Terrace, Florida 33637-0926

Ron DeSantis
Governor

Jay Collins
Lt. Governor

Alexis A. Lambert
Secretary

October 21, 2025

ELECTRONIC CORRESPONDENCE

In the matter of an
Application for Permit by:

Olivia Minshew
City Manager
City of Wauchula
126 South 7th Avenue
Wauchula, FL 33873
ominshew@cityofwauchula.com

DEP File No. 0147708-039-WC/M1
County: Hardee

NOTICE OF PERMIT ISSUANCE

Enclosed is Permit Number 0147708-039-WC/M1 for Southwest Area Elevated Tower and Water Tower to construct water distribution system and water treatment plant components, issued pursuant to Section 403.861(9), Florida Statutes.

This action is final and effective on the date filed with the Clerk of the Department unless a petition for an administrative hearing is timely filed under Sections 120.569 and 120.57, F.S., before the deadline for filing a petition. On the filing of a timely and sufficient petition, this action will not be final and effective until further order of the Department. Because the administrative hearing process is designed to formulate final agency action, the hearing process may result in a modification of the agency action or even denial of the application.

Petition for Administrative Hearing

A person whose substantial interests are affected by the Department's action may petition for an administrative proceeding (hearing) under Sections 120.569 and 120.57, F.S. Pursuant to Rules 28-106.201 and 28-106.301, F.A.C., a petition for an administrative hearing must contain the following information:

(a) The name and address of each agency affected and each agency's file or identification number, if known;
(b) The name, address, any e-mail address, any facsimile number, and telephone number of the petitioner, if the petitioner is not represented by an attorney or a qualified representative; the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination;
(c) A statement of when and how the petitioner received notice of the agency decision;
(d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate;
(e) A concise statement of the ultimate facts alleged, including the specific facts that the petitioner contends warrant reversal or modification of the agency's proposed action;

(f) A statement of the specific rules or statutes that the petitioner contends require reversal or modification of the agency's proposed action, including an explanation of how the alleged facts relate to the specific rules or statutes; and
(g) A statement of the relief sought by the petitioner, stating precisely the action that the petitioner wishes the agency to take with respect to the agency's proposed action.

The petition must be filed (received by the Clerk) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, or via electronic correspondence at Agency_Clerk@FloridaDEP.gov. Also, a copy of the petition shall be mailed to the applicant at the address indicated above at the time of filing.

Time Period for Filing a Petition

In accordance with Rule 62-110.106(3), F.A.C., petitions for an administrative hearing by the applicant and persons entitled to written notice under Section 120.60(3), F.S., must be filed within 14 days of receipt of this written notice. Petitions filed by any persons other than the applicant, and other than those entitled to written notice under Section 120.60(3), F.S., must be filed within 14 days of publication of the notice or within 14 days of receipt of the written notice, whichever occurs first. You cannot justifiably rely on the finality of this decision unless notice of this decision and the right of substantially affected persons to challenge this decision has been duly published or otherwise provided to all persons substantially affected by the decision. While you are not required to publish notice of this action, you may elect to do so pursuant Rule 62-110.106(10)(a), F.A.C.

The failure to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention (in a proceeding initiated by another party) will be only at the discretion of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C. If you do not publish notice of this action, this waiver may not apply to persons who have not received a clear point of entry.

Extension of Time
Under Rule 62-110.106(4), F.A.C., a person whose substantial interests are affected by the Department's action may also request an extension of time to file a petition for an administrative hearing. The Department may, for good cause shown, grant the request for an extension of time. Requests for extension of time must be filed with the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, or via electronic correspondence at Agency_Clerk@dep.state.fl.us, before the deadline for filing a petition for an administrative hearing. A timely request for extension of time shall toll the running of the time period for filing a petition until the request is acted upon.

Mediation
Mediation is not available in this proceeding.

Judicial Review
Once this decision becomes final, any party to this action has the right to seek judicial review pursuant to Section 120.68, F.S., by filing a Notice of Appeal pursuant to Florida Rules of Appellate Procedure 9.110 and 9.190 with the Clerk of the Department in the Office of General Counsel (Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000) and by filing a copy of the Notice of Appeal

accompanied by the applicable filing fees with the appropriate district court of appeal. The notice must be filed within 30 days from the date this action is filed with the Clerk of the Department.

EXECUTION AND CLERKING

Executed in Hillsborough County, Florida

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

for Shannon Herbon
Program Administrator
Permitting & Waste Cleanup Program
Southwest District

Enclosures: Permit No. 0147708-039-WC/M1
Utilities Separation Requirements

CERTIFICATE OF SERVICE
The undersigned duly designated deputy agency clerk hereby certifies that this Notice of Permit Issuance and all copies were mailed/electronically transmitted before the close of business on October 21, 2025, to those persons listed.

Copies Furnished to:
Vaughan Leer, P.E., Chastain Skillman, LLC, vleer@dccm.com
Austin Hungate, Chastain Skillman, LLC, ahungate@DCCM.com
Douglas Jones, Chastain Skillman, LLC, djones@DCCM.com
John Eason, Deputy City Manager of the City of Wauchula, jeason@cityofwauchula.com
James Brock, DEP SWD, James.Brock@FloridaDEP.gov
Sarah West, DEP SWD, Sarah.J.West@FloridaDEP.gov

FILING AND ACKNOWLEDGMENT
FILED, on this date, pursuant to Section 120.52, F. S., with the designated Department Clerk, receipt of which is hereby acknowledged.

Clerk **Date** October 21, 2025

FLORIDA DEPARTMENT OF Environmental Protection

Southwest District
13051 North Telecom Parkway #101
Temple Terrace, Florida 33637-0926

Ron DeSantis
Governor

Jay Collins
Lt. Governor

Alexis A. Lambert
Secretary

ELECTRONIC CORRESPONDENCE

PERMITTEE:
City of Wauchula
Olivia Minshew, City Manager
126 South 7th Avenue
Wauchula, FL 33873
ominshew@cityofwauchula.com

PWS ID NUMBER: 625-0329
PERMIT NUMBER: 0147708-039-WC/M1
DATE OF ISSUE: October 21, 2025
EXPIRATION DATE: October 20, 2030
COUNTY: Hardee
PROJECT: Southwest Area Elevated Tower and Water Line

This permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-550, 62-555 and 62-560. The above-named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawings, plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

TO CONSTRUCT: A water distribution system and water treatment plant components to improve water pressure and fire protection of the southwest area served by the City of Wauchula.

PROPOSED CONSTRUCTION INCLUDES APPROXIMATELY: 600 linear feet of six-inch diameter water main pipe(s) and 25,400 linear feet of 12-inch diameter water main pipe(s).

A 150,000-gallon elevated storage tank.

Associated piping and appurtenances.

The permitted operating capacity is 2,160,000 MGD.

IN ACCORDANCE WITH: Preliminary design report, engineering drawings and related documents, prepared by Vaughan S. Leer, P.E., [Chastain Skillman, LLC].

LOCATION: The water line runs along West Main Street, Altman Road, Doyle Carlton Road, Rodeo Drive, and South Florida Avenue. It connects to the existing Wauchula water system on Main Street and South Florida Avenue. The elevated tank is located adjacent to Rodeo Drive near the Hardee County Sports Complex and Hardee Senior High School in Hardee County, Florida.

A. General Conditions

The permittee shall be aware of and operate under the Permit Conditions below. These applicable conditions are binding upon the permittee and enforceable pursuant to Chapter 403, Florida Statutes. [F.A.C. Rule 62-555.533(1)]

1. The terms, conditions, requirements, limitations and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 403.727, or 403.859 through 403.861, F.S. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.

3. As provided in Subsections 403.087(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations. This permit is not a waiver of or approval of any other department permit that may be required for other aspects of the total project which are not addressed in this permit.

4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.

5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times (reasonable time may depend on the nature of the concern being investigated), access to the premises where the permitted activity is located or conducted to:

    a. Have access to and copy any records that must be kept under conditions of the permit;
    b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
    c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

    a. A description of and cause of noncompliance; and
    b. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted

source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules. A reasonable time for compliance with a new or amended surface water quality standard, other than those standards addressed in Rule 62-302.500, shall include a reasonable time to obtain or be denied a mixing zone for the new or amended standard.

11. This permit is transferable only upon Department approval in accordance with Rule 62- 4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit also constitutes:

    a. Determination of Best Available Control Technology (BACT)
    b. Determination of Prevention of Significant Deterioration (PSD)
    c. Certification of compliance with State Water Quality Standards (Section 401, PL 92-500)
    d. Compliance with New Source Performance Standards

14. The permittee shall comply with the following:

    a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.

    b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.

    c. Records of monitoring information shall include:
        i. the date, exact place, and time of sampling or measurements;
        ii. the person responsible for performing the sampling or measurements;
        iii. the dates analyses were performed;
        iv. the person responsible for performing the analyses;
        v. the analytical techniques or methods used;
        vi. the results of such analyses.

15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

B. Regulatory Section

1. All construction must be in accordance with this permit. Before commencing work on project changes for which a construction permit modification is required per 62-555.536(1), the permittee shall submit to the Department a written request for a permit modification. Each such request shall be accompanied by one copy of a revised construction permit application, the proper processing fee and one copy of either a revised preliminary design report or revised drawings, specifications and design data. [F.A.C. Rule 62-555.536].

2. Permitted construction or alteration of public water supply systems must be supervised during construction

by a professional engineer registered in the State of Florida if the project was designed under the responsible charge of a professional engineer licensed in the State of Florida. The permittee must retain the service of a professional engineer registered in the State of Florida to observe that construction of the project is in accordance with the engineering plans and specifications as submitted in support of the application for this permit. [F.A.C. Rule 62-555.520(3)].

3. If prehistoric or historic artifacts, such as pottery or ceramics, stone tools or metal implements, dugout canoe remains, or any other physical remains that could be associated with Native American cultures, or early colonial or American settlement are encountered at any time within the project site area, the permitted project should cease all activities involving subsurface disturbance in the immediate vicinity of such discoveries. The permittee, or other designee, should contact the Florida Department of State, Division of Historical Resources, Compliance and Review Section at 850.245.6333 or 800.847.7278, as well as the appropriate permitting agency office. Project activities should not resume without verbal and/or written authorization from the Division of Historical Resources and the permitting agency. In the event that unmarked human remains are encountered during permitted activities, all work shall stop immediately and the proper authorities notified in accordance with Section 872.05, *Florida Statutes*.

4. If delays will cause project completion to extend beyond the expiration date of this permit, the permittee shall submit to the Department a request to extend the expiration date of this permit including the appropriate processing fee. This request shall specify the reasons for the delay and shall be submitted to the Department for approval prior to the expiration date of this permit. Note that no specific construction permit shall be extended so as to remain in effect longer than five years. [F.A.C. Rule 62-555.536(4)]. {OPTIONAL}

5. In accordance with General Condition #11 of this permit, this permit is transferable only upon Department approval. Persons proposing to transfer this permit must apply jointly for a transfer of the permit within 30 days after the sale or legal transfer of ownership of the permitted project that has not been cleared for service by the Department using form, 62-555.900(8), Application for Transfer of a PWS Construction Permit along with the appropriate fee. [F.A.C. Rule 62-555.536(5)]

6. This permit satisfies Drinking Water permitting requirements only and does not authorize construction or operation of this facility and distribution system prior to obtaining all other necessary permits from other program areas within the Department, or required permits from other state, federal, or local agencies.

7. This permit is for CONSTRUCTION ONLY of the distribution system project. This permit shall not infer that the clearance necessary for connection will be granted. Any such clearance shall be granted only when the connection point has been permitted and cleared for use by the Department and the public water system to which the water main extension will be connected, has the capacity necessary to meet the design water demands of all customers to be served by the water main extension. Partial clearance may be granted, if required.

8. If gasoline contamination is found at the construction site, work shall be stopped and the proper authorities notified. With the approval of the Department, ductile iron pipe and fittings, and solvent resistant gaskets materials shall be used in the contaminated area. The ductile pipe shall be used in the contaminated area. The ductile iron pipe shall extend 100 feet beyond any solvent noted. Any contaminated soil that is excavated shall be placed on an impermeable mat, covered with waterproof covering, and held for disposal. <u>If the site cannot be properly cleaned, then consultation with the Department is necessary prior to continuing with the project construction.</u>

9. This permit does not constitute approval of construction on jurisdictional wetland areas; therefore such approval must be obtained separately from the Water Management District or from DEP ERP Section, as applicable, Permittee shall provide a copy of the permit approval to the Department if water main installation involves activities on wetlands.

10. Permittee shall ensure that the well and drinking water treatment facilities will be protected to prevent tampering, vandalism, and sabotage as required by Rule 62-555.315(1) & 62-555.320(5), F.A.C.

C. Construction Standards

1. All products, including paints, which shall come into contact with potable water, either directly or indirectly, shall conform with National Sanitation Foundation (NSF) International, Water Chemicals Codex, Food Chemicals Codex, American Water Works Association (AWWA) Standards and the Food and Drug Administration, as provided in Rule 62-555.320(3), F.A.C.

2. Water supply facilities, including mains, pipe, fittings, valves, fire hydrants and other materials shall be installed in accordance with the latest applicable AWWA Standards and Department rules and regulations. The system shall be pressure and leak tested in accordance with AWWA Standard C600 C603, or C605, as applicable, and disinfected in accordance with AWWA Standard C651-653, as well as in accordance with Rule 62-555.340, F.A.C.

3. The installation or repairs of any public water system, or any plumbing in residential or nonresidential facilities providing water for human consumption, which is connected to a public water system shall be lead free in accordance with Rule 62-555.322, F.A.C.

4. When any existing asbestos cement (AC) pipes are replaced under this permit, the permittee shall do so in accordance with the applicable rules of Federal Asbestos Regulation and Florida DEP requirements. For specific requirements applicable to AC pipes, the permittee should contact the Air and Waste Management section managers prior to commencing any such activities at 813.470.5700. Please be aware that a notification is required to be submitted to the Department for a regulated project.

5. Setback distances between potable water wells and sanitary hazards shall be in accordance with 62-555.312, F.A.C. Reclaimed water land application areas must not be located within the setback distance from potable water supply wells established in Chapter 62-610, F.A.C.

6. Permittee shall maintain vertical clearance and horizontal separation between water mains and sanitary sewers, storm sewers, etc. unless approved otherwise by the Department, as provided in Rule 62-555.314, F.A.C., and Section 8.6 of *Recommended Standards for Water Works*, a manual adopted by reference in Rule 62-555.330(3), F.A.C.

7. The new or altered aboveground piping at the drinking water treatment plant shall be color coded and labeled as recommended in Section 2.14 of "Recommended Standards for Water Works, 1997 Edition". [F.A.C. Rule 62-555.320(10)]

8. Permittee shall ensure that there shall be no cross-connection with any non-potable water source in accordance with Rule 62-555.360, F.A.C.

9. The hydropneumatic tank greater than 120 gallons that will be utilized for this project must meet ASME code requirements for the construction and installation of unfired pressure vessels, as provided in Rule 62-555.320(20), F.A.C., and Section 7.2 of *Recommended Standards for Water Works*, a manual adopted by reference in Rule 62-555.330(3), F.A.C.

D. Operational Requirements

1. The facility has been classified as a Category II, Class B water treatment plant. Accordingly, the lead or chief operator must be Class C or higher. Proof of staffing by a Class C or higher operator for 16 hours/day for 7 days/week must be provided. [F.A.C. Rule 62-699.310]

2. The supplier of water shall operate and maintain the public water system so as to comply with applicable standards in F.A.C. Rule 62-550 and 62-555.350.

3. The permittee shall provide an operation and maintenance manual for the new or altered treatment facilities to fulfill the requirements under subsection 62-555.350(13), F.A.C. The manual shall contain operation and control procedures, and preventative maintenance and repair procedures, for all plant equipment and shall be made available for reference at the plant or at a convenient location near the plant. Bound and indexed equipment manufacturer manuals shall be considered sufficient to meet the requirements of the subsection.

5. The permittee shall have complete record drawings produced for the project in accordance with Rule 62-555.530(4), F.A.C.

6. The permittee or suppliers of water shall telephone the State Warning Point (SWP), at 1-800-320-0519 immediately (i.e., within two hours) after discovery of any actual or suspected sabotage or security breach, or any suspicious incident, involving a public water system in accordance with the F.A.C. Rule 62-555.350(10).

E. Monitoring Provisions

1. Permittee shall follow the guidelines of Chapters 62-550, 62-555, and 62-560, F.A.C., regarding public drinking water system standards, monitoring, reporting, permitting, construction, and operation.

   This facility is a Community Water System as defined in F.A.C. Rule 62-550.200(12) and shall comply with the applicable chemical, radiological, lead and copper, and bacteriological monitoring requirements of F.A.C. Rule 62-550. Such requirements shall be initiated within the quarter that the water treatment facility is placed into service (i.e. January—March or April—June, the preceding are examples of quarters) and the results submitted to the Department.

2. The water treatment plant shall maintain throughout the distribution system a minimum combined chlorine residual of 0.6 mg/l or its equivalent. A minimum system pressure of 20 psi must be maintained throughout the system. Also, safety equipment shall be provided and located outside of chlorine room.

F. Clearance Requirements

1. The permittee must instruct the engineer of record to request system clearance from the Department within sixty (60) days of completion of construction, testing and disinfecting the system. Bacteriological test results shall be considered unacceptable if the test were completed more than 60 days before the Department received the results. [F.A.C. Rule 62-555.340(2)(c)]

   Permitted construction or alteration of a public water system may not be placed into service until a letter of clearance has been issued by this Department. [F.A.C. Rule 62-555.345]

2. Prior to placing this project into service, Permittee shall submit, at a minimum, all of the following to the Department for evaluation and approval for operation, as provided in Rules 62-555.340 and 62-555.345, F.A.C.:

   <u>For Treatment Plant Components:</u>

   a. the engineer's *Certification of Construction Completion and Request for Clearance to Place Permitted PWS Components Into Operation* {DEP Form 62-555.900(9)};
   b. certified record drawings, if there are any changes noted for the permitted project.
   c. copy of a satisfactory pressure test of the process piping performed in accordance with AWWA Standards. [F.A.C. Rule 62-555.320(21)(a)(1)]
   d. two consecutive days of satisfactory distribution bacteriological analytical results.

   <u>For Distribution System Components:</u>

   a. the engineer's *Certification of Construction Completion and Request for Clearance to Place Permitted PWS Components Into Operation* {DEP Form 62-555.900(9)};
   b. certified record drawings, if there are any changes noted for the permitted project.
   c. two consecutive days of satisfactory bacteriological analytical results (see paragraph 3 below).
   d. copy of a satisfactory pressure test of the process piping performed in accordance with AWWA Standards. [F.A.C. Rule 62-555.320(21)(a)(1)]

In order to facilitate the issuance of a letter of clearance, the Department requests that all of the above information be submitted as one package.

3. The new facilities shall be cleaned, disinfected, and bacteriologically cleared in accordance with Chapter 62-555, F.A.C. The bacteriological clearance data representative of the storage tank (two samples on consecutive days), the well discharge piping and distribution system (in accordance with the instructions for Bacteriological Sampling Locations shown below) and the untreated well water (two samples per day for 5 consecutive days collected at least six hours apart for each of the two wells) shall be submitted to the Department with the engineer's certification of construction completion. [Section 62-555.340 and 62-555.315(6)(b), F.A.C.]

   Bacteriological Sampling Locations: Copies of satisfactory bacteriological analyses taken from locations within the distribution system or water main extension to be cleared, in accordance with Rules 62-555.315 (6), 62-555.340 and 62-555.330, F.A.C. and American Water Works Association (AWWA) Standard C 651-92 as follows:

   - Connection to existing system;
   - The endpoint of the proposed addition;
   - Any water lines branching off a main extension;
   - Every 1,200 feet of water main;
   - Each location shall be sampled on two separate days (at least 6 hours apart) with sample point locations and chlorine residual readings **clearly indicated** on the report and/or drawings.
   - Bacteriological sample results will be considered unacceptable if the tests were completed more than 60 days before the Department receives the results.

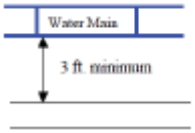
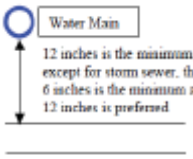
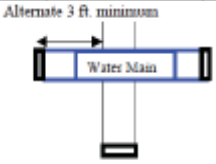
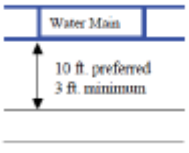
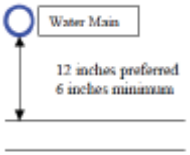
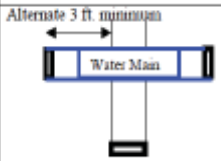
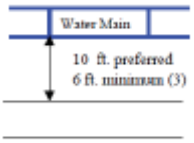
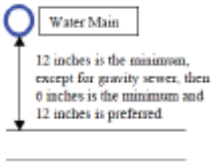
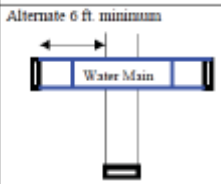
Executed in Hillsborough County, Florida

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION



for Shannon Herbon
Program Administrator
Permitting & Waste Cleanup Program
Southwest District

LOCATION OF PUBLIC WATER SYSTEM MAINS IN ACCORDANCE WITH RULE 62-555.314, F.A.C.

Other Pipe	Horizontal Separation	Crossings (1)	Joint Spacing @ Crossings (Full Joint Centered)
Storm Sewer, Stormwater Force Main, Reclaimed Water (2)			
Vacuum Sanitary Sewer			
Gravity or Pressure Sanitary Sewer, Sanitary Sewer Force Main, Reclaimed Water (4)			
On-Site Sewage Treatment & Disposal System	10 ft. minimum	---	---

(1) Water main should cross above other pipe. When water main must be below other pipe, the minimum separation is 12 inches.

(2) Reclaimed water regulated under Part III of Chapter 62-610, F.A.C.

(3) 3 ft. for gravity sanitary sewer where the bottom of the water main is laid at least 6 inches above the top of the gravity sanitary sewer.

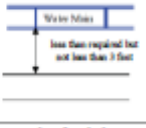
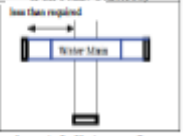
(4) Reclaimed water not regulated under Part III of Chapter 62-610, F.A.C.

EXCEPTIONS TO MINIMUM SEPARATION REQUIREMENTS

Where it is not technically feasible or economically sensible to comply with the requirements of 62-555.314(1) or (2), F.A.C., **the Department shall allow exceptions to these requirements if suppliers of water or construction permit applicants provide technical or economic justification for each exception and provide alternative construction features that afford a similar level of reliability and public health protection.**

Acceptable alternative construction features include the following:

LOCATION OF PUBLIC WATER SYSTEM MAINS IN ACCORDANCE WITH 62-555.314(5)(a), F.A.C.

Other Pipe	Horizontal Separation	Joint Spacing @ Crossings (Full Joint Centered)
Gravity or Pressure Sanitary Sewer, Sanitary Sewer Force Main, Reclaimed Water, Vacuum Sanitary Sewer, Storm Sewer, Stormwater Force Main		

Where an underground water main is being laid **less than the required minimum horizontal distance** from another pipeline and where an underground water main is **crossing another pipeline and joints in the water main are being located less than the required minimum distance from joints in the other pipeline**:

1. Use of pressure-rated pipe conforming to the American Water Works Association standards incorporated into Rule 62-555.330, F.A.C., for the other pipeline if it is a gravity- or vacuum-type pipeline;

2. Use of welded, fused, or otherwise restrained joints for either the water main or the other pipeline; **or**

3. Use of watertight casing pipe or concrete encasement at least four inches thick for either the water main or the other pipeline.

LOCATION OF PUBLIC WATER SYSTEM MAINS IN ACCORDANCE WITH 62-555.314(5)(b), F.A.C.

Other Pipe	Horizontal Separation	Crossings
Gravity or Pressure Sanitary Sewer, Sanitary Sewer Force Main, Reclaimed Water, Vacuum Sanitary Sewer, Storm Sewer, Stormwater Force Main		

Where an underground water main is being laid **less than three feet horizontally** from another pipeline and where an underground water main is **crossing another pipeline and is being laid less than the required minimum vertical distance from the other pipeline**:

Use of pipe, or casing pipe, having high impact strength (i.e., having an impact strength at least equal to that of 0.25-inch-thick ductile iron pipe) or concrete encasement at least four inches thick for both the water main **and** for the other pipeline if it is new and is conveying wastewater or reclaimed water.

Disclaimer – This document is provided for your convenience only. Please refer to Rule 62-555.314, F.A.C., for additional construction requirements.

FLORIDA DEPARTMENT OF Environmental Protection

Southwest District
13051 North Telecom Parkway #101
Temple Terrace, Florida 33637-0926

Ron DeSantis
Governor

Jay Collins
Lt. Governor

Alexis A. Lambert
Secretary

May 14, 2026

City of Wauchula
% Olivia Minshew
126 South 7th Avenue
Wauchula, Florida 33873
ominshew@cityofwauchula.com

File No.: 25-0463797-002-EG, Hardee County

Dear Olivia Minshew,

On April 29th, 2026, we received your notice of intent to use a General Permit (GP), pursuant to Rule 62-330.453, Florida Administrative Code (F.A.C.) to perform an installation of a water transmission line via horizontal directional drill and open-cut trenching within Thompson Branch, a Class III Florida Waterbody. The project starts near 904 West Main Street and ends near 1150 South Florida Avenue, Wauchula, Florida 33873, Section 04, 05, 08, 09, 16, 17, Township 34 South, Range 25 East, Hardee County.

Your intent to use a general permit has been reviewed by Department staff for three types of authorizations: (1) regulatory authorization, (2) proprietary authorization (related to state-owned submerged lands), and (3) federal authorization. The authority for review and the outcomes of the reviews are listed below. Please read each section carefully.

Your project did not qualify for the federal review portion of this verification request. Specifically, the activity is not covered by the State Programmatic General Permit. **Additional authorization must be obtained prior to commencement of the proposed activity**. This letter does not relieve you from the responsibility of obtaining other federal, state, or local authorizations that may be required for the activity. Please refer to the specific section(s) dealing with that portion of the review below for advice on how to proceed.

If you change the project from what you submitted, the authorization(s) granted may no longer be valid at the time of commencement of the project. Please contact us prior to beginning your project if you wish to make any changes.

If you have any questions regarding this matter, please contact Andrea Rengifo via email at Andrea.Rengifo@FloridaDEP.gov.

1. Regulatory Review – Approved

Based on the forms, drawings, and documents submitted with your notice, it appears that the project meets the requirements for the General Permit under Rule 62-330.453, F.A.C. Any activities performed under a general permit are subject to general conditions required in Rule 62-330.405,

F.A.C. (attached), and the specific conditions of Rule 62-330.453, F.A.C. (attached). Any deviations from these conditions may subject the permittee to enforcement action and possible penalties.

Please be advised that the construction phase of the GP must be completed within five years from the date the notice to use the GP was received by the Department. If you wish to continue this GP beyond the expiration date, you must notify the Department at least 30 days before its expiration.

Authority for review- Part IV of Chapter 373, F.S., Title 62, F.A.C. and in accordance with the operating agreements executed between the Department and the water management districts, as referenced in Chapter 62-113, F.A.C.

2. Proprietary Review – Not Required

The activity does not appear to be located on sovereign submerged lands, and does not require further authorization under Chapter 253 of the Florida Statutes, or Chapters 18-20 or 18-21 of the Florida Administrative Code.

3. Federal Review

3.1 SPGP - Not Approved

Your proposed activity as outlined in your application and attached drawings **does not qualify** for Federal authorization pursuant to the State Programmatic General Permit VI-R1. **SEPARATE permit(s)** or authorization **will be required** from the U.S. Army Corps of Engineers.

Authority for review - an agreement with the USACOE entitled "Coordination Agreement Between the U. S. Army Corps of Engineers (Jacksonville District) and the Florida Department of Environmental Protection (or Duly Authorized Designee), State Programmatic General Permit", Section 10 of the Rivers and Harbor Act of 1899, and Section 404 of the Clean Water Act.

3.2. Water Quality Certification Granted With Conditions

This permit also constitutes a *granted with conditions* water quality certification under Section 401 of the Clean Water Act, 33 U.S.C. Section 1341. Pursuant to Rule 62-330.062, F.A.C. State Water Quality Certification is granted when an activity meets all the terms and conditions of a general permit under Rule 62-330.052, F.A.C., and the applicable Rules 62-330.401 through 62-330.635, F.A.C.

Additional Information

Please retain this letter. The activities may be inspected by authorized state personnel in the future to ensure compliance with appropriate statutes and administrative codes. If the activities are not in compliance, you may be subject to penalties under Chapter 373, F.S., and Chapter 18-14, F.A.C.

NOTICE OF RIGHTS

This action is final and effective on the date filed with the Clerk of the Department unless a petition for an administrative hearing is timely filed under Sections 120.569 and 120.57, F.S., before the

deadline for filing a petition. On the filing of a timely and sufficient petition, this action will not be final and effective until further order of the Department. Because the administrative hearing process is designed to formulate final agency action, the hearing process may result in a modification of the agency action or even denial of the application.

Petition for Administrative Hearing

A person whose substantial interests are affected by the Department's action may petition for an administrative proceeding (hearing) under Sections 120.569 and 120.57, F.S. Pursuant to Rules 28-106.201 and 28-106.301, F.A.C., a petition for an administrative hearing must contain the following information:

(a) The name and address of each agency affected and each agency's file or identification number, if known;
(b) The name, address, any e-mail address, any facsimile number, and telephone number of the petitioner, if the petitioner is not represented by an attorney or a qualified representative; the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination;
(c) A statement of when and how the petitioner received notice of the agency decision;
(d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate;
(e) A concise statement of the ultimate facts alleged, including the specific facts that the petitioner contends warrant reversal or modification of the agency's proposed action;
(f) A statement of the specific rules or statutes that the petitioner contends require reversal or modification of the agency's proposed action, including an explanation of how the alleged facts relate to the specific rules or statutes; and
(g) A statement of the relief sought by the petitioner, stating precisely the action that the petitioner wishes the agency to take with respect to the agency's proposed action.

The petition must be filed (received by the Clerk) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, or via electronic correspondence at Agency_Clerk@dep.state.fl.us. Also, a copy of the petition shall be mailed to the applicant at the address indicated above at the time of filing.

Time Period for Filing a Petition

In accordance with Rule 62-110.106(3), F.A.C., petitions for an administrative hearing by the applicant and persons entitled to written notice under Section 120.60(3), F.S., must be filed within 21 days of receipt of this written notice. Petitions filed by any persons other than the applicant, and other than those entitled to written notice under Section 120.60(3), F.S., must be filed within 21 days of publication of the notice or within 21 days of receipt of the written notice, whichever occurs first. You cannot justifiably rely on the finality of this decision unless notice of this decision and the right of substantially affected persons to challenge this decision has been duly published or otherwise provided to all persons substantially affected by the decision. While you are not required to publish notice of this action, you may elect to do so pursuant Rule 62-110.106(10)(a).

The failure to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and

120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention (in a proceeding initiated by another party) will be only at the discretion of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C. If you do not publish notice of this action, this waiver will not apply to persons who have not received written notice of this action.

Extension of Time
Under Rule 62-110.106(4), F.A.C., a person whose substantial interests are affected by the Department's action may also request an extension of time to file a petition for an administrative hearing. The Department may, for good cause shown, grant the request for an extension of time. Requests for extension of time must be filed with the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, or via electronic correspondence at Agency_Clerk@dep.state.fl.us, before the deadline for filing a petition for an administrative hearing. A timely request for extension of time shall toll the running of the time period for filing a petition until the request is acted upon.

Mediation
Mediation is not available in this proceeding.

FLAWAC Review
The applicant, or any party within the meaning of Section 373.114(1)(a) or 373.4275, F.S., may also seek appellate review of this order before the Land and Water Adjudicatory Commission under Section 373.114(1) or 373.4275, F.S. Requests for review before the Land and Water Adjudicatory Commission must be filed with the Secretary of the Commission and served on the Department within 20 days from the date when the order is filed with the Clerk of the Department.

Judicial Review
Once this decision becomes final, any party to this action has the right to seek judicial review pursuant to Section 120.68, F.S., by filing a Notice of Appeal pursuant to Florida Rules of Appellate Procedure 9.110 and 9.190 with the Clerk of the Department in the Office of General Counsel (Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000) and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate district court of appeal. The notice must be filed within 30 days from the date this action is filed with the Clerk of the Department.

EXECUTION AND CLERKING

Executed in Hillsborough County, Florida.
STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Sincerely,



Sarah McWilliams
Environmental Manager
Permitting & Waste Cleanup Program
Southwest District

Enclosures:
62-330.453, F.A.C.
General Conditions for All General Permits, Ch. 62-330.405, F.A.C.

Attachments:
Project Plans Part 1, 21 pages
Project Plans Part 2, 20 pages
Project Plans Part 3, 20 pages

cc:
Andrea Rengifo, Southwest District, Andrea.Rengifo@FloridaDEP.gov
ERP Permitting, Southwest District, sw_erp@floridadep.gov
Craig Stout, Consultant, cstout@esassoc.com

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this document and all attachments were sent on the filing date below to the above listed persons.

FILING AND ACKNOWLEDGMENT

FILED, on this date, pursuant to 120.52(7), F.S., with the designated Department Clerk, receipt of which is hereby acknowledged.

Clerk  Date May 14, 2026

62-330.453 General Permit for Installation, Maintenance, Repair, and Removal of Utility Lines.

(1) A general permit is granted for the installation, maintenance, repair, and removal of underground utility lines, cable, conduit, or pipeline transmitting electricity, communication signals, potable water, raw water, reclaimed water, domestic wastewater, propane gas or natural gas.

(2) For the purposes of this general permit:

(a) "Directional drilling" means the linear or curvilinear excavation of a tunnel or conduit, in any direction, through the use of drilling equipment that can change direction during excavation; this also includes borehole reaming and pulling following primary drilling.

(b) "Jack-and-bore" means the linear, primarily lateral excavation of a tunnel, typically between excavated subgrade pits, through use of drilling equipment and encasement which is advanced under mechanical force, and includes similar methods commonly termed as "microtunneling."

(c) "Frac-out" means any release of drilling fluid or slurry which results in above-grade discharge of drilling fluid or slurry or significant loss of such fluid or slurry into the surrounding parent material.

(3) This general permit is limited as follows:

(a) No work occurs within Outstanding Florida Waters, Aquatic Preserves, or Class I waters.

(b) The installation of conduit or pipeline to drain wetlands or other surface waters is not authorized.

(c) Prior to work, existing pipelines shall be evacuated of substances which, if released, could result in a violation of state water quality standards.

(d) The maximum width of the disturbed corridor in wetlands shall not exceed 30 feet.

(e) The total area of forested wetland disturbance shall not exceed 0.5 acre per ten miles of cable, conduit, or pipeline.

(f) Minor above-grade improvements may be constructed in uplands under this general permit, but shall be limited to vents, valves, meter assemblies, relays, junction boxes, pads or similar structures that are directly connected to the utility line, do not create discharges, and which cumulatively comprise no more than 100 square feet of impervious surfaces per mile of utility line.

(g) Installation, maintenance, repair, and removal activities performed via trenching or methods other than directional drilling or jack-and-bore, are subject to the following special conditions:

1. The maximum width of the excavated trench shall not exceed eight feet, with temporary spoil storage banks not to exceed ten feet in width;

2. For a trench with a top width greater than three feet in herbaceous wetlands, the upper layer of the soil horizon shall initially be scraped and segregated into a spoil bank that is separated from the spoil bank resulting from the excavation of the trench for the utility line. The upper layer of the soil horizon shall be replaced as the last step of restored grades to facilitate natural revegetation;

3. Trenching in surface waters shall be limited to wetlands, artificial waters, and residential canal systems; and

4. Temporary spoil banks shall contain breaches that prevent impoundment or restriction of surface water flows;

(h) Installation, maintenance, repair, and removal conducted using directional drilling or jack-and-bore methods are subject to the following special conditions:

1. The maximum outside diameter of the cable, conduit or pipeline, including encasement, shall not exceed 30 inches.

2. A minimum depth of cover, equal to the greater of either five feet, or five times the maximum encased diameter of the utility line to be installed, shall be maintained between the top of the utility line and casing and the soil surface or submerged bottom of any wetland or waterbody being crossed.

3. All work areas associated with directional drilling or jack-and-bore activities, including

entrance and exit pits, drill rigs, tanks, pumps, drilling fluid mixing and settling pits, dewatering systems and staging areas for pipe, cables, and drill string, shall be located within uplands.

4. The use of drilling fluids shall not cause or contribute to a violation of state ground water quality criteria or standards, as defined in Chapter 62-520, F.A.C.

5. The permittee shall, at least 48 hours prior to commencement of any directional drilling or jack-and-bore activities, submit to the agency the name, as registered with the Florida Department of State, and all-hours telephone contact information of all contractors responsible for drilling and for containment and cleanup in the event of a drilling fluid frac-out or spill.

6. The contractor shall, at all times during directional drilling activities, maintain appropriate equipment and materials in a readily-accessible location and condition, to effectively contain and clean up a drilling fluid frac-out or spill.

7. The permittee or the permittee's contractor shall, at all times during directional drilling activities, ensure that appropriately-trained personnel monitor downhole equipment position, drilling fluid circulation and pressures, and actively monitor the entire utility line route for surface frac-out of drilling fluids.

8. Drilling activities shall be discontinued and the drilling fluid or slurry shall be contained using appropriate methods as soon as possible, in the event of a drilling fluid frac-out or spill. Removal of drilling fluid or slurry from wetlands and other surface waters shall be initiated and completed in the most expeditious manner practicable. Removed drilling fluid shall be contained or disposed of in an appropriate upland location. Any frac-out or spill of drilling fluid into wetlands or other surface waters shall be reported to Agency staff within 24 hours following detection of the spill or frac-out.

(i) Utilities must be located a minimum of 14 feet below the authorized depth of a federal navigation channel.

Rulemaking Authority 373.026(7), 373.043, 373.118(1), 373.406(5), 373.4131, 373.414(9), 373.418, 403.805(1) FS. Law Implemented 373.118(1), 373.406(5), 373.413, 373.4131, 373.414(9), 373.416, 373.418, 403.814(1) FS. History–New 10-3-95, Formerly 62-341.453, Amended 10-1-13, 6-1-18.

62-330.405 General Conditions for All General Permits

The following general permit conditions are binding upon the permittee and are enforceable under chapter 373, F.S. These conditions do not apply to the general permit for stormwater management systems under section 403.814(12), F.S.

(1) The general permit is valid only for the specific activity indicated. Any deviation from the specified activity and the conditions for undertaking that activity shall constitute a violation of the permit and may subject the permittee to enforcement action and revocation of the permit under chapter 373, F.S.

(2) The general permit does not eliminate the necessity to obtain any required federal, state, local and special district authorizations prior to the start of any construction, alteration, operation, maintenance, removal or abandonment authorized by this permit; and it does not authorize any violation of any other applicable federal, state, local, or special district laws (including, but not limited to, those governing the "take" of listed species).

(3) The general permit does not convey to the permittee or create in the permittee any property right, or any interest in real property, nor does it authorize any entrance upon or activities on property which is not owned or controlled by the permittee, or convey any rights or privileges other than those specified in the general permit.

(4) The general permit does not relieve the permittee from liability and penalties when the permitted activity causes harm or injury to: human health or welfare; animal, plant or aquatic life; or property. It does not allow the permittee to cause pollution that violates state water quality standards.

(5) Section 253.77, F.S., provides that a person may not commence any excavation, construction, or other activity involving the use of state-owned or other lands of the state, the title to which is vested in the Board of Trustees of the Internal Improvement Trust Fund without obtaining the required consent, lease, easement, or other form of authorization authorizing the proposed use. Therefore, the permittee is responsible for obtaining any necessary authorizations from the Board of Trustees prior to commencing activity on state-owned lands.

(6) The authorization to conduct activities under a general permit may be modified, suspended or revoked in accordance with chapter 120, F.S., and section 373.429, F.S.

(7) The general permit is not transferable to a new third party. To be used by a different permittee, a new notice to use a general permit must be submitted in accordance with rule 62-330.402, F.A.C. Activities constructed in accordance with the terms and conditions of a general permit are automatically authorized to be operated and maintained by the permittee and subsequent owners in accordance with subsection 62-330.340(1), F.A.C. Any person holding the general permit, persons working under the general permit, and owners of land while work is conducted under the general permit shall remain liable for any corrective actions that may be required as a result of any permit violations prior to sale, conveyance, or other transfer of ownership or control of the permitted project, activity, or the real property at which the permitted project or activity is located.

(8) Upon reasonable notice to the permittee, Agency staff with proper identification shall have permission to enter, inspect, sample and test the permitted system to ensure conformity with the plans and specifications approved by the general permit.

(9) The permittee shall maintain any permitted project or activity in accordance with the plans submitted to the Agency and authorized in the general permit.

(10) A permittee's right to conduct a specific activity under the general permit is authorized for a duration of five years.

(11) Activities shall be conducted in a manner that does not cause or contribute to violations of state water quality standards. Performance-based erosion and sediment control best management practices shall be implemented and maintained immediately prior to, during, and after construction as needed to stabilize all disturbed areas, including other measures specified in the permit to prevent adverse impacts to the water resources and adjacent lands. Erosion and sediment control measures shall be installed and maintained in accordance with the *State of Florida Erosion and Sediment Control Designer and Reviewer Manual (Florida Department of Environmental Protection and Florida Department of Transportation, June 2007)*, available at https://www.flrules.org/Gateway/reference.asp?No=Ref-04227, and the *Florida Stormwater Erosion and Sedimentation Control Inspector's Manual (Florida Department of Environmental Protection, Nonpoint Source Management Section, Tallahassee, Florida, July 2008)*, available at http://publicfiles.dep.state.fl.us/DEAR/Stormwater_Training_Docs/erosion-inspectors-manual.pdf.

(12) Unless otherwise specified in the general permit, temporary vehicular access within wetlands during construction shall be performed using vehicles generating minimum ground pressure to minimize rutting and other environmental impacts. Within forested wetlands, the permittee shall choose alignments that minimize the destruction of mature wetland trees to the greatest extent practicable. When needed to prevent rutting or soil compaction, access vehicles shall be operated on wooden, composite, metal, or other non-earthen construction mats. In all cases, access in wetlands shall comply with the following:

(a) Access within forested wetlands shall not include the cutting or clearing of any native wetland tree having a diameter four inches or greater at breast height;

(b) The maximum width of the construction access area shall be limited to 15 feet;

(c) All mats shall be removed as soon as practicable after equipment has completed passage through, or work has been completed, at any location along the alignment of the project, but in no case longer than seven days after equipment has completed work or passage through that location; and

(d) Areas disturbed for access shall be restored to natural grades immediately after the maintenance or repair is completed.

(13) Barges or other work vessels used to conduct in-water activities shall be operated in a manner that prevents unauthorized dredging, water quality violations, and damage to submerged aquatic communities.

(14) The construction, alteration, or use of the authorized project shall not adversely impede navigation or create a navigational hazard in the water body.

(15) Except where specifically authorized in the general permit, activities must not:

(a) Impound or obstruct existing water flow, cause adverse impacts to existing surface water storage and conveyance capabilities, or otherwise cause adverse water quantity or flooding impacts to receiving water and adjacent lands; or

(b) Cause an adverse impact to the maintenance of surface or ground water levels or surface water flows established pursuant to section 373.042, F.S., or a Works of the District established pursuant to section 373.086, F.S.

(16) If prehistoric or historic artifacts, such as pottery or ceramics, projectile points, stone tools, dugout canoes, metal implements, historic building materials, or any other physical remains that could be associated with Native American, early European, or American settlement are encountered at any time within the project site area, the permitted project shall cease all activities involving subsurface disturbance in the vicinity of the discovery. The permittee or other designee shall contact the Florida Department of State, Division of Historical Resources, Compliance Review Section (DHR), at (850)245-6333, as well as the appropriate permitting agency office. Project activities shall not resume without verbal or written authorization from the Division of Historical Resources. If unmarked human remains are encountered, all work shall stop immediately and the proper authorities notified in accordance with section 872.05, F.S.

(17) The activity must be capable, based on generally accepted engineering and scientific principles, of being performed and of functioning as proposed, and must comply with any applicable District special basin and geographic area criteria.

(18) The permittee shall comply with the following when performing work within waters accessible to federally- or state-listed aquatic species, such as manatees, marine turtles, smalltooth sawfish, and Gulf sturgeon:

(a) All vessels associated with the project shall operate at “Idle Speed/No Wake” at all times while in the work area and where the draft of the vessels provides less than a four-foot clearance from the bottom. All vessels will follow routes of deep water whenever possible.

(b) All deployed siltation or turbidity barriers shall be properly secured, monitored, and maintained to prevent entanglement or entrapment of listed species.

(c) All in-water activities, including vessel operation, must be shut down if a listed species comes within 50 feet of the work area. Activities shall not resume until the animal(s) has moved beyond a 50-foot radius of the in-water work, or until 30 minutes elapses since the last sighting within 50 feet. Animals must not be herded away or harassed into leaving. All onsite project personnel are responsible for observing water-related activities for the presence of listed species.

(d) Any listed species that is killed or injured by work associated with activities performed shall be reported immediately to the Florida Fish and Wildlife Conservation Commission (FWC) Hotline at 1(888)404-3922 and ImperiledSpecies@myFWC.com.

(e) Whenever there is a spill or frac-out of drilling fluid into waters accessible to the above species during a directional drilling operation, the FWC shall be notified at ImperiledSpecies@myfwc.com with details of the event within 24 hours following detection of the spill or frac-out.

(19) The permittee shall hold and save the Agency harmless from any and all damages, claims, or liabilities which may arise by reason of the construction, alteration, operation, maintenance, removal, abandonment or use of any activity authorized by the general permit.

(20) The permittee shall immediately notify the Agency in writing of any submitted information that is discovered to be inaccurate.

Rulemaking Authority 373.026(7), 373.043, 373.118(1), 373.406(5), 373.4131, 373.414(9), 373.4145, 373.418, 403.805(1) FS. Law Implemented 373.044, 373.118(1), 373.129, 373.136, 373.406(5), 373.413, 373.4131, 373.414(9), 373.4145, 373.416, 373.422, 373.423, 373.429, 403.814(1) FS. History–New 10-3-95, Amended 10-1-07, Formerly 62-341.215, Amended 10-1-13, 6-1-18.

· Call 48 hrs prior to starting work. $0
· Call after work is completed in row.

HARDEE COUNTY
PUBLIC WORKS DIVISION / COUNTY ENGINEER
IRRIGATION, UTILITY, TRACTOR, AND DRAGLINE CROSSING
RIGHT-OF-WAY USE PERMIT APPLICATION

-Tara Holton (863)857-7979

DATE: 10/02/2025 PERMIT NUMBER: 26-53
COUNTY ROAD NAME: Main Street, Florida Ave.
LOCATION: Main St between Illinois Ave & Altman Rd., Crossing Altman Rd. along Main St.
SECTION: 4, 5, 8, 9, 16, 17 TOWNSHIP: 34S RANGE: 25E

I, Olivia Minshew, hereinafter referred to as the "Permittee", hereby request permission from Hardee County, Florida, hereinafter called the County, to construct, operate, and/or maintain a(an) 12-inch diameter water main, over ____; under Altman Rd, Doyle Carlton Rd, Florida Ave; and/or along Main Street, Altman Rd, Florida Ave, the above County road rights-of-way.

1. The Permittee declares: That prior to filing this application, he/she has determined the location of all existing utilities both above ground and underground.
2. The following utilities/municipalities have been notified of the proposed project: City of Wauchula, Peace River Electric, TECO Peoples Gas, Comcast, Century Link
3. This permit is for permissive use only and the placing of facilities upon public road right-of-way shall not create or vest any property rights to said Permittee.
4. Whenever necessary for construction, repair, improvement, maintenance, and safe efficient operation, alteration, or relocation of the County road by Hardee County, as determined by the County Engineer or his designee, any or all poles, wires, pipes, cables, or other facilities authorized hereunder shall be removed for reset or relocated as required by the County Engineer or his designee, and at the expense of the Permittee.
5. All materials, equipment and work shall be subject to inspection by the County Engineer or his designated representative.
6. All installations shall conform to "Hardee County Resolution No.01-09."
7. The attached sketch, detailed plans and supporting information on the installation shall become part of this Permit.
8. All Hardee County property shall be restored to its original condition; as far as practical and in keeping with County Specifications.
9. It is understood and agreed that the permit herein granted is only to the extent of the County's right, title, and interest in the land to be entered upon and used by the Permittee, and the Permittee will, at all times assume all risks of construction and shall indemnify, defend, and hold harmless Hardee County employees and assignees from and against any and all loss, damage, cost or expense arising in any manner on account of the exercise or attempted exercise by the Permittee of the aforesaid rights and privileges.
10. The Hardee County Public Works Division shall be notified forty-eight (48) hours prior to the start of the project in writing to Tara Holton, Road & Bridge or by phone no. 863-773-3272.
11. In case of non-compliance with Hardee County's requirements, this permit is void and the facilities shall be brought into compliance or removed from Hardee County's rights-of-way.
12. A non-refundable processing fee of two hundred twenty-five dollars ($225.00) shall be charged for this application.
13. This permit shall be effective on the approval date indicated and expires in ninety (90) days.
14. The permittee shall be responsible for restoration of all disturbed areas.
15. Permittee shall comply with all applicable federal, county and local codes and regulations.

The Permittee hereby certifies that he/she understands and will comply with the above conditions.

Submitted By: Olivia Minshew Date: 4/28/26

Approved By: Tara Holton Date: 4/28/26

Expires: 7/28/26