



CITY OF VENICE, FLORIDA

Procurement- Finance Department

**401 W. Venice Avenue
Venice, FL 34285**

Invitation to Bid

ITB Number 2973-13

Date of Issue: August 13, 2013

Submission Deadline: September 13, 2013 at 2:00 PM

Title and Purpose of ITB:

Valve Replacement Program- Phase 5

INVITATION TO BID

The City of Venice invites sealed bids from qualified bidders to provide the following goods or services, which is described in detail in the Specifications.

Bid No.: 2973-13

Bid Title: Valve Replacement Program- Phase 5

PROJECT DESCRIPTION: This project includes “phase 5” of the City’s valve replacement program, which includes the replacement of 14 total broken gate valves that range in size from 4 inches to 8 inches in the City’s water distribution system. The existing gate valves shall be removed and disposed of, new gate valves shall be installed, necessary fittings shall be installed, and proper restraint shall be provided. The work will include, but is not limited to, mobilization/demobilization, preconstruction video, replacement of broken gate valves, bacteriological testing and restoration.

BID OPENING LOCATION: City of Venice, Venice City Hall, Community Hall, room # 114,
401 W. Venice Ave., Venice FL 34285

BID SUBMITTAL DEADLINE and BID OPENING DATE & TIME: September 13, 2013

at 2:00 PM

PRE-BID MEETING: YES DATE & TIME: August 22, 2013 at 2:00 PM

LOCATION: Venice City Hall, Community Hall room #114

Specifications and Bid documents are available by calling Onvia DemandStar at (800) 711-1712 or by their Internet address at <http://www.demandstar.com>. Proposers may also pick up Bid documents at the City of Venice Procurement- Finance Department, Room 204, 401 West Venice Ave., Venice Florida 34285, (941) 486-2626 Ext. 24002 at no charge.

A pre-bid meeting will be held on August 22, 2013 at 2:00 p.m., room #114, Venice City Hall. Representatives from the City will be present to discuss the overall project and the Invitation to Bid. Interested Firms are encouraged to attend.

All questions, comments, or concerns about this ITB must be submitted in writing to Mr. Jon Mayes, Procurement- Finance Department, for the City of Venice, Room 204, 401 West Venice Avenue, Venice, FL 34285 or e-mail at jmayes@ci.venice.fl.us. Mr. Mayes is the only designated representative of the City authorized to respond to comments, questions, and concerns. The City will not respond to comments, questions or concerns addressed to any person other than Mr. Mayes. If the City determines that a particular comment, question or concern necessitates a global response to all Proposers, the City will issue a clarifying memorandum or addendum. **The final day that the City will accept questions will be Friday, August 30, 2013 by 1:00 p.m.**

Bids must be submitted in **four sets** and at least one set must bear an original signature, in a sealed envelope marked “**Invitation to Bid # 2973-13: “Valve Replacement Program- Phase 5”** and mailed or delivered to the City of Venice- Purchasing Department, 401 W. Venice Ave. Room # 204, Venice, FL 34285, no later than the deadline specified. The City assumes no responsibility for bids received after the bid submittal time or at any location other than that specified, no matter what the reason. Late bids will be held unopened and will not be considered for award.

Bid Security in the amount of five (5%) percent of the bid is required.

Performance and Payment Bonds are required in the amount of One Hundred (100%) percent of the contract price once a contract is awarded.

No bid will be received after the specified time for acceptance and no bidder may withdraw his bid within a period of one-hundred and eighty (180) days after the actual date of opening thereof.

Bids will be considered only from bidders who have the applicable license, if a license is required by the City of Venice and/or State of Florida, for the type of work specified. A copy of the applicable license must be submitted with bid if a license is required.

The City reserves the right to reject any or all bids in whole or in part, with or without cause, to waive any requirements, irregularities or technical defects therein, when it is deemed to be in the interest of the City.

CITY OF VENICE, FLORIDA

Publish: Wednesday, August 14, 2013
Saturday, August 17, 2013

SEALED INVITATION TO BID
CITY OF VENICE, FLORIDA
ITB# 2973-13

GENERAL CONDITIONS & INSTRUCTIONS TO OFFERORS

DEFINED TERMS

Terms used in this solicitation are defined and have the meaning assigned to them. The term "Offeror" means one that submits a proposal directly to CITY as distinct from a Sub-Offeror, who submits a Proposal to the Offeror. The term "Successful Offeror" means the qualified, responsible and responsive Offeror to whom the City of Venice (on the basis of CITY'S evaluation as hereinafter provided) makes an award. The term "CITY" refers to the City of Venice, a municipal corporation of the State of Florida. The term "ITB" refers to this Sealed INVITATION TO BID. The term "solicitation" refers to the entire ITB package and the Offeror's submittal as a response to this ITB. The term "submittal" refers to all documentation and information as submitted by the Offeror in response to this solicitation. The term "Department" refers to the State of Florida Department of Transportation.

1. OFFEROR REGISTRATION

Offerors who obtain solicitation documents from sources other than the City or download from <http://www.demandstar.com/> must officially register receipt of the solicitation with the City's Procurement- Finance Department in order to be placed on the notification list for any forthcoming addendum or other official communications. Failure to register as a prospective Offeror may cause your submittal to be rejected as non-responsive if you have submitted a response without acknowledgment of issued addenda. The City of Venice is not responsible for the accuracy of bid documents and information obtained from any source other than <http://www.demandstar.com/>.

2. CONTACT

All prospective Offerors are hereby instructed not to contact any member of the City of Venice City Council, City Manager, or City of Venice staff member other than the contact person indicated in this ITB regarding this solicitation or their submittal at any time prior to the final evaluation and recommended ranking by the City staff for this project. Any such contact shall be cause for rejection of your submittal.

3. ADDENDA AND INQUIRIES

- 3.1 If there is any doubt as to the true meaning of the specifications and information provided, Offerors may submit written or faxed inquiries regarding this solicitation to the Procurement- Finance Department, 401 West Venice Avenue, Room # 204 Venice, FL 34285, Fax No. (941) 486-2790. The City will respond to written or faxed inquiries received by the posted deadline for questions. Inquiries must reference the date and time of opening, and the solicitation number. Failure to comply with this condition shall result in the Offeror waiving their right to dispute the specifications and information provided in the solicitation document.
- 3.2 Any change to this solicitation shall be made by addenda duly issued to each registered Offeror. Receipt of such addenda must be so noted on or within your response. It is the Offeror's responsibility to make contact through the Internet or phone to determine if Addenda have been issued.

- 3.3 Oral Inquiries: The City will not respond to oral inquiries.

4. PUBLIC OPENING

Submittals shall be received in the Procurement- Finance Department, 401 W. Venice Ave, Venice, FL 34285 by the date and time indicated on these documents. As soon as possible thereafter, the names of the Offerors shall be read off at the specified location.

5. DELAYS

The City, at its sole discretion, may delay the scheduled due dates indicated above if it is to the advantage of the City to do so. The City will notify Offerors of all changes in scheduled due dates by written addenda.

6. PROPOSAL SUBMISSION AND WITHDRAWAL

- 6.1 Address to send submittal:

*Procurement- Finance Department
City of Venice – Purchasing Department
401 W. Venice Ave, Room # 204.
Venice, FL 34285*

- 6.2 The outside of the envelope/container must be identified with the solicitation number and title as stated above. The envelope/container must also include the Offeror's name and return address.
- 6.3 Submittals may be withdrawn by an appropriate document duly executed (in the manner that a Submittal must be executed) and delivered to the place where Submittals are to be submitted at any time prior to the deadline for submission. A request for withdrawal or a modification must be in writing and signed by a person duly authorized to do so. Evidence of such authority must accompany the request for withdrawal or modification. Withdrawal of a Submittal will not prejudice the rights of an Offeror to submit a new Submittal prior to the opening date and time. After expiration of the period for receiving Submittals, no Submittal may be withdrawn or modified.

- 6.4 **Withdrawal of Submittals after Opening Date:** Submittals, once opened, become the property of the City and will not be returned to the Offerors. Submittals not so withdrawn before the opening constitute an irrevocable offer for a period of one-hundred-eighty (180) days to provide the City the services set forth in these specifications until one or more of the proposals have been accepted by City staff. No Offeror may withdraw their proposal during this one-hundred-eighty (180) day period.
- 6.5 **Number of Submittal Copies:** Offerors shall submit four (4) complete sets (one original and three copies) of the submittal complete with all supporting documentation (i.e. photographs, drawings, and exhibits) in a sealed envelope/container marked as noted above.
- 6.6 **Proposal Is Not Binding:** The Offeror understands that responding to this solicitation does not constitute an agreement or contract with the Offeror. A submittal is not binding until submittal is reviewed and accepted by the appropriate level of authority and both parties execute a contract.
- 6.7 **Responsibility for getting a submittal to the City on or before the specified date and time is solely and strictly that of the Offeror.** The City will not be responsible for any delay, for any reason whatsoever. Submittals by telephone, telegram, facsimile machines, and Internet, will not be acceptable. Submittals must be received and stamped on the outside of the envelope with the time and date, in the Procurement- Finance Department by the date and time specified for opening.
- 6.8 **LATE SUBMITTALS** – Submittals received after the date and time of the opening will not be considered and will not be opened. It will be the Offeror's responsibility to make arrangements for the return of their submittal at their expense.
- 7. PRICES, TERMS AND PAYMENT:**
- Firm prices shall be bid F.O.B. requesting agency and include packing, handling and shipping charges fully prepaid by the vendor.
- 7.1 **BID PRICE/MISTAKES:** The bidder shall show in the proposal both the unit price and the total amount on items when indicated. In the event of discrepancy between the unit price and the extension, THE UNIT PRICE SHALL PREVAIL. Prices shall be extended in decimals.
- 7.2 **INVOICING AND PAYMENT:** The vendor shall be paid upon submission of proper certified invoices to the ordering agency at the prices stipulated on the contract. Invoices shall contain the purchase order number. THE VENDOR SHALL ACCEPT NO ORDER WITHOUT A PURCHASE ORDER NUMBER FROM THE CONTRACTING ENTITY. The City reserves the right to pay for purchases made under any agreement resulting from a solicitation through its Purchasing Card Program which utilizes VISA credit cards. Check or the ACH (Automated Clearing House) process may also be used if the City desires to select this form of payment. When payment is received utilizing the City credit card, an original invoice should not be mailed to the Finance Department. Only the credit card receipt is issued for this charge with the original receipt being provided with

the delivery to the individual cardholder placing the order. No surcharges will be accepted for the use of purchasing cards.

- 7.3 **TAXES:** The purchase of certain items by the Contracting Entity are exempt from the payment of excise, transportation and sales tax imposed by the Federal, State and/or City governments. Such taxes must not be included in proposal prices. Upon request, applicable Federal Excise Exemption certificates will be furnished.

8. CONDITION AND PRICING:

It is understood and agreed that any item offered or shipped as a result of this bid shall be new (current model at the time of this bid). All containers shall be suitable for storage or shipment and all prices shall include standard commercial packaging.

9. SAFETY STANDARDS:

Unless otherwise stipulated in the bid, all manufactured items or fabricated assemblies shall comply with applicable requirements of occupational Safety and Health Act and any standards

10. MANUFACTURER'S NAME AND APPROVED EQUIVALENTS:

Any manufacturer's names, trade names, brand names, information and/or catalog numbers listed in a specification are for information and not intended to limit competition unless otherwise indicated. The bidder may offer any brand for which he/she is an authorized representative, which meets or exceeds the bid specification for any item(s). If bids are based on equivalent products, indicate on the bid form the manufacturer's product name and reference number. Bidder shall submit with his/her proposal, cuts, sketches, and descriptive literature, and/or complete specifications. Reference to literature submitted with a previous bid will not satisfy this provision. The bidder shall explain in detail the reason(s) why the proposed equivalent will meet the specifications and not be considered an exception thereto. Bids that do not comply with these requirements, are subject to rejection. Bids lacking any written indication of intent to quote an alternate brand will be received and considered in complete compliance with the specifications as listed on the bid form. The City's Procurement- Finance Department is to be notified of any proposed changes in (a) materials used, (b) manufacturing process, or (c) construction. However, changes shall not be binding upon the City unless evidenced by a Change Notice issued and signed by the Procurement- Finance Department or designated representative.

11. DELIVERY:

All prices shall be F.O.B. Destination, Venice, Florida. Delivery date and warranties must be written out and submitted with bids. Delivery dates, as specified, must be met.

12. ADDITIONAL PURCHASES ("PIGGY-BACK") BY OTHER PUBLIC AGENCIES:

The vendor, by submitting a bid, authorizes other Public Agencies to "Piggy-Back" or purchase equipment or services being proposed in this invitation to bid at prices bid unless otherwise noted on the proposal sheet.

13. SUBMITTAL PREPARATION COST

The City shall not be liable for any expense incurred in connection with preparation of a submittal to this document. Offerors should prepare a straightforward and concise description of the Offeror's ability to meet the requirements of this document.

14. ACCURACY OF SUBMITTAL INFORMATION

Any Offeror, who states in their submittal any information that is determined to be substantially inaccurate, misleading, exaggerated, or incorrect, shall be disqualified from consideration.

15. LICENSES

Licensed and Certified: Offeror's, both corporate and individual, must be fully licensed and certified for the type of work to be performed in the state of Florida at the time of submittal and during the entire Contract time.

16. LOCAL PREFERENCE

16.1 Unless otherwise noted in the solicitation, preference shall be given to a "local business" in the awarding of any Invitation to Bid (ITB), Request for Proposal (RFP) or Request for Qualifications (RFQ) in accordance with Section 2-217 of the City of Venice's Code. Local preference shall not apply to other types of solicitations unless explicitly stated in the subject solicitation.

16.2 "Local business" means the vendor has paid a local business tax to either Sarasota, Manatee, DeSoto or Charlotte County, whichever county the vendor is located, if applicable prior to bid submission that authorizes the vendor to provide the commodities or services to be purchased, and maintains a permanent physical business address located within the limits of either Sarasota, Manatee, DeSoto or Charlotte County from which the vendor operates or performs business, and at which at least one full time employee is located.

16.3 In addition, fifty percent (50%) or more of the employees based at the local business location must reside within Sarasota, Manatee, DeSoto or Charlotte County.

16.4 In the event the local office is not the primary location of the vendor, at least ten percent (10%) of the vendor's entire full-time employees must be based at the local office location. Alternatively, this requirement may be satisfied if at least one corporate officer, managing partner or principal owner of the vendor resides in Sarasota, Manatee, DeSoto or Charlotte County.

16.5 Offerors wishing to be given preference as a local business must submit **with their offer**, all of the Local Preference documentation identified in the "Required Forms Section" of the solicitation.

16.6 For local preference to be granted, the name of the company represented on the required forms must be the same as the name on the Local Preference documentation.

16.7 Information regarding Sarasota County's Local Business Tax can be found at www.sarasotataxcollector.governmax.com.

16.8 In case of a proposal submitted by more than one entity, any one of those entities can qualify the proposal for the local preference. Sub-contractors or sub-consultants cannot qualify a proposal for local preference.

17. POSTING OF NOTICE OF INTENT

A notice of intent for award will be posted for review by interested parties in City Hall and on the City's website prior to submission through the appropriate approval process to the appropriate level for final approval of award.

18. PUBLIC RECORDS/TABULATION

Submittals are not public records, subject to the provisions of Florida State Statutes, Chapters 119 and 120, until such time as notice of a decision or intended decision is provided, or within ten (10) days after the solicitation opening, whichever is earlier. A copy of the tabulation results will be forwarded upon receipt of a stamped, self-addressed envelope. An electronic tabulation will be posted on Demand Star at their Internet Website at <http://www.demandstar.com/>.

19. RESERVED RIGHTS

19.1 The City reserves the right to waive formalities in any submittal, and to reject any or all submittals in whole or in part, with or without cause and/or to accept the submittal that in the City's judgment will be in the best interest of the City. The City specifically reserves the right to reject any conditional submittal.

19.2 To the extent permitted by applicable state and federal laws and regulations, City reserves the right to reject any and all submittals, to waive any and all informalities not involving price, time or changes in the work with the Successful Offeror, and the right to disregard all nonconforming, non-responsive, unbalanced or conditional submittals. Submittals will be considered irregular and may be rejected, if they show serious omissions, alterations in form, additions not called for, conditions or unauthorized alterations, or irregularities of any kind.

19.3 City reserves the right to reject the submittal of any Offeror if the City believes that it would not be in the best interest of the City to make an award to that Offeror, whether because the submittal is not responsive or the Offeror is unqualified or of doubtful financial ability or fails to meet any other pertinent standard or criteria established by City.

19.4 The City reserves the right to terminate the contract with any vendor who fails to meet a deadline or shows incompetency.

20. INDEMNIFICATION/HOLD HARMLESS

The Offeror shall defend, indemnify and hold the City, the City's representatives or agents, and the officers, directors, agents, employees, and assigns of each harmless for and against any and all claims, demands, suits, judgments, damages to persons or property, injuries, losses or expenses of any nature whatsoever arising directly or indirectly from or out of any negligent act or omission of the Offeror, its sub-consultants and their officers, directors, agents or employees; any failure of the elected firm to perform its

services hereunder in accordance with generally accepted professional standards; any material breach of the elected firm representations as set forth in the proposal or any other failure of the elected firm's to comply with the obligations on its part to be performed under this contract.

21. PUBLIC ENTITY CRIMES/NON-COLLUSIVE AFFIDAVIT

- 21.1 Each Offeror shall complete the Non-Collusive Affidavit and the Public Entity Crimes Form and shall submit the forms with the submittal. CITY considers the failure of the Offeror to submit these documents to be a major irregularity and may be cause for rejection of their submittal.
- 21.2 A person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a response on a contract to provide any goods or services to a public entity, may not submit a response on a contract with a public entity for the construction or repair of a public building or public work, may not submit responses on leases of real property to a public entity, may not be awarded or perform work as a Offeror, supplier, Sub-Offeree, or consultant under a contract with any public entity, and may not transact business with any public entity in excess of the threshold amount provided in Section 287, for CATEGORY TWO for a period of 36 months from the date of being placed on the convicted vendor list.
- 21.3 Termination for Cause: Any Agreement with the City obtained in violation of this Section shall be subject to termination for cause. A Sub-Offeree who obtains a subcontract in violation of this Section shall be removed from the Project and promptly replaced by a Sub-Offeree acceptable to the City.

22. GRATUITIES AND KICKBACKS

- 22.1 Gratuities: It is unethical for any person to offer, give, or agree to give any employee or for any employee to solicit, demand, accept or agree to accept from another person, a gratuity or an offer of employment in connection with any decision, approval, disapproval, recommendation, preparation of any part of program requirement or a purchase request, influencing the content of any specification or procurement standard, rendering of advice, investigation, audit, or in any other advisory capacity in any proceeding or application, request for ruling, determination claim or controversy, or other particular matter, pertaining to any program requirement or an Agreement or subcontract, or to any solicitation or proposal therefore.
- 22.2 Kickbacks: It shall be unethical for any payment, gratuity, or offer of employment to be made by or on behalf of a Sub-Offeree under a Contract to Offeror or higher tier Sub-Offeree any person associated therewith, as an inducement of the award of a subcontract or order.
- 22.3 Contract Clause: The prohibition against gratuities and kickbacks prescribed in this section shall be conspicuously set forth in every Contract and subcontract and solicitation therefore.

23. EQUAL EMPLOYMENT OPPORTUNITY

Offeror shall be in compliance with Executive Order 11426 Equal Opportunity as amended by Executive Order 11375, and as supplemented by the Department of Labor Regulations as applicable.

24. TERMS FOR FEDERAL AID CONTRACTS

The following terms apply to this contract which involves the expenditure of federal funds:

- 24.1 It is understood and agreed that all rights of the Department relating to inspection, review, approval, patents, copyrights, and audit of the work, tracing, plans specifications, maps data, and cost records relating to this Agreement shall also be reserved and held by authorized representatives of the United States of America.
- 24.2 It is understood and agreed that, in order to permit federal participation, no supplemental agreement of any nature may be entered into by the parties hereto with regard to the work to be performed hereunder without the approval of U.S.D.O.T., anything to the contrary in this Agreement notwithstanding.
- 24.3 COMPLIANCE WITH REGULATIONS: The Consultant shall comply with the regulations of the U.S. Department of Transportation relative to nondiscrimination in federally-assisted programs of the U.S. Department of Transportation (Title 49, Code of Federal Regulation, Part 21, hereinafter referred to as the Regulations), which are herein incorporated by reference and made a part of the contract.
- 24.4 NONDISCRIMINATION: The Consultant, with regard to the work performed by him after award and prior to completion of the contract work, will not discriminate on the grounds of race, color, religion, sex or national origin in the selection and retention of Sub-Offerees, including procurements of material, and leases of equipment. The Consultant will not participate either directly or indirectly in the discrimination prohibited by Section 21.5 of the program set forth in Appendix B of the Regulations.
- 24.5 SOLICITATIONS FOR SUBCONTRACTS, INCLUDING PROCUREMENTS OF MATERIALS AND EQUIPMENT: In all solicitations made by competitive bidding or negotiation made by the Consultant for work to be performed under a subcontract, including procurements of materials and leases of equipment, each potential Sub-Offeree, supplier or lessor shall be notified by a consultant of the consultant's obligations under this contract and the regulations relative to nondiscrimination on the grounds of race, color religion, sex or national origin.
- 24.6 INFORMATION AND REPORTS: The Consultant will provide all information and reports required by the Regulations, or orders and instructions issued pursuant thereto, and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the

- Department or U.S. Department of Transportation to be pertinent to ascertain compliance with such Regulations, orders and instructions. Where any information required of the Consultant is in the exclusive possession of another who fails or refuses to furnish this information, the Consultant shall certify to the Department, or the U.S. Department of Transportation, as appropriate, and shall set forth what efforts it has made to obtain the information.
- 24.7 **SANCTIONS OF NONCOMPLIANCE:** In the event of the Consultant's noncompliance with the nondiscrimination provisions of this contract, the State of Florida Department of Transportation shall impose such contract sanctions as it or the U.S. Department of Transportation may determine to be appropriate, including but not limited to,
1. withholding of payments to the Consultant under the contract until the Consultant complies and/or
 2. cancellation, termination or suspensions of the Contract, in whole or in part.
- 24.8 **INCORPORATION OR PROVISIONS:** The Consultant will include the provisions of Section 25.11, part 1 and 2 of the General Conditions in every subcontract, including procurements of materials and leases of equipment unless exempt by the Regulations, order, or instructions issued pursuant thereto. The Consultant will take such action with respect to any subcontract or procurement as the State of Florida Department of Transportation or the U.S. Department of Transportation may direct as a means of enforcing such provisions, including sanctions for noncompliance; provided, however, that, in the event a Consultant becomes involved in, or is threatened with litigation with a Sub-Offeree or supplier as a result of such direction, the Consultant may request the State to enter into such litigation to protect the interests of the State, and, in addition, the Consultant may request the United States to enter into such litigation to protect the interests of the United States.
- 24.9 **INTEREST OF MEMBERS OF CONGRESS:** No member of or delegate to the Congress of the United States shall be admitted to any share or part of this contract or to any benefit arising therefrom.
- 24.10 **INTEREST OF PUBLIC OFFICIALS:** No member, officer, or employee of the public body or of a local public body during his tenure or for one year thereafter shall be any interest, direct or indirect, in this contract or the proceeds thereof. For purposes of this provision, public body shall include municipalities and other political subdivisions of States, and public corporations, boards, and commissions established under the laws of any State.
- 24.11 **PARTICIPATION BY MINORITY BUSINESS ENTERPRISES:** The Consultant shall agree to abide by statements in Paragraph (1) and (2) which follow. These statements shall be included in all subsequent agreements between the Consultant and any subconsultant or Offeror:
1. "Policy: It is the policy of the Department of Transportation that minority business enterprises as defined in 49 CFR Part 23 shall have the maximum opportunity to participate in the performance of contracts financed in whole or in part with Federal funds under this agreement. Consequently, the MBE requirements of 49 CFR Part 23 apply to this agreement."
 2. "MBE OBLIGATION: The recipient or its Offeror agrees to ensure that minority business enterprises, as defined in 49 CFR Part 23, have the maximum opportunity to participate in the performance of contracts and subcontracts financed in whole or in part with Federal Funds provided under this agreement. In this regard, all recipients or Offerors shall take all necessary and reasonable steps in accordance with 49 CFR Part 23, have the maximum opportunity to participate in the performance of contracts and subcontracts financed in whole or in part with Federal funds provided under this agreement. In this regard, all recipients or Offerors shall take all necessary and reasonable steps in accordance with 49 CFR Part 23 to ensure that minority business enterprises have the maximum opportunity to compete for and perform contracts. Recipients and their Offerors shall not discriminate on the basis of race, color, national origin, or sex in the award and performance of DOT-assisted contracts."
- 24.12 It is mutually understood and agreed that the willful falsification, distortion or misrepresentation with respect to any facts related to the project(s) described in this Agreement is a violation of the Federal Law. Accordingly, United States Code, Title 18, Section 1020, is hereby incorporated by reference and made a part of this Agreement.
- 24.13 It is understood and agreed that if the Consultant at any time learns that the certification it provided the Department in compliance with CFR, Section 23.51, was erroneous when submitted or has become erroneous by reason of changed circumstances, the Consultant shall provide immediate written notice to the Department. It is further agreed that the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – Lower Tier Covered Transaction" as set forth in 49 CFR, Section 29.510, shall be included by the Consultant in all lower tier covered transactions and in all aforementioned federal regulation.
- 24.14 The Department hereby certifies that neither the Consultant nor the Consultant's representative have been required by the Department, directly or indirectly as an express or implied condition in connection with obtaining or carrying out this contract, to
- A. employ or retain, or agree to employ or retain, any firm or person, or
 - B. pay, or agree to pay, to any firm, person, or organization, any fee, contribution, donation, or consideration of any kind;
- 24.15 The Department further acknowledges that this agreement will be furnished to a federal agency, in

connection with this contract involving participation of Federal-Aid funds, and is subject to applicable State and Federal Laws, both criminal and civil.

- 24.16 The Consultant hereby certified that it has not:
- A. employed or retained for a commission, percentage, brokerage, contingent fee, or other consideration, any firm or person (other than a bona fide employee working solely for the above Offeror) to solicit or secure this contract;
 - B. agreed, as an express or implied condition for obtaining this contract, to employ or retain the services of any firm or person in connection with carrying out this contract; or
 - C. paid, or agreed to pay, to any firm, organization or person (other than a bona fide employee working solely for the above Offeror) any fee contribution, donation, or consideration of any kind for, or in connection with, procuring or carrying out the contract.
- 24.17 The Consultant further acknowledges that this agreement will be furnished to the State of Florida Department of Transportation and a federal agency in connection with this contract involving participation of Federal-Aid funds, and is subject to applicable State and Federal Laws, both criminal and civil.

25. CONFLICT OF INTEREST

No employee of an agency acting in his or her official capacity as a purchasing agent, or public officer acting in his or her official capacity, shall either directly or indirectly purchase, rent, or lease any realty, goods, or services for his or her own agency from any business entity of which the officer or employee or the officer's or employee's spouse or child is an officer, partner, director, or proprietor or in which such officer or employee or the officer's or employee's spouse or child, or any combination of them, has a material interest. Nor shall a public officer or employee, acting in a private capacity, rent, lease, or sell any realty, goods, or services to the officer's or employee's own agency, if he or she is a state officer or employee, or to any political subdivision or any agency thereof, if he or she is serving as an officer or employee of that political subdivision. The foregoing shall not apply to district offices maintained by legislators when such offices are located in the legislator's place of business or when such offices are on property wholly or partially owned by the legislator. This subsection shall not affect or be construed to prohibit contracts entered into prior to:

October 1, 1975.
Qualification for elective office.
Appointment to public office.
Beginning public employment

26. DRUG FREE WORKPLACE:

The City of Venice has adopted a policy in observance of the Drug Free Work Place Act of 1988. Therefore, it is unlawful to manufacture, distribute, disperse, possess, or use any controlled substance in the City of Venice workplace.

The City of Venice requests the attached Drug Free Workplace Affidavit to accompany your response. This form has been adopted by the City in accordance with the

Drug Free Workplace Act. The City will not disqualify any respondent who does not concur with the affidavit. The Drug Free Workplace Affidavit is primarily used as tiebreaker when two or more separate entities have submitted proposals at the same price, terms and conditions.

27. APPLICABLE LAWS

Interested parties are advised that all City contracts and/or documentation pertinent to this solicitation are subject in full or in part to all legal requirements provided in applicable City Ordinances, State Statutes, and Federal Regulations. Uniform Commercial Code, Chapter 672, Florida State Statutes shall prevail, as the basis for contractual obligations between the Offeror and the City for any terms and conditions not specifically stated within the context of this contract.

28. COMPETENT PERSONNEL

All interested firms are to warrant that services shall be performed by skilled and competent personnel to the highest professional standards in this scope of work.

29. EXAMINATION OF CONTRACT DOCUMENTS AND SITE

- 29.1 Before delivering a submittal, each Offeror must (a) consider federal, state and local laws, ordinances, rules and regulations that may in any manner affect cost, or performance of the work, (b) study and carefully correlate the Offeror's observations with the solicitation documents; and notify the Procurement- Finance Department of all conflicts, errors and discrepancies, if any, in the solicitation documents.
- 29.2 The Offeror, by and through delivering a submittal, agrees that they shall be held responsible for having familiarized themselves with the nature and extent of any local conditions that may affect the services.

30. SPECIFICATIONS

- 30.1 The apparent silence of the specification as to any detail, or the apparent omission from it of a detailed description concerning any point, shall be regarded as meaning that only the best commercial practice is to prevail and that only material and workmanship of the finest quality are to be used. All interpretations of the Specifications shall be made on the basis of this statement.
- 30.2 For the purpose of evaluation, the Offeror must indicate any variance or exceptions to the stated Specifications, no matter how slight. Deviations should be explained in detail. Absence of variations and/or corrections will be interpreted to mean that the Offeror meets all the Specifications in every respect.

31. CANCELLATION CLAUSE

Failure to comply with any of the terms, conditions, specifications and/or service requirements will be just cause for termination of this contract by a thirty (30) day written notice of intent forwarded to the successful Offeror.

32. ACCEPTING CONTENT OF PROPOSAL

By delivering a submittal in response to this solicitation document, the Offeror certifies that they have fully read

and understand the context of the solicitation document and have full knowledge of the scope, nature, and detailed requirements of services and/or commodities to be provided and performed. Submittals shall be returned in the sequential manner as requested in the "Submittal Format and Requirements" section of this solicitation.

33. TAXES

The negotiated cost shall include all freight, handling, delivery, surcharges or other incidental charges that may be required to provide the services or deliver the commodities. The City of Venice is exempt from the payment of Federal and State taxes, including sales tax. Your cost proposal shall not include sales tax to be collected from the City. The City's sales tax exemption is not available to you for items you purchase, regardless of whether these items will be transferred to the City.

34. ASSIGNMENT

- 34.1 Successful Offeror shall not assign, transfer or subject the Contract or its rights, title or interests or obligations therein without CITY'S prior written approval.
- 34.2 Violation of the terms of this paragraph shall constitute a breach of the Contract by Successful Offeror and CITY may, at its discretion, cancel the Contract and all rights, title and interest of Successful Offeror shall thereupon cease and terminate.

35. SOLICITATION FORMS

- 35.1 If the Proposer cannot meet a service or equipment requirement, then the phrase "not available" should be entered on the Proposal Form for that service requirement. In the case of a "not available" remark, the Offeror may offer an alternative service. Alternate submittals may be submitted for consideration. It will be at the City's sole discretion to accept or reject any and all alternate submittals received.
- 35.2 This solicitation presents the City's minimum requirements under present methods of operation. Responses to this request should address these requirements, but Offerors are encouraged to suggest any additional services or commodities, which in their opinion, would be in the best interest of the City.
- 35.3 Submittals may be delivered, which deviate from the requirements herein, providing that they are clearly identified as alternate submittals and providing further that it can be demonstrated that stated requirements are substantially improved or are not compromised or prejudiced by such deviations; and, that it would be clearly in the interest of the City that an alternative proposal be considered. Such alternative proposals will be provisionally accepted for consideration, subject to the reserved right of the City to make the determination whether the above stated conditions for alternate proposals have been satisfied and subject further to the reserved right of the City to accept or reject these proposals upon the basis of the determination.

36. DISCLOSURE – PUBLIC OFFICER, PUBLIC EMPLOYEE OR ADVISORY BOARD MEMBER OF CITY

- 36.1 Sections 112.313(3) and 112.313(7), Florida Statutes, prohibit any public officer, employee, or advisory board member of the City from holding any employment or contractual relationship with any business entity doing business with the City. Section 112.313(12) provides that a public officer, employee, or advisory board member will not be in violation of the prohibition if all three of the following conditions are met. The filing of the disclosure form with the Supervisor of Elections is the sole responsibility of the Proposer and must be filed prior to or at the time of submission of the proposal. A copy of the filed disclosure form shall be submitted as part of the proposal.
- 36.2 Bid is awarded under a sealed, competitive Proposal to lowest or best Proposer system. Advisory board member is required to, prior to or at the time of the submission of the proposal, file a statement with the Supervisor of Elections, disclosing his interest and the nature of the intended business. The form is entitled "Form 3A Interest in Competitive Proposal for Public Business," a copy of which is available from the City's Procurement- Finance Department.
- 36.3 The public officer, employee, or advisory board member, spouse, or child is required to have in no way used or attempted to use his influence to persuade a member of the City or any of its personnel to enter into such a contract other than by the mere submission of the proposal.
- 36.4 The public officer, employee, or advisory board member, spouse, or child is required to have in no way participated in the determination of the Bid specifications or the determination of the lowest or best Proposer.

37. CIVIL RIGHTS

- A. Nondiscrimination - In accordance with Title VI of the Civil Rights Act of 1964, as amended, 42 U.S.C. § 2000d, section 303 of the Age Discrimination Act of 1975, as amended, 42 U.S.C. § 6102, section 202 of the Americans with Disabilities Act of 1990, 42 U.S.C. § 12132, and Federal transit law at 49 U.S.C. § 5332:
The CONSULTANT or SUBGRANTEE shall not discriminate on the basis of race, age, creed, disability, marital status, color, national origin, or sex in the performance of this contract. The CONSULTANT or SUBGRANTEE shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of (Florida Department of Transportation, the Federal Highway Administration, Federal Aviation Administration, the US Department of Energy, US Department of Justice, or Office of Housing and Urban Development) assisted contracts. Failure by the CONSULTANT or SUBGRANTEE to carry out these requirements is a material breach of this AGREEMENT, which may result in the

termination of this AGREEMENT or such other remedy, as the City deems appropriate.

Each subcontract the CONSULTANT or SUBGRANTEE signs in regards to this federal aid PROJECT must include the assurance in this paragraph (see 49 CFR 26. 13(b). The CONSULTANT or SUBGRANTEE agrees to comply with all applicable federal implementing regulations and other implementing requirements the Federal government may issue.

B. Equal Employment Opportunity - The following equal employment opportunity requirements apply to this AGREEMENT:

(1) Race, Color, Creed, National Origin, Sex - In accordance with Title VI of the Civil Rights Act of 1964, as amended, 42 U.S.C. § 2000e, and Federal transit laws at 49 U.S.C. § 5332, the CONSULTANT or SUBGRANTEE agrees to comply with all applicable equal employment opportunity requirements of U.S. Department of Labor (U.S. DOL) regulations, "Office of Federal Contract Compliance Programs, Employment Opportunity, Department of Labor," 41 C.F.R. Parts 60 et seq., (which implement Executive Order No. 11246, "Equal Employment Opportunity," as amended by Executive Order No. 11375, "Amending Executive Order 11246 Relating to Equal Employment Opportunity," 42U.S.C. § 2000e note), and with any applicable Federal statutes, executive orders, regulations, and Federal policies that may in the future affect construction activities undertaken in the course of the PROJECT.

The CONSULTANT or SUBGRANTEE agrees to take all reasonable steps to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, creed, national origin, sex, or age. Such action shall include, but not be limited to, the following:

Employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination; rates of payer other forms of compensation; and selection for training, including apprenticeship. In addition, the CONSULTANT or SUBGRANTEE agrees to comply with any implementing requirements the Federal government may issue.

(2) Age - In accordance with Section 4 of the Age Discrimination in Employment Act of 1967, as amended, 29 U.S.C. § 621 through 634 and Federal transit law at 49 U.S.C. § 5332, the CONSULTANT or SUBGRANTEE agrees to refrain from discrimination against present and prospective employees for reason of age. In addition, the CONSULTANT or SUBGRANTEE agrees to comply with any implementing requirements the Federal government may issue.

(3) Disabilities - In accordance with section 102 of the Americans with Disabilities Act, as amended, 42 U.S.C. § 12112, the CONSULTANT or SUBGRANTEE agrees that it will comply with the

requirements of U.S. Equal Employment Opportunity Commission, "Regulations to Implement the Equal Employment Provisions of the Americans with Disabilities Act," 29 C.F.R. Part 1630, pertaining to employment of persons with disabilities. In addition, the CONSULTANT or SUBGRANTEE agrees to comply with any implementing requirements the Federal government may Issue.

(4) Access to Services for Persons with Limited English Proficiency - To the extent applicable and except to the extent that the Federal agency determines otherwise in writing, the CONSULTANT or SUBGRANTEE agrees to comply with the policies of Executive Order No. 13166, "Improving Access to Services for Persons with Limited English Proficiency," 42 U.S.C. § 2000d-l note, and with the provisions of U.S. DOT Notice, "DOT Guidance to Recipients on Special Language Services to Limited English Proficient (LEP) Beneficiaries," 66 Fed. Reg. 6733 et seq., January 22, 2001. The City's LEP Plan is available in the Title VI/ADA plan at City facilities or may be viewed online at www.venicegov.com

(5) Drug or Alcohol Abuse - Confidentiality and Other Civil Rights Protections - To the extent applicable, the CONSULTANT or SUBGRANTEE agrees to comply with the confidentiality and other civil rights protections of the Drug Abuse Office and Treatment Act of 1972, as amended, 21 U.S.C. §§ 1101 et seq., with the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970, as amended, 42 U.S.C. §§ 4541 et seq., and with the Public Health Service Act of 1912, as amended, 42 U.S.C. §§ 201 et seq., and any amendments to these laws.

(6) Other Nondiscrimination Laws - The CONSULTANT or SUBGRANTEE agrees to comply with all applicable provisions of other federal laws, regulations, and directives pertaining to and prohibiting discrimination, except to the extent the Federal Government determines otherwise in writing. The CONSULTANT or SUBGRANTEE also agrees to include these requirements in each subcontract financed in whole or in part with federal assistance, modified only if necessary to identify the affected parties.

38. BID PROTESTS

In any case where a bidder wishes to protest either the results of or the intended disposition of any bid, the bidder must:

38.1 File a written notice to the City Manager of the bidder's intention to protest within one (1) business day of the bid opening or the City's declaration of intent with regard to the disposition. Upon receipt of a protest, the bid process shall be suspended until the protest procedure herein described has been completed.

38.2 Within five (5) days of filing the written notice of

intent to protest, the protester shall file a formal written protest with the City Manager, acting as the bid protest officer, explaining in detail the nature of the protest and the grounds on which it is based. During this five-day period, the protester is encouraged to attempt to resolve the issue with the City's Finance Department.

38.3 The protester must include with the formal written protest a bid protest bond in the form of a certified check, cashier's check or money order made payable to the city in an amount equal to five percent (5%) of the lowest acceptable bid. The bond will be deposited with the Cashier's Office where it will be put into an account and the protester will receive a receipt.

38.4 Upon timely receipt of the formal written protest and protest bond, the City must:

(1) Issue formal findings of fact and a written decision with regard to the validity or non-validity of the formal written protest within ten (10) business days of the City's receipt of the protest.

(2) Within two (2) business days of receipt of the formal findings of fact and written decision, the City shall notify the protester of the decision of the bid protest officer. Such notification shall be transmitted via certified return receipt mail.

38.5 Should the protest be found to be without merit or validity, the bid protest bond shall be forfeited to the City in its entirety, and the bid process may resume. If a decision favorable in whole or in part to the protest is rendered, a check for the full amount of the bond will be returned to the protester.

END OF SECTION

“ATTACHMENT A”

Insurance:

Before performing any work, the Company shall procure and maintain, during the life of the Contract, insurance listed below. The policies of insurance shall be primary and written on forms acceptable to the City and placed with insurance carriers approved and licensed by the Insurance Department in the State of Florida and meet a minimum financial AM Best and Company rating of no less than A:VII. No changes are to be made to these specifications without prior written specific approval by the City.

A. Workers Compensation: Company will provide Workers Compensation Insurance on behalf of all employees, including sub-contractors who are to provide a service under this Contract, as required under Florida Law, Chapter 440, and Employers Liability with limits of not less than \$100,000 per employee per accident; \$500,000 disease aggregate; and \$100,000 per employee per disease.

B. Commercial General Liability including but not limited to bodily injury, property damage, contractual, products and completed operations, and personal injury with limits of not less than \$1,000,000 per occurrence, \$1,000,000 aggregate covering all work performed under this Contract, to include broad form property damage.

C. Builders' Risk – Property Coverage: coverage shall include but not be limited

to:

- a. Storage and transport of materials, equipment, supplies of any kind whatsoever to be used on or incidental to the project
- b. Flood and Windstorm coverage
- c. Limits of insurance to equal 100% of the insurable completed contract amount of such addition(s), building(s) or structure(s), on an agreed amount/replacement cost basis, and
- d. Maximum deductible of (\$5,000 or \$10,000) each claim.

Policy Form:

A. All policies required by this Contract, with the exception of Workers Compensation, or unless specific approval is given by the City, are to be written on an occurrence basis, shall name the City of Venice, its Elected Officials, Officers, Agents, Employees as additional insured as their interest may appear under this Contract. Insurer(s), with the exception of Workers Compensation, shall agree to waive all rights of subrogation against the City of Venice, its Elected Officials, Officers, Agents, & Employees.

B. Insurance requirements itemized in this Contract, and required of the Company, shall be provided on behalf of all subcontractors to cover their operations performed under this Contract. The Company shall be held responsible for any modifications, deviations, or omissions in these insurance requirements as they apply to subcontractors.

C. Each insurance policy required by this Contract shall:

(1) apply separately to each insured against whom claim is made and suit is brought, except with respect to limits of the insurer's liability;

(2) be endorsed to state that coverage shall not be suspended, voided or canceled by either party except after thirty (30) calendar days prior written notice by certified mail, return receipt requested, has been given to the City of Venice Risk Manager.

D. The City shall retain the right to review, at any time, coverage form, and amount of insurance.

E. The procuring of required policies of insurance shall not be construed to limit Company's liability nor to fulfill the indemnification provisions and requirements of this Contract.

F. The Company shall be solely responsible for payment of all premiums for insurance contributing to the satisfaction of this Contract and shall be solely responsible for the payment of any deductible and/or retention to which such policies are subject, whether or not the City is an insured under the policy. In the event that claims in excess of the insured amounts provided herein are filed by reason of operations under the contract, the amount excess of such claims, or any portion thereof, may be withheld from any payment due or to become due to the Company until such time the Company shall furnish additional security covering such claims as may be determined by the City. Deductible levels should be acceptable to the city.

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

H. Certificates of Insurance evidencing Claims Made or Occurrence form coverage and conditions to this Contract, as well as the City's Bid Number and description of work, are to be furnished to the City's Risk Manager, 401 West Venice Avenue, Venice, FL 34285, ten (10) business days prior to commencement of work and a minimum of thirty (30) calendar days prior to expiration of the insurance policy.

I. Notices of Accidents and Notices of Claims associated with work being performed under this Contract, shall be provided to the Company's insurance company and the City's Risk Manager, as soon as practicable after notice to the insured.

END OF SECTION

SPECIAL CONDITIONS

1. Payment

Retainage of 10 percent of each progress payment made to the contractor shall be withheld until final completion and acceptance of the project by the City of Venice for all construction services contracts exceeding \$200,000. Retainage shall not be withheld for construction services contracts of \$200,000 or less.

2. Stored Materials

The City of Venice, at its discretion, will pay for stored materials which are safely stored on the project site in accordance with the manufacturer's or supplier's recommendations and in accordance with these Contract Documents. All requests for payment of stored materials shall be accompanied by a paid receipt indicating that the contractor has paid for the materials.

3. Permits

Unless otherwise provided, Contractor shall obtain and pay for all construction permits and licenses. City shall assist Contractor, when possible, in obtaining such permits and licenses. Contractor shall pay all governmental charges and inspection fees necessary for the prosecution of the work.

The following City permits are required for this project:

Right of Way Use Permit Authorization (Application fee is waived)

Site Preparation Permit (Application fee is waived)

4. Warranty

All work, materials and equipment furnished as defined herein shall be guaranteed and warranted by the Contractor for a minimum period of one (1) year, unless otherwise specified, from final acceptance by the City to be free from defects due either to faulty materials or equipment or faulty workmanship. If within one (1) year after the date of final completion or such longer period of time as may be prescribed by laws or regulation or by the terms of any applicable special guarantee required by the Contract Documents, any work is found to be defective, Contractor shall promptly, without cost to the City and in accordance with the City's written instructions, either correct such defective work or remove it from the site and replace it with non-defective work. If Contractor does not promptly comply with the terms of such instruction, City may have the defective work corrected/removed and all direct, indirect and consequential costs of such removal and replacement will be paid by the Contractor.

5. Stipulated Damages

In the event that the work is not completed within the required time, then from the compensation otherwise to be paid to the Contractor, the City may retain the sum of seven hundred fifty-eight dollars (\$758.00) per day for each calendar day that the work remains uncompleted beyond the time limit, which sum shall represent the actual damage which the City will have sustained per

day by failure of the Contractor to complete the work within the required time, said sum not being a penalty but being the stipulated damages the City will have sustained in the event of such default by the Contractor.

6. Testing

Unless otherwise specified herein, Contractor shall arrange and pay for all testing required by the Contract Documents.

7. Construction Time

The Contractor shall diligently prosecute the work to completion within 60 days from receipt of a Notice To Proceed.

Division 01 - General Requirements

SECTION	TITLE
01010.....	Summary of Work
01025.....	Measurement and Payment
01026.....	Applications for Payment
01027.....	Change Order Procedures
01040.....	Contract Coordination
01045.....	Cutting and Patching
01200.....	Preconstruction/Project Meetings
01340.....	Shop Drawings, Product Data and Samples
01380.....	Color Audio-Video Preconstruction Record
01400.....	Quality Control
01560.....	Temporary Controls
01569.....	Construction Cleaning
01570.....	Traffic Control
01610.....	Transportation and Handling
01620.....	Storage and Protection
01630.....	Product Options and Substitutions
01701.....	Contract Closeout Requirements
01720.....	Project Record Documents
01740.....	Warranties and Bonds

Division 02 - Site Work

SECTION	TITLE
02050.....	Environmental Protection
02070.....	Selective Demolition
02100.....	Site Preparation
02140.....	Dewatering
02160.....	Excavation Support
02230.....	General Excavating, Filling and Backfilling
02616.....	Polyvinyl Chloride (PVC) Pipe
02661.....	Piping Specialties
02663.....	Gate Valves and Tapping Sleeves and Valves
02664.....	Piping - General Requirements
02705.....	Restoration and General Requirements
02734.....	Contractor's Storm Preparedness/Recovery Plan
02933.....	Sodding
02990.....	Miscellaneous Work and Clean Up

SECTION 01010
SUMMARY OF WORK

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Description of Work
- B. Contract type
- C. Work sequence
- D. Use of premises

1.02 SCOPE OF WORK

- A. This project includes phase 5 of the City's valve replacement program, which includes the replacement of 14 total broken gate valves that range in size from 4 inches to 8 inches in the City's water distribution system. The existing gate valves shall be removed and disposed of, new gate valves shall be installed, necessary fittings shall be installed, and proper restraint shall be provided. The work will include, but is not limited to, mobilization/demobilization, preconstruction video, replacement of broken gate valves, bacteriological testing, and restoration.

1.03 DESCRIPTION OF WORK

- A. Preparation of a preconstruction video of each of the valve replacement locations.
- B. Schedule and maintain shut downs:
 - 1. To minimize impact to customers, the replacement of valves C00-0302, C00-0306, C00-0307, and C00-0312 shall be completed during the first shutdown sequence on a single Thursday from 10:00 pm to 5:00 am. Refer to the attached Figures: Area 1 and Area 2 Valve Replacement Plat Maps. All subsequent distribution system shutdowns (following the first shutdown) shall be during daytime hours. Each system shutdown shall be completed by City forces no earlier than 8:00 am of the date requested by the Contractor.
 - 2. Contractor shall notify the City a minimum of 48 hours prior to the desired shutdown of each specific valve location to prepare boil water notices for Contractor to distribute to affected customers. Shut down shall take place between the hours of 8:00 AM and 3:30 PM. Shut downs shall minimize impact to customers. Shutdown areas shall be placed back in service at the end of each day or earlier.
 - 3. Contractor shall be responsible for contacting each residence affected by the valve replacements. A minimum of 24 hours prior, notice of the shutdown shall be given to affected customers. At minimum, the Contractor shall provide door hangers with project information.
 - 4. Contractor shall notify the City a minimum of 1 hour prior to area shut down and a minimum of 1 hour prior to completing the work for that area to place the area back in service. The City shall be responsible for the operation of the valve(s) at or near the work site(s).
 - 5. Contractor shall distribute rescind notices prepared by the City immediately upon receiving clearance from bacteriological samples for each valve location.

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- C. Replacement of 14 total broken gate valves that range in size from 4 inches to 8 inches in the City's water distribution system. Replacement of broken gate valves shall be in accordance with City Standard Details, specifications, and Area 1 and Area 2 Valve Replacement Plat Map Figures.

1. The valves to be replaced under Phase 5 include valves located at the following addresses:

Item	Address	Road Maintained By	Size	Valve #
1	205 Park Blvd S.	County	8 inch	C00-0302
2	Ave Des Parques & Barcelona Ave	City	6 inch	C00-0304
3	Ave Des Parques & Granada Ave	City	6 inch	C00-0307
4	Ave Des Parques & Granada Ave	City	6 inch	C00-0306
5	517 Menendez St	City	6 inch	S01-0323
6	205 Ave Des Parques	City	4 inch	C00-0312
7	528 Menendez St	City	4 inch	S01-0321
8	517 Menendez St	City	4 inch	S01-0322
9	229 Harbor Dr	County	6 inch	S01-0335
10	405 Menendez St Unit 2	City	6 inch	S01-0330
11	Lisbon St between Armada Rd & Menendez St	City	4 inch	S01-0325
12	344 Ponce DeLeon Ave	City	6 inch	S01-0304
13	344 Ponce DeLeon Ave	City	6 inch	S01-0334
14	630 Madrid Ave	City	4 inch	N01-0201

2. Contractor shall install valve pad for each valve replaced and a brass tag identifying the actual valve size.
3. Contractor shall replace 6 inch by 10 inch cast iron tee during the valve replacement at Ave Des Parques and Grenada Avenue.

D. Testing Requirements:

1. Contractor shall be responsible for the visual testing of each newly installed gate valve to confirm no signs of visual leaks are present.
2. Contractor shall be responsible for necessary pressure testing.
3. Contractor shall be responsible for necessary density testing.

E. Schedule and provide bacteriological sampling/testing:

1. Contractor shall abide by the Department of Health (DOH) rules and regulations.
2. Contractor shall be responsible for all bacteriological sampling/testing. All samples shall be taken by an employee of a certified laboratory or by the DOH.
3. Testing Requirements:

- i. Two (2) sets of bacteriological samples shall be taken (one (1) on each side of each new valve) for each shutdown. With the replacement of 14 valves for Phase 5 of this project, a total of 56 bacteriological samples shall be taken.
- F. Contractor shall restore the work area to nominal grade and replace any sidewalk, curb, asphalt, driveways, mailboxes, sod, landscape materials, etc. removed/damaged to perform the work to an 'as found' or better condition.
 - 1. For valves within the City of Venice right-of-way, restoration of all features within the project area disturbed during construction shall be in accordance with City Standard Details.
 - i. Sidewalk restoration shall take place following existing panel segments and shall be in accordance with City Standard Details.
 - ii. Driveway restoration shall take place in segments following existing construction and expansion joints and shall be in accordance with City Standard Details.
 - iii. Asphalt restoration shall take place for an entire lane width of the roadway, shall be a rectangular cut and repair, and shall be in accordance with City Standards Details.
 - 2. For valves within Sarasota County right-of-way, restoration of all features within the project area disturbed during construction shall be in accordance with the requirements specified in the Sarasota County Right-Of-Way Use Permit.
 - i. The pending Sarasota County Right-Of-Way Use Permit will be provided once obtained by the City.
- G. Coordination of these efforts with the Owner and other construction forces shall be incidental to this work. Quality of the work shall be acceptable to the Owner before work will be accepted under this contract.

1.04 USE OF PREMISES

- A. CONTRACTOR shall limit use of premises for work, for storage, and for access, to allow:
 - 1. OWNER occupancy on OWNER'S property
 - 2. Normal public use of public property, rights-of-way, etc.
 - 3. Access to private property
- B. Coordinate use of premises under direction of OWNER.
- C. Assume full responsibility for protection and safekeeping of products under this Contract.
- D. Obtain and pay for use of additional storage or work areas needed for operations under this Contract.

1.05 SEQUENCE OF WORK

- A. Upon Notice of Award, the CONTRACTOR shall prepare a project schedule and sequence of work and submit these items to the OWNER. The schedule shall take into consideration the performance of construction efforts to exclude the periods between 9:00 PM and 7:00 AM week days, with the exception of the first shutdown of Phase 5. The schedule shall take into

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consideration that work is prohibited on the weekends and/or City holidays without prior written approval from the City.

- B. Following the completion of contract processing, the OWNER shall issue a Notice to Proceed.
- C. The CONTRACTOR shall diligently prosecute the work to completion no later than 60 days from receipt of a Notice to Proceed.

PART 2 PRODUCTS

Not used

PART 3 EXECUTION

Not used

END OF SECTION

SECTION 01025
MEASUREMENT AND PAYMENT

PART 1 GENERAL

1.01 PROCEDURES

- A. For unit price items, the CONTRACTOR shall be paid for the actual amount of work accepted during the period of construction. After the Work is completed and before final payment is made, the Project Representative shall make final measurements to determine the quantities of the various items of work accepted as the basis for final payment.
- B. Measurement and Payment for Lump Sum bid items will be made based on a percentage of completion, as approved by the OWNER and recommended by the ENGINEER, on a monthly basis for each item listed on the Bid Form of the Contract Documents.
- C. All units of measurement shall be standard United States convention as applied to the individual items of work as specified and as interpreted by the Project Representative.
- D. At the end of each week's work, the CONTRACTOR'S superintendent or other authorized representative of the CONTRACTOR shall meet with the Project Representative and determine the quantities of unit price and/or lump sum price work accomplished and/or completed during that week.
- E. Once each month the CONTRACTOR shall prepare and sign an Application for Payment, and submit the original and four (4) copies for review and signature of the Project Representative. These completed forms will provide the basis upon which payment will be made to the CONTRACTOR.

1.02 SCOPE OF PAYMENT

- A. Payments to the CONTRACTOR shall be made for the actual quantities of the contract unit price items performed and accepted in accordance with the Contract Documents. Upon completion of construction, if these actual quantities show either an increase or decrease from the quantities given in the Bid, the contract unit prices will still prevail, except as provided in the General Conditions, Supplementary Conditions or Special Conditions.
- B. No payment of any Application for Payment or of any retained percentage shall relieve the CONTRACTOR of his obligation to repair or replace any defective parts of the construction or to be responsible for all damage due to such defects during the construction period or the one-year correction period.

1.03 PARTIAL PAYMENTS

- A. Partial payments shall be made monthly as the work progresses. All partial invoices and payments shall be subject to correction in the final Application for Payment.

1.04 PAYMENT FOR MATERIAL DELIVERED

- A. No payment shall be made for materials delivered and not installed, unless specifically agreed upon by the OWNER prior to delivery of such materials.

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

3.01 PAY ITEMS

- A. Mobilization and Demobilization (Bid Item No. 1): Payment for this item shall be made at the contract lump sum price for mobilization and demobilization. This price shall be full compensation for all costs incurred for preparatory work and operations including, but not limited to those necessary for the movement of personnel, equipment and supplies to and from the project site; one construction sign; temporary traffic control; cleanup and incidentals to the project site; the establishment of a field office and other facilities necessary for work on the project; fees for bonds, insurance and permits; and all other work and operations including submittals and obtaining construction permits, which must be performed prior to beginning work on the various items. The lump sum price shall not exceed five percent (5%) of the total of all items bid. Payment for mobilization will be payable in the first partial payment at 75% of the contract lump sum price for mobilization and the balance payable in the final project close-out payment.
- B. Pre-Construction Video (Bid Item No. 2): Payment for this item shall be made at the contract lump sum price for the pre-construction video. This price shall be full compensation for all costs incurred including, but not limited to all labor, materials, and equipment necessary for the preparation and delivery of the preconstruction audio-video to the Owner of the construction area as described in the specifications. Payment for this item shall be full compensation for the satisfactory completion of the preparation, delivery, and acceptance of the pre-construction video to the Owner.
- C. Valve Replacements (Bid Item No. 3): Payment for this item shall be made at the contract unit price for replacing the existing broken gate valves ranging in size in the City's water distribution system and furnishing, installing, and placing into operation each new gate valve to an acceptable working condition. Unit price shall include all labor, materials, tools and equipment necessary for the replacement of existing gate valves. Work shall include all necessary fittings; proper restraint; dewatering; sheeting; excavating; backfilling; compacting; flushing; testing and sampling; permits; coordinating with other utilities for locating buried cables and other utilities during construction; clearing and grubbing; excavation of all material encountered including rock; backfill; compaction; removal and disposal of existing gate valves and piping; cleanup; repair of existing utilities; protection of existing utilities; restoration and replacement of all surface materials and obstructions located in the path of the work including sidewalk, driveways, sod, landscape materials, signs, fences, trees, ornamental vegetation, irrigation lines, etc.; any necessary repairs to water main; and all other work and materials for a complete valve replacement and other work incidental to acceptable installation.
- D. OWNER'S ALLOWANCE (Bid Item No. 4): This price shall include minor increases to existing bid item quantities or minor modification items not bid which were unforeseen and necessary during construction to provide a safe, complete project in accordance with the Bid Documents. In general, this item is for unanticipated conflicts and/or design changes required during construction which are necessary to complete the project without changing the initial Scope of Work and without costly delays. Payment for all work included under this bid item will be in the amount mutually agreed to by the Owner and Contractor as indicated in writing on a properly authorized form prepared by the Owner and signed and dated by both the Contractor and Owner.

END OF SECTION

SECTION 01026
APPLICATIONS FOR PAYMENT

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Procedures for preparation and submittal of Applications for Payment.

1.02 FORMAT

- A. Application for Payment.
- B. For each item, by specification section number and title, provide a column for listing:
 - 1. Item Number.
 - 2. Description of Work.
 - 3. Scheduled Value.
 - 4. Previous Applications.
 - 5. Work in Place.
 - 6. Stored Materials.
 - 7. Authorized Change Orders.
 - 8. Total Work Completed.
 - 9. Materials Stored to Date of Application.
 - 10. Percentage of Completion.
 - 11. Balance to Finish.
 - 12. Retainage.

For specification sections covering more than one production or work item, list each item separately as a sub-listing to the section.

- C. Submit format to be used to ENGINEER for review and approval a minimum of 10 days prior to the first Application for Payment.

1.03 PREPARATION OF APPLICATIONS

- A. Review application with ENGINEER.
- B. Type required information and execute certification by signature of authorized officer.
- C. Submit each payment application to the ENGINEER for approval and submission to OWNER for payment.
- D. Use data on accepted Schedule of Values. Provide dollar value in each column for each line item for portion of Work performed and for stored materials.

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- E. List each authorized Change Order as an extension on continuation sheet, listing Change Order number and dollar amount the same as for an original item of the Work.
- F. Prepare Application for Final Payment as specified in Section 01701.

1.04 SUBMITTAL PROCEDURES

- A. Submit four (4) copies of each Application for Payment on a monthly basis.
- B. Applications for Payment submitted more frequently than on a monthly basis will not be considered.

1.05 SUBSTANTIATING DATA

- A. When OWNER requires substantiating information, submit data justifying line item amounts in question.
- B. Provide one (1) copy of data with cover letter for each copy of submittal. Show application number and date, and line item by number and description.

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

Not used.

END OF SECTION

SECTION 01027
CHANGE ORDER PROCEDURES

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Promptly implement change order procedures.
 - 1. Provide full written data required to evaluate the time and associated costs of changes.
 - 2. Maintain detailed records of work done on a time-and-material basis.
 - 3. Provide full documentation to ENGINEER.

1.02 DEFINITIONS

- A. Change Order: See General Conditions and Supplementary Conditions.
- B. Work Directive Change: A written order to the CONTRACTOR, signed by OWNER, which amends the Contract Documents as described, and authorizes CONTRACTOR to proceed with a change which affects the Contract Price or the Contract Time, for inclusion in a subsequent Change Order.
- C. Field Order: The ENGINEER may issue, as required, a written order, instructions, or interpretations, signed by the ENGINEER making minor changes in the Work not involving a change in Contract Price or Contract Time.

1.03 PRELIMINARY PROCEDURES

- A. OWNER may initiate changes by submitting a proposal request to CONTRACTOR. Such request is for information only, and is not an instruction to execute the changes, nor to stop the Work in progress. Request shall include:
 - 1. Detailed description of the change, products, and location of the change in the Project.
 - 2. Supplementary or revised Drawings and Specifications.
 - 3. The projected time span for making the change, and a specific statement as to whether overtime work is, or is not, authorized.
 - 4. A specific period of time during which the requested price shall be considered valid.
- B. CONTRACTOR may initiate changes by submitting a written notice to OWNER, containing:
 - 1. Description of the proposed changes.
 - 2. Statement of the reason for making the changes.
 - 3. Statement of the effect on the Contract Price and the Contract Time.
 - 4. Statement of the effect on the Work of subcontractors or other contractors.
 - 5. Documentation supporting any change in Contract Price and/or Contract Time.

1.04 WORK DIRECTIVE CHANGE

- A. In lieu of proposal request, OWNER and ENGINEER may issue a Work Directive Change ordering the CONTRACTOR to proceed with a change for subsequent inclusion in a Change Order.
- B. The Work Directive Change shall describe changes in the Work, both additions and deletions, with attachments of revised Contract Documents to define details of the change, and shall designate the method of determining any change in the Contract Price and/or Contract Time.
- C. OWNER shall sign and date the Work Directive Change as authorization for the CONTRACTOR to proceed with the changes.
- D. CONTRACTOR shall sign and date the Work Directive Change to indicate agreement with the terms therein.

1.05 DOCUMENTATION OF PROPOSALS AND CLAIMS

- A. Support each quotation for a lump sum proposal, and for each unit price which has not previously been established, with sufficient substantiating data including labor, equipment, overhead and profit to allow ENGINEER to evaluate the quotation.
- B. On request provide additional data to support time and cost computations:
 - 1. Labor required.
 - 2. Equipment required.
 - 3. Products required.
 - a. Recommended source of purchase and unit cost.
 - b. Quantities required.
 - 4. Taxes, insurance and bonds.
 - 5. Credit for work deleted from Contract, similarly detailed and documented.
 - 6. Overhead and profit.
 - 7. Justification for any change in Contract Time. Justification shall include a revised project schedule identifying the impact of the change.
- C. Support each claim for additional costs, and for work done on a time-and-material basis, with documentation as required for a lump-sum proposal, plus additional information:
 - 1. Name of the OWNER'S authorized agent who ordered the work, and date of the order.
 - 2. Dates and times work was performed, and by whom.
 - 3. Time record, summary of hours worked, and hourly rates paid (Certified Payroll).
 - 4. Receipts and invoices for:
 - a. Equipment used, listing dates and times of use, and hourly rates.

- b. Products used, listing of quantities and receipted bills.
- c. Subcontractors billings and description of work performed.
- D. Document requests for substitutions for Products as specified in Section 01630.

1.06 PREPARATION OF CHANGE ORDERS

- A. ENGINEER shall prepare each Change Order.
- B. Form: Change Order: Form included in SPECIFICATIONS.
- C. Change Order shall describe changes in the work, both additions and deletions, with attachments of revised Contract Documents to define details of the change.
- D. Change Order shall provide an accounting of the adjustment in the Contract Price and/or Contract Time.

1.07 LUMP-SUM OR FIXED PRICE CHANGE ORDER

- A. Content of Change Orders shall be based on, either:
 - 1. ENGINEER's proposal request and CONTRACTOR'S responsive proposal as mutually agreed between OWNER and CONTRACTOR.
 - 2. CONTRACTOR'S proposal for a change, as recommended by ENGINEER.
- B. OWNER shall sign and date the Change Order as authorization for the CONTRACTOR to proceed with the changes.
- C. CONTRACTOR shall sign and date the Change Order to indicate agreement with the terms therein.

1.08 UNIT PRICE CHANGE ORDER

- A. Content of Change Orders shall be based on, either:
 - 1. OWNER's definition of the scope of the required changes.
 - 2. CONTRACTOR'S proposal for a change, as recommended by ENGINEER.
 - 3. Measurement of completed work.
- B. The amounts of the unit prices to be:
 - 1. Those stated in the Agreement.
 - 2. Those mutually agreed upon between OWNER and CONTRACTOR.
- C. When quantities of each of the items affected by the Change Order can be determined prior to start of the Work:
 - 1. OWNER shall sign and date the Change Order as authorization for CONTRACTOR to proceed with the changes.

2. CONTRACTOR shall sign and date the Change Order to indicate agreement with the terms therein.

D. When quantities of the items cannot be determined prior to start of the Work:

1. OWNER and ENGINEER shall issue a Work Directive Change directing CONTRACTOR to proceed with the change on the basis of unit prices, and shall cite the applicable unit prices.
2. At completion of the change, ENGINEER shall determine the cost of such work based on the unit prices and quantities used. CONTRACTOR shall submit documentation to establish the number of units of each item and any claims for a change in Contract Time.
3. OWNER shall sign and date the Change Order as authorization.
4. CONTRACTOR shall sign and date the Change Order to indicate agreement with the terms therein.

1.09 TIME AND MATERIAL WORK DIRECTIVE CHANGE AND CHANGE ORDER

- A. OWNER shall issue a Work Directive Change directing CONTRACTOR to proceed with the changes.
- B. At completion of the change, CONTRACTOR shall submit itemized accounting and supporting data as provided in paragraph 1.05 Documentation of Proposals and Claims.
- C. ENGINEER shall recommend the allowable cost of such work.
- D. OWNER shall sign and date the Change Order as authorization.
- E. CONTRACTOR shall sign and date the Change Order to indicate their agreement therewith.

1.10 CORRELATION WITH CONTRACTOR'S SUBMITTALS

- A. Periodically revise Schedule of Values and Request for Payment forms to record each change as a separate item of Work, and to record the adjusted Contract Price.
- B. Periodically revise the Construction Schedule to reflect each change in Contract Time. Revise subschedules to show changes for other items of work affected by the changes.
- C. Upon completion of work under a Change Order, enter pertinent changes in Record Documents.

PART 2 PRODUCTS

Not used

PART 3 EXECUTION

Not used

CHANGE ORDER

Project: _____ **Owner's Contract No.:** _____
Date of Issuance: _____ **Effective Date:** _____

Owner: _____

Contractor: _____ **Engineer:** _____

The Contractor is directed to make the following changes in the Contract Documents.

Description: _____

Attachments: _____

Change in Contract Price:	Change in Contract Times:
Original Contract Price: \$ _____	Original Contract Times: _____ Substantial Completion: _____ Completion: _____ Days or Dates
Contract Price prior to this Change Order \$ _____	Contract Time prior to this Change Order Substantial Completion: _____ Completion for final payment: _____
Net Increase/Decrease of this Change Order \$ _____	Net Increase/Decrease of this Change Order Days _____
Contract Price with all approved Change Orders \$ _____	Contract Times with all approved Change Orders Substantial Completion: _____ Completion: _____ Days or Dates

Recommended:

Approved:

Accepted:

By: _____

By: _____

By: _____

Engineer (Authorized Signature)

Owner (Authorized Signature)

Contractor (Authorized Signature)

Date: _____

Date: _____

Date: _____

SECTION 01040
CONTRACT COORDINATION

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

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

1.02 DESCRIPTION

- A. Coordinate scheduling, submittals, and work of the various sections of Specifications to assure efficient and orderly sequence of installation of construction elements, with provisions for accommodating items to be installed later.

1.03 MEETINGS

- A. Hold coordination meetings and pre-installation conferences with personnel and subcontractors to assure coordination of Work.

1.04 COORDINATION OF SUBMITTALS

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

1.05 COORDINATION OF CONTRACT CLOSEOUT

- A. Coordinate completion and cleanup of work in preparation for Substantial Completion.
- B. After OWNER occupancy of premises, coordinate access to site for correction of defective Work and Work not in accordance with Contract Documents, in a manner that minimizes disruption of OWNER'S activities.
- C. Assemble and coordinate closeout submittals specified in Section 01701.

1.06 COORDINATION WITH OTHER CONTRACTORS

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

PART 2 PRODUCTS

Not used

PART 3 EXECUTION

Not used

END OF SECTION

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SECTION 01045
CUTTING AND PATCHING

PART 1 GENERAL

1.01 WORK INCLUDED

- A. Cutting and patching included in the Work

1.02 DESCRIPTION

- A. Execute cutting, fitting, and patching to complete the Work, and to:
 - 1. Fit the several parts together, to integrate with other work
 - 2. Uncover work to install ill-timed work
 - 3. Remove samples of installed work for testing
 - 4. Provide openings for penetrations of mechanical and electrical work

1.03 SUBMITTALS

- A. Submit written notice to Project Representative 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
- B. Include the following in written notice:
 - 1. Identification of Project
 - 2. Location and description of affected work
 - 3. Necessity for cutting or alteration
 - 4. Description of proposed work, and products to be used
 - 5. Alternatives to cutting and patching
 - 6. Date and time work will be executed

PART 2 PRODUCTS

2.01 MATERIALS

- A. Those required for original installation
- B. For any change in materials, submit request for substitution in accordance with Section 01630.

PART 3 EXECUTION

3.01 INSPECTION

- A. Inspect existing conditions, including elements subject to damage or movement during cutting and patching.
- B. After uncovering, inspect conditions affecting performance of work.
- C. Beginning of cutting or patching means acceptance of existing conditions.

3.02 PREPARATION

- A. Provide supports to assure structural integrity of surroundings. Provide devices and methods to protect other portions of Project from damage.
- B. Provide protection from elements for areas which may be exposed by work; maintain excavations free of water.

3.03 PERFORMANCE

- A. All cutting and patching work shall be performed by, and shall be the responsibility of the CONTRACTOR. Subcontractors are not responsible for any cutting or patching under this Contract.
- B. Execute work using methods which avoid damage to other work, and which will provide proper surfaces to receive patching and finishing.
- C. Restore work with new products in accordance with requirements of Contract Documents.
- D. Fit work airtight and/or watertight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces.
- E. Refinish surfaces to match adjacent finishes. For continuous surfaces, refinish to nearest intersection; for an assembly, refinish entire unit.

END OF SECTION

SECTION 01200
PRECONSTRUCTION/PROJECT MEETINGS

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. CONTRACTOR participation in preconstruction conferences
- B. CONTRACTOR participation in progress meetings

1.02 PRECONSTRUCTION CONFERENCE

- A. ENGINEER shall schedule preconstruction conference within 15 days after Notice to Proceed.
- B. Attendance: OWNER, ENGINEER, state and/or federal agency representatives, local authorities and CONTRACTOR.

C. Agenda:

- 1. Distribution of Contract Documents
- 2. Submittal of list of subcontractors, list of products proposed for installation (in accordance with Section 01630), schedule of values, and progress schedule
- 3. Designation of responsible personnel
- 4. Submittal of list of products proposed for substitution
- 5. Procedures and processing of field decisions, submittals, substitutions, applications for payments, proposal requests, change orders, and Contract closeout procedures
- 6. Certified payroll requirements for CONTRACTOR and Subcontractors
- 7. Scheduling and critical work sequencing
- 8. Coordination with other contracts and/or work
- 9. Use of premises by OWNER and CONTRACTOR
- 10. Construction facilities and controls provided by CONTRACTOR
- 11. Construction facilities and controls provided by OWNER
- 12. Temporary utilities provided by OWNER
- 13. Field engineering
- 14. Major equipment deliveries and priorities
- 15. Project inspection
- 16. Labor requirements
- 17. Requirements of railroads, highway departments, other agencies and utility companies
- 18. Rights-of-way and easements

19. Security and housekeeping procedures
20. Payments to CONTRACTOR
21. Procedures for testing
22. Procedures for maintaining record documents
23. Requirements for start-up of equipment
24. Inspection and acceptance of equipment put into service during construction period
25. Substantial completion of the Work
26. Final completion of the Work

PART 2 PRODUCTS

Not used

PART 3 EXECUTION

Not used

END OF SECTION

SECTION 01340
SHOP DRAWINGS, PRODUCT DATA AND SAMPLES

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

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

1.02 SHOP DRAWINGS

- A. Present in a clear and thorough manner. Title each drawing with Project name and number; identify each element of drawings by reference to sheet number, detail and schedule of Contract Documents. The CONTRACTOR shall use and complete the transmittal form included at the end of this Section.
- B. Identify field dimensions; show relation to adjacent or critical features or Work or products.
- C. Minimum Sheet Size: 11 x 17 inches or multiples of 8-1/2 x 11 inches.
- D. Number Required: Four (4) copies of each page or sheet assembled in separate sets.

1.03 PRODUCT DATA

- A. Submit only pages which are pertinent; mark each copy of standard printed data to identify pertinent products, referenced to Specification Section and Article number. Show reference standards, performance characteristics, and capacities; wiring and piping diagrams and controls; component parts; finishes; dimensions; and required clearances. Provide Material Safety Data Sheets required by OSHA for all chemicals to be supplied under this Contract. Submittals made without the required transmittal form which clearly identifies the respective specification section number for which the submittal is being made will be returned without review. It is the CONTRACTOR'S responsibility to make clearly identified submittals.
- B. Modify manufacturer's standard schematic drawings and diagrams to supplement standard information and to provide information specifically applicable to the Work. Delete information not applicable.
- C. Provide manufacturer's preparation, assembly, delivery, storage, installation, start up, adjusting, and finishing instructions.
- D. If similar or identical submittal material can be submitted under more than one specification section, the CONTRACTOR shall make separate clearly identified submittals for each specification section. Submittal materials for any specification section shall be complete for that section; partial submittals are unacceptable.

1.04 SAMPLES

- A. Submit full range of manufacturer's standard finishes, except when more restrictive requirements are specified, indicating colors, textures, and patterns, for ENGINEER's selection.
- B. Submit samples to illustrate functional characteristics of products, including parts and attachments.
- C. Acceptable samples which may be used in the Work are indicated in the specification section.
- D. Label each sample with identification required for transmittal letter.

- E. Provide field samples of finishes at Project, at location acceptable to ENGINEER, as required by individual specification sections. Install each sample complete and finished. Acceptable finishes in place may be retained in completed work.
- F. Those provisions of paragraph 1.03 which relate to submittal identification and completeness are applicable for sample submittal.

1.05 CONTRACTOR REVIEW

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

1.06 SUBMITTAL REQUIREMENTS

- A. Transmit submittals with required submittal form included herewith, in accordance with the Progress Schedule and in such sequence to avoid delay in the Work.
- B. Apply CONTRACTOR'S stamp, signed certifying to review, verification of products, field dimensions and field construction criteria, and coordination of information with requirements of Work and Contract Documents.
- C. Coordinate submittals into logical groupings to facilitate interrelation of the several items:
 - 1. Finishes which involve OWNER selection of colors, textures, or patterns.
 - 2. Associated items which require correlation for efficient function or for installation.
- D. Submit four (4) copies of shop drawings; three (2) of which will be retained by ENGINEER upon review; the other three (2) will be returned to the CONTRACTOR.
- E. Submit four (4) copies of product data; three (2) copies which will be retained by ENGINEER upon review; the other three (2) copies will be returned to the CONTRACTOR.
- F. Submit number of samples required by individual specification sections.
- G. Submit to ENGINEER using transmittal form provided in this Section. Identify Project by title and number. Identify work and product by specification section and paragraph number. ENGINEER shall designate a submittal number upon receipt.

- H. Review by ENGINEER of any deviation in material, workmanship or equipment proposed subsequent to approval of the shop drawings, samples or design data shall be requested in writing by the CONTRACTOR.

1.07 RESUBMITTALS

- A. Make resubmittals under procedures specified for initial submittals; identify changes made since previous submittal.

1.08 ENGINEER REVIEW

- A. The ENGINEER shall review each submittal and return it with the action required marked on it. Respond to submittals with reasonable promptness. The ENGINEER shall transmit submittals with the required transmittal form.
- B. The mark will be a self-explanatory action stamp, marked and executed to indicate whether submittal is accepted or returned for re-submittal.
- C. When marked RESUBMIT, do not proceed with work covered by submittal (purchasing, fabrication, delivery or other activity); revise submittal or prepare a new submittal and resubmit without delay, in accordance with Engineer's notations stating reasons for returning submittal; repeat if necessary to obtain a different action marking.

1.09 DISTRIBUTION

- A. Duplicate and distribute reproductions of shop drawings, copies of product data, and samples, which bear ENGINEER'S stamp to job site file, Record Documents file, subcontractors, suppliers, other affected contractors, and other entities requiring information.

1.10 SCHEDULE OF SUBMITTALS

- A. Shop drawings, product data and sample submittals shall be made in a timely and logical fashion taking into account work scheduling and job progress.
- B. It is the CONTRACTOR'S responsibility to prepare, coordinate, and review all submittals prior to delivery to ENGINEER. The ENGINEER will review each submittal and the first resubmittal at no cost to the CONTRACTOR. The CONTRACTOR shall reimburse the OWNER for all reasonable costs associated with the ENGINEER'S, and his consultants, review of each subsequent resubmittal.

1.11 REVIEW QUALIFICATION

- A. Regardless of corrections made or acceptance of such drawings by the ENGINEER, the CONTRACTOR will nevertheless be responsible for the accuracy of such drawings and for their conformity to the Contract Documents. The CONTRACTOR shall notify the ENGINEER in writing of any deviations at the time he furnishes such drawings.

PART 2 PRODUCTS

Not used.

PART 3 EXECUTION

Not used.

INSERT CONTRACTOR SUBMITTAL FORM
(EXAMPLE TO BE USED AS A COVER TO EACH SUBMITTAL)

INSERT ENGINEER's REVIEW FORM

SHOP DRAWING REVIEW	
ENGINEER'S REVIEW	RESPONSE REQUIRED BY CONTRACTOR
☐ NO EXCEPTIONS TAKEN	☐ CONFIRM MODIFICATION
☐ MODIFY AS NOTED	☐ RESUBMIT
☐ CORRECT AND RESUBMIT	☐ NO RESPONSE REQUIRED
☐ REJECTED	
REVIEW IS FOR GENERAL CONFORMANCE WITH THE DESIGN CONCEPT AND CONTRACT DOCUMENTS. MARKINGS OR COMMENTS SHALL NOT RELIEVE THE CONTRACTOR FROM COMPLIANCE WITH THE INTENT OF THE PROJECT DRAWINGS, SPECIFICATIONS AND CONTRACT DOCUMENTS. CONTRACTOR IS RESPONSIBLE FOR DETAILS AND VERIFICATION OF DIMENSIONS REVIEWED BY _____ _____ EMPLOYEE INITIALS / EMPLOYEE NO. / DATE	

Example Shop Drawing Review stamp to be utilized by the ENGINEER.

SECTION 01380
COLOR AUDIO-VIDEO
PRECONSTRUCTION RECORD

PART - GENERAL

1.01 SCOPE

- A. Prior to commencing work, the CONTRACTOR shall have a continuous color audio-video electronic media site recording taken of the entire project site to serve as a record of pre-construction conditions. The electronic media used shall be consistent with the latest available audio-video technology and approved by the ENGINEER.

1.02 CONSTRUCTION SCHEDULE

- A. Electronic media site recordings shall not be made more than fifteen (15) calendar days prior to construction. No construction shall begin prior to review and approval of the site recordings covering the construction area by the OWNER and ENGINEER.

PART 2 - PRODUCTS

2.01 GENERAL

- A. A total audio-video site recording system and the procedures employed in its use shall be such as to produce a finished project that will fulfill the technical requirements of the project. The video portion of the recording shall produce bright sharp, clear pictures with accurate colors and shall be free from distortion or any other form of picture imperfection. All video recordings shall, by electronic means, display on the screen the time of day, the month, day and year of the recording. This time and date information must be continuously and simultaneously generated with the actual recording. The audio portion of the recording shall produce the commentary of the camera operator with proper clarity and be free from distortion.

2.02 EQUIPMENT

- A. Camera: The color video equipment used shall be consistent with current standards and approved by the ENGINEER.
- B. Electronic media site recordings playback compatibility: The recording format shall be compatible with common consumer software.

PART 3

3.01 COVERAGE

- A. The recordings shall contain coverage of all surface features within the construction zone of influence. These features shall include, but not be limited to, all roadways, pavement, retention ponds, railroad tracks, curbs, driveways, sidewalks, culverts, headwalls, retaining walls, landscaping, trees, and fences. Of particular concern shall be the existence or non-existence of any faults, fractures or defects. Panning, zoom-in and zoom-out rates shall be sufficiently controlled to maintain a clear view of the object.

3.02 AUDIO RECORDING

- A. Accompanying the video recording of each electronic media presentation shall be a corresponding and simultaneously recorded audio recording. This audio recording, exclusively containing the commentary of the camera operator shall assist in viewer orientation and in any needed identification, differentiation, clarification, or objective description of the features being

shown in the video portion of the recording. The audio recording shall also be free from any conversation between the camera operator and any other participants in the walk-thru.

3.03 ELECTRONIC MEDIA INDEXING

- A. All electronic media site recordings shall be permanently labeled and shall be properly identified by electronic media site recording number and project title.
- B. Electronic media site recordings log: Each electronic media site recording shall have a log of that recording's contents. The log shall describe the various segments of coverage contained on that recording e.g., the site areas or easements, coverage beginning and end, directions of coverage, engineering stationing numbers when possible, and the date of recording.

3.04 TIME OF EXECUTION

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

3.05 CONTINUITY OF COVERAGE

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

3.06 COVERAGE RATES

- A. The average rate of travel during a particular segment of coverage shall be directly proportional to the number, size and value of the surface features within that construction area's zone of influence.

3.07 CAMERA OPERATION

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

END OF SECTION

SECTION 01400
QUALITY CONTROL

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

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

1.02 QUALITY CONTROL, GENERAL

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

1.03 WORKMANSHIP

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

1.04 MANUFACTURERS' INSTRUCTIONS

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

1.05 MANUFACTURERS' CERTIFICATES

- A. As required by individual specification sections, submit manufacturer's certificate, in duplicate, that products meet or exceed specified requirements.

PART 2 PRODUCTS

Not used

PART 3 EXECUTION

Not used

END OF SECTION

SECTION 01560
TEMPORARY CONTROLS

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Providing and maintaining methods, equipment, and temporary construction, as necessary to provide controls over environmental conditions at the construction site and related areas under CONTRACTOR'S control. Removal of physical evidence of temporary facilities at completion of the Work.

1.02 DUST CONTROL

- A. Provide positive methods and apply dust control materials such as calcium chloride or water to minimize raising dust from construction operations, and provide positive means to prevent dust from dispersing into the atmosphere.

1.03 WATER CONTROL

- A. Provide methods to control surface water to prevent damage to the Project, the site, or adjoining properties. Control fill, grading and ditching to direct surface drainage away from excavations, pits, tunnels and other construction areas; and to direct drainage to proper disposal.
- B. Provide, operate and maintain pumps and equipment of adequate capacity to control surface and water.
- C. Dispose of drainage water in a manner to prevent flooding, erosion, or other damage to any portion of the site or to adjoining areas in accordance with local, state and federal regulations.

1.04 RODENT CONTROL

- A. Provide rodent control as necessary to prevent infestation of construction or storage area. Employ methods and use materials which will not adversely affect conditions at the site or on adjoining properties.
- B. Use rodenticide in full accordance with the manufacturer's printed instructions and recommendations, and local, state and federal regulations.

1.05 DEBRIS CONTROL

- A. Maintain all areas under CONTRACTOR'S control free of debris.
- B. Initiate and maintain a specific program to prevent accumulation of debris at construction site, storage and parking areas, or along access roads and haul routes.
 - 1. Provide containers for deposit of debris.
 - 2. Prohibit overloading of trucks to prevent spillages on access and haul routes. Provide periodic inspection of traffic areas and enforce requirements.
 - 3. Schedule periodic collection and disposal of debris to prevent accumulation.

1.06 POLLUTION CONTROL

- A. Provide methods, means and facilities required to prevent contamination of soil, water or atmosphere by the discharge of noxious substances from construction operations.

- B. Provide equipment and personnel to perform emergency measures required to contain any spillages, and to remove contaminated soils or liquids. Excavate and dispose of any contaminated earth in accordance with local, state and federal regulations, and replace with suitable compacted fill and topsoil.
- C. Take all appropriate measures to prevent harmful substances from entering surface waters and groundwater. Prevent disposal of wastes, effluents, chemicals, or other such substances adjacent to streams, or in sanitary or storm sewers.
- D. Provide systems to prevent dispersal of harmful pollutants into the atmosphere.

1.07 EROSION CONTROL

- A. Plan and execute construction and earth work by methods to control surface drainage from cuts and fills, and from borrow and waste disposal areas, to prevent erosion and sedimentation.
 - 1. Minimize areas of exposed bare soil.
 - 2. Provide temporary control measures such as berms, dikes and drains.
- B. Construct fills and waste areas by selective placement to eliminate surface silts or clays which will erode.
- C. Periodically inspect earthwork to detect any evidence of the start of erosion. Apply corrective measures as required to control erosion.
- D. Construct sediment basins, diversion ditches, hay bale dikes or such other erosion control devices to control runoff from any area subject to erosion during construction. All such precautionary measures including, but not limited to, construction of sediment basins, diversion ditches, benches, berms or hay bale dikes or laying fiber matting on slopes until vegetation is established, shall be at no extra cost to the OWNER.
- E. Comply with all local, state and federal permits and requirements.

1.08 TRAFFIC SAFETY

- A. Schedule construction and place excavated material so that vehicular and pedestrian traffic may be maintained at all times. The CONTRACTOR shall be responsible for obtaining required state and local highway opening/curb cut permits prior to commencing construction of work in a highway.
- B. Traffic shall be protected by barricades, warning and advance warning signs. The placement and materials shall be in general compliance with the U.S. Department of Transportation's Manual on Uniform Traffic Control Devices, latest edition, and be subject to the approval of the OWNER and ENGINEER. If the CONTRACTOR'S operations cause traffic hazards, he shall repair the road surface, provide temporary ways, erect barricades or fences and/or take other safety measures in accordance with local, state and federal regulations.

PART 2 PRODUCTS

Not used

PART 3 EXECUTION

Not used

END OF SECTION

SECTION 01569
CONSTRUCTION CLEANING

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Cleaning and disposal of waste materials, debris, and rubbish during construction.

1.02 DESCRIPTION

- A. Maintain areas under CONTRACTOR'S control free of waste materials, debris, and rubbish. Maintain site in a clean and orderly condition.
- B. Provide covered containers for deposit of debris and rubbish. Regularly dispose of accumulations of materials.

PART 2 PRODUCTS

Not used

PART 3 EXECUTION

3.01 DISPOSAL

- A. Remove waste materials, debris, and rubbish from site periodically and dispose of off-site in accordance with applicable local, state and federal regulations.

END OF SECTION

SECTION 01570
TRAFFIC CONTROL

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Providing, erecting, and maintaining all necessary barricades, lighting, signals, signs, traffic control devices, and employ uniformed officers and flagging personnel as required for the protection of the Work and safety of the public. The Work shall be done in strict accordance with the requirements of the governing authority and be in place prior to the commencement of construction.
- B. CONTRACTOR'S methods for routing of traffic during construction shall be presented for approval to the Project Representative and local and/or state highway department representative at the preconstruction conference.

PART 2 PRODUCTS

2.01 GENERAL

- A. All barricades, warning signs, lights, temporary signals, and other protective devices must conform to the Manual of Uniform Traffic Control Devices for Streets and Highways published by the U.S. Government Printing Office.

PART 3 EXECUTION

3.01 PERMITS

- A. All work in, upon, under, or across public streets and roads shall be accordance with the permit granted by the governing authority. The CONTRACTOR shall work with the OWNER to obtain the required permits.

3.02 UNIFORMED TRAFFIC OFFICER

- A. The CONTRACTOR shall make all arrangements with the local Police Department to obtain police assistance and shall pay all expenses incurred, including the wages of the police officers. The CONTRACTOR shall be required to employ flagging personnel to assist and/or supplement the uniformed traffic officer(s). Flagging personnel, if utilized by the CONTRACTOR, will not be paid for under this item.
- B. The intent is to insure public safety by police direction of traffic. Police are not to serve as watchmen to protect the CONTRACTOR'S equipment and materials.
- C. Nothing contained herein shall be construed as relieving the CONTRACTOR of any of his responsibilities for protection of persons and property under the terms of the Contract.

3.03 REMOVAL

- A. Upon completion of the work, the CONTRACTOR shall remove and dispose of all temporary materials and construction required under this Section.
- B. All areas and utilities shall be restored to original or specified conditions at the completion of the Work.

END OF SECTION

SECTION 01610
TRANSPORTATION AND HANDLING

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Providing expeditious transportation and delivery of undamaged products to project site, and on a schedule to avoid delay of the Work or work of other contractors.
- B. Providing equipment and personnel at the site to unload and handle products in a manner to avoid damage to products.

1.02 DELIVERY

- A. Arrange deliveries of products in accordance with construction schedules and in ample time to facilitate inspection prior to installation.
- B. Coordinate deliveries to avoid conflict with work, OWNER'S use of premises and conditions at site.
- C. Deliver products in undamaged condition in original containers or packaging, with identifying labels intact and legible.
- D. Partial deliveries of component parts of equipment shall be clearly marked to identify the equipment, to permit easy accumulation of parts and to facilitate assembly.

PART 2 PRODUCTS

Not used

PART 3 EXECUTION

3.01 PRODUCT HANDLING

- A. Immediately upon delivery, inspect shipment to assure:
 - 1. Product complies with requirements of Contract Documents and reviewed submittals.
 - 2. Quantities are correct.
 - 3. Containers and packages are intact, labels are legible.
 - 4. Products are properly protected and undamaged.
- B. Expedite replacement of damaged products.
- C. Provide equipment and personnel necessary to handle products, including those provided by OWNER, by methods to prevent soiling or damage to products or packaging.
- D. Provide additional protection during handling as necessary to prevent scraping, marring or otherwise damaging products or surrounding surfaces.
- E. Handle products by methods to prevent bending or over stressing.
- F. Lift heavy components only at designated lifting points.

END OF SECTION

SECTION 01620
STORAGE AND PROTECTION

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

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

1.02 STORAGE

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

1.03 MAINTENANCE OF STORAGE

- A. Maintain periodic system of inspection of stored products on scheduled basis to assure that:
 - 1. State of storage facilities is adequate to provide required conditions.
 - 2. Required environmental conditions are maintained on continuing basis.
 - 3. Surfaces of products exposed to elements are not adversely affected. Any weathering of products, coatings and finishes is unacceptable under requirements of Contract Documents.
- C. Any product damaged because of improper storage or protection shall be unacceptable for installation and shall be removed from the site.

1.04 PROTECTION AFTER INSTALLATION

- A. Provide protection of installed products to prevent damage from subsequent operations. Remove protection when no longer needed, prior to completion of Work.

B. Control traffic to prevent damage to equipment and surfaces.

C. Lawns and Landscaping: Prohibit traffic of any kind across planted lawn and landscaped areas.

PART 2 PRODUCTS

Not used

PART 3 EXECUTION

Not used

END OF SECTION

SECTION 01630
PRODUCT OPTIONS AND SUBSTITUTIONS

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Quality Guarantee
- B. Limitations of Substitutions
- C. Requests for substitution of products.

1.02 QUALITY GUARANTEE

- A. Unless otherwise specifically provided in the specifications, all equipment, materials, and articles incorporated in the work covered by this Contract shall be new and of the most suitable grade for the purpose intended.
- B. Except where specifically noted "no substitutions", reference to any equipment, material, article or patented process, by trade name, brand name, make or catalog number, shall be regarded as establishing a level of quality, performance, warranty, etc. required and shall not be construed as limiting competition.
- C. Where products are specified by name and accompanied by the terms "OR PRE-APPROVED," "or "PRE-APPROVED SUBSTITUTION", "OR PRE-APPROVED EQUAL" the CONTRACTOR may propose an alternative, but must do so in writing to the OWNER, specifying the bid name no later than ten (10) days prior to bid opening. No substitutions shall be considered after this time.
 - 1. Any such substitution shall be subject to written OWNER approval prior to bid opening. Substitutions shall be approved only if determined by the OWNER to be equivalent to the prescribed specifications. A bid containing a substitution is subject to disqualification if the substitution has not been approved in writing by the OWNER.
- D. Where products are specified by a name of one or more manufacturers, the CONTRACTOR may propose an alternative, but must do so in writing to the OWNER. Any such substitution shall be submitted at the preconstruction conference, the CONTRACTOR shall submit two (2) copies of a list of major products which are proposed for installation including the name and manufacturer. The CONTRACTOR shall not be allowed a substitution for products not identified on this list.
 - 1. Any such substitution shall be subject to written OWNER approval. Substitutions shall be approved only if determined by the OWNER to be equivalent to the prescribed specifications. A bid containing a substitution is subject to disqualification if the substitution is not approved by the OWNER.
- E. Where products are specified by reference standards or description only CONTRACTOR shall submit data substantiating that the product meets those standards in accordance with Section 01340.

1.04 LIMITATIONS ON SUBSTITUTIONS

- A. Many sections of these specifications are based on specific manufacturer recommendations. Use of these recommendations does, not and is, not intended to exclude equal equipment of other manufacturers. The specifications serve only as a guide to establish minimum quality and performance.

1.05 REQUESTS FOR SUBSTITUTIONS

- A. Requests for substitutions not made in strict conformance with this paragraph shall be unacceptable and shall be rejected by the OWNER without review.
- B. Submit separate request for each substitution using the form included at the end of this Section. Document each request with complete data substantiating compliance of proposed substitution with requirements of Contract Documents.
- C. Identify product by specification sections and paragraph numbers. Provide manufacturer's name and address, trade name of product, and model or catalog number. List fabricators and suppliers as appropriate.
- D. Submit product data as specified in Section 01340.
- E. List similar projects using product for which the substitution has been used, dates of installation, and names of ENGINEER and OWNER.
- F. Submit itemized comparison of proposed substitution with specified product, listing variations, and reference to Specification section and paragraph numbers.
- G. Submit quality and performance comparison between proposed substitution and the specified product.
- H. List availability of maintenance services and replacement materials.
- I. A substitute product may be considered equal to the product identified in the Specifications if in all aspects (1) it is at least equal in quality, durability, appearance, strength and design; (2) it will perform at least equally the function imposed by the general design for the work being contracted for or the material being purchased; and (3) it conforms substantially, even with deviations, to the detailed requirements for the product in said Specifications.

1.06 REDESIGN

- A. Redesign of any portion of the work affected by the substitution and coordination of installation of the substitution shall be the responsibility of the CONTRACTOR. There shall be no increase in Contract Price for redesign due to substitution of products.

1.07 CONTRACTOR REPRESENTATION

- A. Submission of a request for substitution constitutes a representation that CONTRACTOR has personally investigated proposed product and has determined that it is equal to or superior in all respects to specified product. The Project Representative, however, will make such determination based on the CONTRACTOR'S request under paragraph 1.05.
- B. CONTRACTOR shall provide, as a minimum, the same warranty for substitution as required for the product specified.
- C. CONTRACTOR shall coordinate installation of accepted substitute, making such changes as may be required for Work to be complete in all respects.
- D. CONTRACTOR certifies that the cost data presented is complete and includes all related costs under this Contract except the ENGINEER'S redesign costs.
- E. CONTRACTOR waives all claims for additional costs/work efforts related to substitution which subsequently become apparent.

1.08 SUBMITTAL PROCEDURES

- A. After preconstruction conference, submit six (6) copies of request for substitution.
- B. Project Representative will respond to CONTRACTOR'S requests for substitutions with reasonable promptness.
- C. Project Representative will notify CONTRACTOR, in writing, of decision to accept or reject requested substitution.
- D. For accepted products, submit shop drawings, product data, and samples in accordance with Section 01340.
- E. Submit with request such drawings as are necessary to define the redesign necessary to accommodate product substitution. Drawings shall be stamped by a professional engineer registered in the State where the work under this Contract is located, and for the engineering disciplines affected by the substitution.

PART 2 PRODUCTS

Not used

PART 3 EXECUTION

3.01 INSTALLATION

- A. Installation of substitutions shall not be done unless written acceptance of OWNER has been given.

SUBSTITUTION REQUEST FORM

Date:_____

1. Name of product to be substituted:_____

2. Name of product requested as substitute:_____

3. Specification Section Reference:_____

Drawing Number Reference:_____

4. Attach Product Data to this form.

5. List similar projects using this product:

	<u>Project</u>	<u>Date of Installation</u>	<u>Engineer</u>	<u>Owner</u>
i.	_____	_____	_____	_____
ii.	_____	_____	_____	_____
iii.	_____	_____	_____	_____

6. Attach itemized comparison by Specification Paragraph.

7. Contractor Representations:

- i. Contractor has complied with Section 01630 in its entirety.
- ii. Contractor has personally investigated proposed substitution and has determined that it is equal or superior in all respects to the project specified.
- iii. Contractor shall provide same warranty as required for the specified product, as a minimum.
- iv. Contractor shall coordinate installation of accepted substitution making such changes as may be required for the Work to be complete in all respects.
- v. Contractor waives all claims for additional costs related to substitution which subsequently become apparent.
- vi. Contractor agrees to pay all reasonable fees of the ENGINEER and other consultants in making an evaluation of this substitution request whether such request is ultimately accepted or not.

9. Certification:

Signed _____

Title_____

Company_____
(Contractor)

SECTION 01701
CONTRACT CLOSEOUT REQUIREMENTS

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Administrative provisions for Contract closeout.

1.02 REQUIREMENTS FOR CLOSEOUT

- A. Neither the final payment nor the remaining retained percentage shall become due until the CONTRACTOR submits to the Project Representative:
1. An affidavit that all payrolls, bills for materials and equipment, subcontractor invoices, and other indebtedness connected with the work for which the OWNER might in any way be responsible, have been paid or otherwise satisfied.
 2. Data establishing payment or satisfaction of all such obligations, such as receipts, releases and waivers of liens arising out of the Contract, to the extent, and in such form as may be designated by the OWNER. If any subcontractor refuses to furnish a release or waiver required by the OWNER, the CONTRACTOR may furnish a bond satisfactory to the OWNER to indemnify the OWNER against any resulting lien. If any such lien remains unsatisfied after all payments are made, the CONTRACTOR shall refund to the OWNER all monies that the latter may be compelled to pay in discharging such lien, including all costs and attorney's fees.
- B. Additional requirements for Project closeout shall include submittal, (if not previously submitted) of the following:
1. Warranties and Bonds: In accordance with Section 01740.
 2. Evidence of payment and release of liens in accordance with conditions of the Contract.
 3. Consent of Surety to final payment.

PART 2 PRODUCTS

Not used

PART 3 EXECUTION

Not used

END OF SECTION

SECTION 01720
PROJECT RECORD DOCUMENTS

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Maintaining and submitting record documents and samples

1.02 MAINTENANCE OF DOCUMENTS AND SAMPLES

- A. Maintain at the site for OWNER one record copy of:
 - 1. Contract Drawings
 - 2. Specifications
 - 3. Addenda
 - 4. Change Orders and other modifications to the Contract
 - 5. Accepted shop drawings, product data, and samples
 - 6. Field test records
 - 7. Inspection certificates
 - 8. Manufacturer's certificates
 - 9. Manufacturer's operating and maintenance manuals
 - 10. EPA Stormwater Management Pollution Prevention Plans
- B. Store record documents and samples in field office apart from documents used for construction. Provide files, racks, and secure storage for record documents and samples.
- C. Label and file record documents and samples in accordance with section number listings in Table of Contents of this Specification. Label each document "PROJECT RECORD" in neat, large, printed letters.
- D. Maintain record documents in a clean, dry and legible condition. Do not use record documents for construction purposes.
- E. Keep record documents and samples available for inspection by Project Representative.

1.03 RECORDING

- A. Use felt tip marking pens, maintaining separate colors for each major system, for recording information.
- B. Record information concurrently with construction progress. Do not conceal any work until required information is recorded.
- C. Shop Drawings: Legibly mark each item to record actual construction, including:
 - 1. Measured depths of elements of foundation in relation to finish first floor datum.

2. Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements.
 3. Measured locations of internal utilities and appurtenances concealed in construction, referenced to visible and accessible features of construction.
 4. Field changes of dimensions and details.
 5. Changes made by modifications.
 6. Details not on original Contract Drawings.
 7. References to related shop drawings and modifications.
- D. Specifications: Legibly mark each item to record actual construction, including:
1. Manufacturer, trade name and catalog number of each product actually installed, particularly optional items and substitute items.
 2. Changes made by addenda or modifications.
- E. Other Documents: Maintain manufacturer's certifications, inspection certifications, and field test records, required by individual Specification sections.

1.04 STORMWATER POLLUTION PREVENTION PLANS

- A. In accordance with EPA Guidelines, maintain records on stormwater management controls and inspections. Prepare an inspection and maintenance plan that corresponds to the sequencing of major activities.
- Reference Document: U.S. EPA Stormwater Management for Construction Activities; Developing Pollution Prevention Plans and Best Management Practices, EPA 832-R-92-005, September, 1992.
- B. Provide for inspection of silt fencing and erosion control measures once every seven days or after each rainfall event.
- C. Keep a record of these inspections in the field office. Note any changes to best management practices shown on the drawings.
1. Record the amount of rainfall on a daily basis.
 2. Dates when major grading activities occur.
 3. Dates when construction activities temporarily cease.
 4. Dates when construction activities permanently cease.
 5. Report any release of reportable quantities of oil or hazardous materials.
- D. Update and change the stormwater Pollution Prevention Plan as necessary to address any change in design or construction operation.
- E. Submit a sample of the report format to be used.

1.05 SUBMITTALS

- A. At Contract closeout, deliver record documents and samples as specified in Section 01701, to Project Representative.
- B. Transmit with cover letter in duplicate, listing:
 - 1. Date.
 - 2. Project title and number.
 - 3. CONTRACTOR'S name, address, and telephone number.
 - 4. Number and title of each Record Document.
 - 5. Signature of CONTRACTOR or authorized representative.

PART 2 PRODUCTS

Not used

PART 3 EXECUTION

Not used

END OF SECTION

SECTION 01740
WARRANTIES AND BONDS

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Preparing and submitting of warranties and bonds.

1.02 FORM OF SUBMITTALS

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

1.03 PREPARATION OF SUBMITTALS

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

1.04 TIME OF SUBMITTALS

- A. For equipment or component parts of equipment put into service during construction with OWNER'S permission, submit documents within ten (10) days after acceptance.
- B. Make other submittals within ten (10) days after date of substantial completion, prior to final application for payment.
- B. For items of Work when acceptance is delayed beyond date of substantial completion, submit within ten (10) days after acceptance, listing the date of acceptance as the beginning of the warranty period.

PART 2 PRODUCTS

Not used

PART 3 EXECUTION

Not used

END OF SECTION

SECTION 02050
ENVIRONMENTAL PROTECTION

PART 1 GENERAL

1.01 WORK INCLUDED

- A. Furnish all labor, material and services needed to insure adequate erosion and sediment control measures.

1.02 REFERENCE STANDARDS

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

1.03 COMPLY

- A. All work shall comply with the measures shown on the plans and all conditions of the construction permit from Southwest Florida Water Management District, Florida Department of Environmental Protection and the Environmental Protection Agency.

PART 2 PRODUCTS

2.01 MATERIALS

- A. All materials shall be in accordance with the Contract Documents.
 - 1. Hay Bales: Securely tied baled hay at least 14 inches by 18 inches by 30 inches long.
 - 2. Silt Barrier: Filter fabric shall be in accordance with Florida Department of Transportation Standard Specifications for Road & Bridge Construction, Section 985.
 - 3. Silt Curtain: Shall be sufficient size and constructed of material to control siltation of waters. Recommended silt curtain is Mark II or Mark III, manufactured by American Boom & Barrier Corp. Port Canaveral, FL or approved equal.
 - 4. Temporary Seeding: Mixture of seed for temporary use shall be supplied to Project Representative for approval.

PART 3 EXECUTION

3.01 EARTH MOVING ACTIVITIES

- A. The Contractor shall exercise care to preserve the natural landscape and shall conduct his construction operations so as to prevent any unnecessary destruction, scarring or defacing of the natural surroundings in the vicinity of the work area. Except where clearing is required for permanent work, for approved construction roads or for excavation operations, all trees, native shrubbery and vegetation shall be preserved and shall be protected from damage which may be caused by the CONTRACTOR's construction operations and equipment.
- B. The first stage of earth moving activity shall be confined to the excavation of the stormwater facility.
- C. Topsoil should be taken from the construction areas and should be stockpiled for reuse in finished grading. Stockpiles should be placed so as not to add any additional sediment to the

construction. The stockpiles should be mulched and/or seeded when exposed beyond thirty (30) days.

- D. Graded areas are to be seeded and/or sodded within 30 days following earth moving procedures. If the time of year is not conducive for permanent seeding, a temporary mulch and/or seeding should be used.
- E. Temporary diversion berms and/or barriers shall be removed only after the construction of those areas directed to the berms and/or barriers have been completed.

3.02 FILLS

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

3.03 CUTS

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

3.04 PERMANENT STORMWATER BASINS

Not Used

3.05 MAINTENANCE

- A. Repair all damages caused by soil erosion or construction equipment before the end of each working day.
- B. After grading is completed and areas are seeded and/or sodded, visual inspections should be made on a routine basis. Any damage shall be repaired at once and re-sodded and/or re-seeded.

3.06 HAYBALES & SILT BARRIERS

- A. Haybales or silt barriers shall be utilized for the control of erosion. They shall be placed in areas shown on the plans, along protective areas, and at points that may be a source of erosion. It shall be the CONTRACTOR'S responsibility to place control facilities as needed. The

ENGINEER may require additional protection if it is felt that there is a potential for damage due to erosion.

1. Haybales: Each bale shall be staked. Bales shall be inspected and if required, replacements shall be made on a daily basis. It shall be the CONTRACTOR'S responsibility to maintain the haybales.
2. Silt Barrier: Barriers may be used instead of hay bales. Fabric to be a minimum of eight (8") inches below existing grade; fabric shall extend 15 to 18 inches above grade; stakes shall be driven a minimum of twelve (12") inches below grade. CONTRACTOR shall be responsible for the maintenance of the silt barriers.
3. Damage and Repair: Repair all damages caused by soil erosion or construction equipment at or before the end of each work day.

END OF SECTION

SECTION 02070
SELECTIVE DEMOLITION

PART 1 GENERAL

1.01 WORK INCLUDED

- A. Demolishing designated structures, utilities, fixtures and equipment
- B. Minor demolition for remodeling
- C. Removing and disposing of materials off site in accordance with local, state and federal regulations
- D. Removal and delivery to OWNER of on-site materials to be salvaged

1.02 COORDINATION

- A. Coordinate work of trades and schedule demolition, alterations and renovation work using procedures and methods to expedite completion of the Work.

1.03 EXISTING CONDITIONS

- A. Conduct work to minimize interference with adjacent building areas and other facility unit processes. Maintain protected egress and access at all times.

PART 2 PRODUCTS

2.01 REMOVED MATERIALS

- A. The CONTRACTOR shall remove all equipment, fixtures, machinery, materials, etc., necessary to accomplish the Work except those items noted or shown that the OWNER will remove. All equipment, fixtures, machinery, materials, etc., removed under this Section shall become the property of the CONTRACTOR unless otherwise noted.
- B. Materials which are indicated to be reused shall be turned over to the trade whose work includes the particular material with designated materials turned over to the OWNER.
- C. Remove all other materials from the site. Dispose of materials in accordance with federal, state, and local regulations.

2.02 PRODUCTS FOR PATCHING, EXTENDING AND MATCHING

- A. Provide same products or types of construction as that in existing structure, as needed to patch, extend or match existing work. Generally Contract Documents will not define products or standards of workmanship present in existing construction; CONTRACTOR shall determine products by inspection and any necessary testing, and workmanship by use of the existing as a sample of comparison.
- B. Presence of a product, finish, or type of construction, requires that patching, extending or matching shall be performed as necessary to make the Work complete and shall be not less than that specified for new work in the applicable Sections.

PART 3 EXECUTION

3.01 PREPARATION

- A. Take precautions to guard against movement or settlement of existing work; provide bracing or shoring necessary in connection herewith; be responsible for safety and support of such work; be liable for any such movement or settlement and any damage or injury caused thereby or resulting therefrom.
- B. Protect buildings and their contents from damage due to weather at all times, providing all necessary temporary enclosures to accomplish this protection.
- C. Coordinate with appropriate utility companies, when applicable, prior to initiating work.
- D. Provide, erect and maintain temporary barriers and security devices.
- E. Protect existing items which are not to be altered.

3.02 EXECUTION

- A. Assign the work of moving, removal, cutting and patching, to CONTRACTOR'S qualified personnel. Perform the work in a manner to cause least damage to each type of work, and provide means of returning surfaces to same appearance of new work.
- B. Perform cutting and removal work to remove minimum necessary, and in a manner to avoid damage to adjacent work.
- C. Replace or repair any damage done to any other property on or off premises by reason of required work.
- D. Provide proper shoring and bracing to prevent settlement or damage to adjacent structures.
- E. If at any time the safety of adjacent structures or equipment appears to be endangered, cease operations; notify the ENGINEER and take precautions to support such structures or equipment; do not resume operations until permission has been granted. Any and all supports necessary to safeguard or prevent movement or settlement shall be installed prior to resuming operations. The CONTRACTOR shall assume full responsibility and expense for the adequacy of such supports.
- F. Ensure that all mechanical piping and ducts and electrical conduit and wires that would be interrupted during the work are turned off, and locked out, valved out, or disconnected before starting work.
- G. Keep dust, dirt and debris to a minimum.
- H. Relocate materials and equipment where possible so as to avoid damage.
- I. Disconnect utilities. Cap as required. Identify disconnected utilities and indicate locations of disconnected utilities on Project Record Documents.
- J. Remove materials to be re-installed or retained in a manner to prevent damage. Store and protect in accordance with requirements of Section 01620.
- K. Notify ENGINEER immediately of any contaminated, vermin infested, dangerous or hazardous materials encountered and remove and properly dispose of materials in accordance with local, state and federal health, safety and environmental regulations.
- L. Remove contents of buried tanks located within demolition area. Remove underground tanks, components and piping from site.
- M. Backfill open pits and holes caused as a result of demolition.
- N. Rough grade and compact areas affected by demolition to finish site grades and contours.

- A. All debris shall be removed as it accumulates and shall not be stored or permitted to accumulate on site. Remove all debris at the end of each working day.
- B. Burning of debris will not be permitted.

3.04 PATCHING

- A. Patch and extend existing work using skilled tradesmen who are capable of matching existing quality of workmanship. Quality of patched or extended work shall be not less than that specified for new work in the applicable sections.
- B. Patch and replace with matching material any portion of an existing finished surface which is found to be damaged, lifted, discolored, or shows other imperfections.
 - 1. Provide adequate support of substrate prior to patching the finish.
 - 2. Refinish patched portions of painted or coated surfaces that will produce compatible uniform color and texture over entire surface.
 - 3. When existing surface finish cannot be matched, refinish entire surface to nearest intersection.
- C. When new work abuts or finishes flush with existing work, make a smooth and workmanlike transition. Patched work shall match existing adjacent work in texture and appearance so that the patch or transition is invisible at a distance of five feet.
- D. When finished surfaces are cut in such a way that a smooth transition with new work is not possible, terminate existing surface in a neat manner along a straight line at a natural line of division, and provide trim appropriate to finished surface.

END OF SECTION

SECTION 02100
SITE PREPARATION

PART 1 GENERAL

1.01 SCOPE OF WORK

- A. This Section covers clearing, grubbing and stripping of the construction site, complete as specified herein.
- B. The CONTRACTOR shall clear and grub all of the area within the limits of construction or as required. The area to be cleared shall be established by the ENGINEER prior to the beginning of any clearing.

1.02 RELATED REQUIREMENTS

- A. The Contract Documents include, but are not limited to, the following:
 - 1. Sodding is included in Section 02933.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

3.01 CLEARING

- A. The surface of the ground, for the area to be cleared and grubbed, shall be completely cleared of all timber, brush, stumps, roots, grass, weeds, rubbish and all other objectionable obstructions resting on, or protruding through, the surface of the ground. However, those trees which are designated by the ENGINEER shall be preserved as hereinafter specified. Clearing operations shall be conducted so as to prevent damage to existing structures and installations, and to those under construction, and so as to provide for the safety of employees and others. Clearing for structures shall consist of topsoil and vegetation removal.

3.02 GRUBBING

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

3.03 STRIPPING

- A. In areas so designated, top soil shall be stockpiled. Topsoil so stockpiled shall be protected until it is placed as specified. Any topsoil remaining after all work is in place shall be disposed of by the CONTRACTOR on site as directed by the ENGINEER.

3.04 DISPOSAL OF CLEARED AND GRUBBED MATERIAL

- A. Dispose of all material and debris from the clearing and grubbing operation by hauling such material and debris away to an approved dump. Disposal by burning or burial will not be permitted. The cost of disposal (including hauling) of cleared and grubbed material and debris shall be considered a subsidiary obligation of the CONTRACTOR, the cost of which shall be included in the Contract prices.

END OF SECTION

SECTION 02140
DEWATERING

PART 1 GENERAL

1.01 SYSTEM PERFORMANCE REQUIREMENTS

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

1.02 ADDITIONAL PROVISIONS

- A. Provide, operate and maintain any dewatering system required to lower and control groundwater levels and groundwater hydrostatic pressure during the construction of the Work as required by this Section and the Contract Documents. The CONTRACTOR shall assume full responsibility and expense for the adequacy of the dewatering system with no additional time for performance.
- B. Remove and dispose of water resulting from activities described in paragraph 1.02 A. Provide siltation settling basins for all discharges from dewatering systems. Submit plan of settling basins and discharge facilities for review by OWNER prior to dewatering system installation.
- C. All construction dewatering shall be contained onsite, at specified locations, and allowed to infiltrate the soil unless FDEP permitting is obtained for offsite discharge. All dewatering effluent shall be routed to a temporary sediment sump prior to discharge to wetlands, other surface waters, or offsite. The general process of the dewatering system if depicted herein shall be adhered to during construction, although the actual layout of the system may be constructed as dictated by field conditions.
- D. If it is necessary to discharge dewatering effluent off site, then coverage under the Florida Department of Environment Protection (FDEP) "Generic Permit for the Discharge of Produced Ground Water from any Non-Contaminated Site Activity" must be obtained by the CONTRACTOR. Should contamination in excess of the thresholds for Generic Permitting be found in the required sampling, an "Individual Permit for Wastewater Discharge" is required. The CONTRACTOR shall bear all responsibility and cost for obtaining the applicable permit for discharge of de-watering effluent and for complying with the permit conditions.
- E. Remove dewatering systems and equipment when no longer required.

PART 2 PRODUCTS

Not used

PART 3 EXECUTION

3.01 EXECUTION

- A. The dewatering system shall be capable of developing an excavated subgrade relieved of any hydrostatic pressure that could cause a decrease in the stability of the excavated subgrade and which will provide the necessary groundwater control for the proper performance required for completion of the Work.

- B. The dewatering system shall not cause damage to newly constructed or existing properties, buildings, utilities and other work due to the loss of support from incompletely drained soils or from removal of soil particles resulting from the dewatering system operation.
- C. Dewatering facilities shall be located where they will not cause interference with work performed by others.
- D. If the dewatering system utilized by the CONTRACTOR causes or threatens to cause damage to new or existing facilities, the dewatering system shall be modified at no additional cost to the OWNER. The CONTRACTOR shall be responsible for, and shall repair all damage caused by the dewatering system operation at no additional cost to the OWNER and at no additional time for performance.
- E. Dispose of subsurface water collected in a manner which conforms to all applicable local and state ordinances, statutes and laws.
- F. Maintain continual and complete effectiveness of the dewatering system operation to provide a firm, stable, excavated subgrade at all times as required for proper performance of the Work.
- G. Provide dewatering necessary to maintain the groundwater table below the level of backfill as it is being placed.
- H. Pump engines shall be equipped with sound attenuating devices and shall not exceed the maximum permissible sound levels define in the City of Venice Noise Ordinance (Chapter 34 Article II).

3.02 JOB CONDITIONS

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

END OF SECTION

SECTION 02160
EXCAVATION SUPPORT

PART 1 GENERAL

1.01 WORK INCLUDED

- A. Designing, furnishing, installing and maintaining excavation support systems for the following:
 - 1. Excavation for structures.
 - 2. Trench excavation.
- B. Removing excavation support systems.
- C. Complying with local, state and federal safety regulations.

1.02 REFERENCE STANDARDS

- A. ASTM A328 - Steel Sheet Piling.
- B. NFPA - National Forest Products Association.

1.03 SYSTEM DESCRIPTION

- A. Excavation support systems shall include soldier piles, trench boxes, wood sheeting and steel sheeting, including bracing members such as wales, struts, shores, lagging, and tieback anchors and all other system members.

PART 2 PRODUCTS

2.01 MATERIALS

- A. Steel: ASTM A328.
- B. Trench Boxes: Fabricated steel.

PART 3 EXECUTION

3.01 EXECUTION

- A. The CONTRACTOR shall be totally responsible for the means and methods of excavation and for the design and construction of the excavation support systems.
- B. The support system shall be designed for the maximum loads that will occur during construction.
- C. Excavation support systems shall be constructed to support all vertical and lateral loads and other surcharge loads imposed on the system during construction including earth and groundwater pressures, utility and construction loads in order to provide safe construction of the permanent structures and prevent movement and/or damage to adjacent soil, buildings, structures and utilities.
- D. Do not brace to concrete unless authorized by the ENGINEER, and if concrete has reached its design strength as determined by compressive test of representative concrete cylinders which have been cured on site for a period of at least 14 days.

- E. Do not embed any part of excavation support system in the Work. Do not construct sleeves or openings in the structures to permit bracing through the structures unless authorized by the ENGINEER.
- F. Do not perform excavations in unstable earth. Unstable earth shall be stabilized with excavation support systems before excavation proceeds.
- G. Monitor all excavations as a means of detecting movement of adjacent soil, buildings, structures and utilities. Where movement or damage is observed, the CONTRACTOR shall immediately cease excavation operations and correct such deficiency in the excavation support system that allowed for movement or damage and repair all damage at no additional cost to the OWNER and at no additional time for performance.
- H. The CONTRACTOR shall be responsible for, and shall repair all damage resulting from his excavations at no additional cost to the OWNER and at no additional time for performance.

3.02 SHEETING LEFT-IN-PLACE

- A. Cut off all sheeting left-in-place at least three feet below the ground surface, whether such sheeting is ordered left in place by the ENGINEER or is left in place for the convenience of the CONTRACTOR.

END OF SECTION

SECTION 02230
GENERAL EXCAVATING, FILLING AND BACKFILLING

PART 1 GENERAL

1.01 WORK INCLUDED

- A. Excavating topsoil and stockpiling topsoil for later use
- B. Saw cutting pavement and excavating pavement
- C. Placing excavating and fill materials for utilities
- D. Backfilling excavations with common fill materials
- E. Placing common fill materials for bringing site to subgrade
- F. Complying with compaction requirements
- G. Removing and disposal of excess topsoil and subsoil, excavated unsuitable material, and excavated pavement, rock, boulders, solid rubble masonry and Portland cement concrete off site.
- H. Grading and rough contouring the site to the cut limits required for construction.

1.02 REFERENCE STANDARDS

- A. ASTM C33 - Concrete Aggregates
- B. ASTM C136 - Sieve Analysis of Fine and Coarse Aggregates
- C. ASTM D75 - Sampling Aggregates
- D. ASTM D1556 - Test for Density of Soil in Place by the Sand Cone Method
- E. ASTM D1557 - Tests for Moisture - Density Relations of Soils and Soil- Aggregate Mixtures, Using 10-lb Rammer and 18-inch Drop: (Modified Proctor)
- F. ASTM D2922 - Tests for Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth)
- G. Florida Department of Transportation Standard Specifications for Road & Bridge Construction, latest edition

1.03 TESTING

- A. Tests and analysis of materials will be performed in accordance with latest ASTM Standards.
- B. The CONTRACTOR shall carry out density tests to determine compaction of backfill spaced at a minimum of one in every 300 feet of trench cut per lift and shall include a test at the spring line of the pipe.

PART 2 PRODUCTS

2.01 MATERIALS, GENERAL

- A. Topsoil: Friable, fertile, natural, free-draining loam typical of the locality; free of subsoil, roots, grass, sticks, weeds, clay, sod lumps, debris and stones larger than $\frac{3}{4}$ -inch in maximum dimension.

- B. Unsuitable Material: Cut or broken pavement, debris, concrete or other rubble, organic materials; muck, peat; rock over 3 inches in maximum dimension; or any material which in the opinion of the OWNER will not provide sufficient support or maintain the completed construction in a stable condition.

2.02 COMMON FILL MATERIALS

- A. Additional Fill: Imported material which is friable, natural soil composed of sand, or silty sand; free from debris, concrete or other rubble, organic matter, muck, peat, excavated rock and boulders of 3 inches in maximum dimension.

2.03 FILTER FABRIC

- A. Filter fabric shall be FDOT D-2. Substitution of a product equal or better quality, detail, function and performance may be proposed for substitution when approved by the OWNER.

2.04 TRENCH BACKFILL MATERIAL

- A. Suitable Backfill Material - Material suitable for backfill in a properly dewatered trench shall not be expansive nor have high organic content, shall be free of debris, lumps and clods, and shall meet the following requirements:

1. Maximum liquid limit shall not exceed 12 as determined by ASTM D423.
2. Maximum plasticity index shall not exceed 35 as determined by ASTM D424.
3. Not more than 10% of weight shall be finer than 74 micron (No. 200) U.S. Standard Sieve.

Broken concrete shall not be used. Fill material containing limerock shall have sufficient sand to fill the voids in the limerock. No stones or rocks larger than three inches (3") in diameter will be permitted in any backfill. Material placed within one foot (1') of piping and appurtenances or in the upper six inches (6") of fills and backfills shall not contain any stones or rocks larger than one inch (1") in diameter.

Existing backfill material may be used, only if it meets the above-mentioned requirements.

- B. Concrete for Trench Backfill (flowable fill)

1. Ready-Mix Flowable Fill or Controlled Low Strength Material (CLSM) may be substituted as an alternative to compacted soil, with the approval of the ENGINEER or if shown on the plans. Applications for the material include beddings, encasements, and closures for tanks and pipes, and general backfill applications for trenches and abutments. Flowable fill shall be designed to be excavateable.
2. Excavateable flowable fill shall have an ultimate compressive strength that must be less than 200 psi at 28 days.

- C. Imported Topsoil - Imported topsoil shall be suitable sandy loam from an approved source, which possesses friability and a high degree of fertility. It shall be free of clods, roots, gravel, and other inert material. It shall be free of quack grass, horsetail, and other noxious vegetation and seed. The organic content shall be not less than 1%.

- D. Foundation Material or Bedding Rock - Foundation material or bedding rock shall be used for bedding of pipe and/or manholes as indicated on the Drawings. Crushed stone shall consist of hard, durable, sub-angular particles of proper size and gradation, and shall be free from organic material, wood, trash, sand, loam, clay, excess fines and other deleterious materials. The stone

shall conform to the requirements of ASTM C33, Size No. 57 (3/4 inch rock) and be graded within the following limits:

<u>U.S. Sieve Size</u>	<u>Percent Finer by Weight</u>
2-inch	100
1-inch	95 to 100
1/2-inch	25 to 100
No. 4	0 to 10
No. 8	0 to 5

PART 3 EXECUTION

3.01 PREPARATION

- A. Request available information on existing utilities and structures from OWNER.
- B. Identify required lines, levels, contours, and datum.
- C. Identify known underground utilities. Stake and flag locations.
- D. Identify and flag surface and aerial utilities.
- E. Notify utility companies to locate and temporarily support, remove, and/or relocate utilities.

3.02 PROTECTION

- A. Protect trees, shrubs, lawns, and other features remaining as a portion of final landscaping.
- B. Protect existing structures to remain.
- C. Protect pavement, both for access and parking that is to remain.
- D. Protect surrounding roadways.
- E. Protect bench marks, existing structures, fences, stone walls, sidewalks, paving, and curbs from equipment and vehicular traffic.
- F. Protect above and below grade utilities which are to remain.
- G. Protect excavations by shoring, bracing, sheet piling, underpinning, or other methods required to prevent cave-in or loose soil from falling into excavation.

3.03 TOPSOIL EXCAVATION

- A. Excavate topsoil from areas to be further excavated, landscaped, or graded, and stockpile. Remove excess topsoil not being reused from site. Topsoil suitable for reuse shall be in conformance with paragraph 2.01 A. Stockpiled topsoil shall be protected from erosion.

3.04 PAVEMENT EXCAVATION

- A. All pavement shall be cut with saws or acceptable power tools prior to removal.
- B. Excavate pavement within the limits shown on the Drawings.
- C. Keep excavated pavement separate from topsoil and subsoil stockpiles.
- D. Remove and dispose of pavement excavated from site.

3.05 SUBSOIL EXCAVATION

- A. Excavate subsoil from areas to be landscaped or graded to the limits shown on the Drawings.
- B. Excavate subsoil required for structures, utilities and other work to the limits necessary or as shown on the Drawings.
- C. Stockpile excavated material to be reused and remove and dispose of unsuitable subsoil and excess subsoil not being reused, off site. Subsoil suitable for reuse shall be in conformance with paragraph 2.02 A. Stockpiled subsoil shall be protected from erosion.
- D. Remove all muck, peat and other unsuitable material within trench limits or where structures are to be located. If unsuitable material exists at limits of excavation shown on Drawings, obtain excavation authorization from OWNER prior to removal of material. Unauthorized excavation of unsuitable material will not be considered for payment. Excavated unsuitable material shall be replaced with backfill material as specified.
- E. Notify OWNER of unexpected subsurface conditions, discovery of unknown utilities or concealed conditions, and discontinue affected work in area until notified to resume work. Unexpected subsurface conditions do not include those conditions identified in the Contract Documents.
- F. Slope sides of excavation to satisfy OSHA and State Trench Safety requirements or install excavation support systems.
- G. Excavations shall not interfere with normal 45 degree bearing influence of any foundation.
- H. Grade top perimeter of excavations to prevent surface water run-off into excavation.
- I. When excavation through roots is necessary, cleanly cut roots.
- J. Correct unauthorized excavation at no cost to OWNER. Backfill with material acceptable to the OWNER.
- K. Maintain bottom of all excavations stable, dry and free of water on a continual basis in accordance with Section 02140 - DEWATERING.

3.06 BACKFILLING PREPARATION FOR UTILITIES

- A. Brace walls and slabs of structures to support surcharge forces and construction loads to be imposed by backfilling operations.
- B. Remove all water and debris from excavations and trenches before placing pipe bedding or foundation material.
- C. Compact subgrade surfaces disturbed by construction operations to density requirements for backfill material. Do not place bedding, foundation material or backfill on porous, unstable or unsuitable subgrade.

3.07 BEDDING AND BACKFILLING FOR UTILITIES

- A. Bedding and backing of utilities shall be in conformance with the specifications.
- B. Backfill excavations and trenches to depths, contours and elevations required.
- C. Each layer of backfill shall be compacted to the specified density the same day it is placed.
- D. Maintain optimum moisture content of backfill materials to attain required compaction density.

- E. Fill that is too wet for proper compaction shall be disced, harrowed or otherwise dried to proper moisture content for compacting to the required density. If the fill material cannot be dried within 48 hours of placement, it shall be removed and replaced with drier fill.
- F. Fill that is too dry for proper compaction shall be watered uniformly over the surface of the loose layer. Sufficient water shall be added to allow compaction to the required density.
- G. Employ placement and compaction methods that will not disturb or damage Work or existing structures or utilities. Disturbed or damaged Work, structures or utilities shall be repaired at no additional cost to the OWNER and at no additional time for performance.
- H. Do not backfill against unsupported foundation walls or before required concrete strength has been achieved. Backfill simultaneously on each side of unsupported foundation walls.
- I. Backfilling shall be performed as required to avoid interference with the Work.
- J. Grade backfill to provide a smooth surface which will readily shed water and provide positive drainage. Areas to receive compacted fill shall be graded to prevent ponding of surface water runoff.

3.08 BACKFILLING TOLERANCES

- A. Top Surface of Backfilling or Subgrade: Plus or minus one inch.

3.09 COMPACTION

- A. The maximum density at optimum moisture content for bedding and backfill materials shall be determined in accordance with ASTM D1557 (Modified Proctor).
- B. All bedding and backfill materials shall be compacted to the density shown in paragraph 3.10 - FILL.
- C. Testing density of soil in place (compaction) will be performed in accordance with ASTM D1556, ASTM D2167, or ASTM D2922. If tests indicate compacted bedding and/or backfill does not meet specified requirements, remove, replace and retest at no additional cost to OWNER and at no additional time for performance.

3.10 FILL

- A. Fill material shall be evaluated and approved by the OWNER prior to its placement on-site.
- B. Fill shall be placed in lifts not exceeding twelve (12) inches in loose depth and shall be thoroughly compacted. In embankment areas or retention/detention areas, lifts shall not exceed eight (8) inches in loose depth and shall be thoroughly compacted to 95% of modified proctor. Compaction in areas to receive floor slabs or pavement shall be to a minimum of 98% of modified proctor.

Compaction in general fill (non-structure) areas shall be to a minimum of 95% of modified proctor.

- C. Prior to placement of fill, the entire ground surface shall be scarified to a depth of six inches in such a manner that the fill material will bond with the existing earth material. Compaction equipment shall weigh 8 to 10 tons and shall be adaptable to the fill used. Sprinkling shall be performed as necessary to develop a uniform dense compaction. Under no conditions shall fill material be placed on earth surfaces which are muddy.

- D. Fill material shall be free of roots, organic material, rubbish or debris. However, fill material may contain shoulder rocks or masonry material not over six inches in size, if well distributed, and not within the top twelve inches.
- E. In lawn area, fill is to be within four inches of finished grade. Subgrade for paved areas shall be filled as required and compacted, ready to receive base material.
- F. Finish grade with four inches of loamy topsoil, clean, free from all debris, stones over $\frac{3}{4}$ inches in size or rubbish of any nature. Use stripped topsoil and, if necessary, furnish and place additional topsoil to meet finished grade. Final grades shall be approved by OWNER.
- G. During the rough grading operations, site filling shall be accomplished in accordance with the following:
 - 1. Within the building and under exterior concrete and bituminous paving such as sidewalks, parking areas and drives, fill shall be deposited in horizontal layers not to exceed twelve (12") inches thick and be compacted and tested in accordance with the following paragraphs:
 - a. Each layer of fill shall be uniformly rolled with suitable equipment, as approved by the OWNER. Provide shoring and bracing for all walls, retaining walls, piping, piers, etc., which may be damaged or displaced by rolling. Fill adjacent to areas inaccessible to large equipment and rollers shall be compacted with machine tampers.
 - b. Moisture content of the fill shall be that at which maximum consolidation can be obtained as determined by the laboratory test for optimum moisture content. Where areas are not of proper moisture content as determined by field tests, add water to provide the desired moisture percentage determined by the laboratory test.
 - c. Densities of fill in place shall be not less than herein before specified. Each layer shall be compacted to the satisfaction of the OWNER and verified with field tests before next layer is laid. Test reports shall clearly indicate the exact location of all testing (vertical and horizontal).
 - d. Areas excavated after compaction and approval of fill shall be backfilled and tested in the same manner as specified herein.
 - 2. Controlled Compaction Tests
 - a. Laboratory determination of optimum moisture content for available fill to obtain maximum compaction.
 - b. Field tests of compacted fill for moisture content and dry unit weight of compacted soil.
 - c. Field density compaction test for density of soil in place.
 - d. Determination of L.B.R.
 - 3. The following is the frequency of testing required for all fill and backfill material.
 - a. Building Areas

One density test every 2,500 s.f. of building area, per 12 inch lift of installed material. Compact each layer to not less than 98% maximum density (ASTM D-1557) modified proctor.
 - b. On-Site Pavements

Subgrade:

One density test every 4,500 s.y. compacted to not less than 98% maximum density (ASTM D-1557) modified proctor.

Subbase:

One density test every 1,000 s.y. compacted to not less than 98% maximum density (ASTM D-1557), with limerock bearing ratio of 40 for flexible pavements, 20 for rigid. One LBR test every 4,500 s.y. or change in material.

Base Course:

One density test every 1,000 s.y. compacted to not less than 98% maximum density (ASTM D-1557) with limerock bearing ratio of 100 or above. One LBR test every 4,500 s.y. or change in material.

c. Pipe or Utilities Backfill

One density test every 12 inch lift between each pipe run starting at the spring line of the pipe; maximum spacing between tests 300 feet. One density test at each road crossing. Compact backfill to not less than 98% maximum density (ASTM D-1557) modified proctor, as per City of Sarasota and FDOT requirements.

- H. Foundation Stabilization for Pipe - Foundation stabilization material shall be required as specified in the plans or as directed by the OWNER'S representative. When, in the opinion of the OWNER's representative, the existing material in the bottom of the trench is unsuitable for supporting the pipe, excavate below the flow line of the pipe, as directed by the OWNER. Backfill the trench to specified pipe grade with the foundation stabilization material. If the trench is properly dewatered, suitable backfill material may be used for stabilization. Crushed rock shall be used when a dry trench cannot be obtained. Place the foundation stabilization material over the full width of the trench and compact in layers not exceeding six inches (6") deep to the required grade.
- I. Backfill in Trenches - Backfilling of trenches will not be allowed until the work has been reviewed by the ENGINEER and the ENGINEER indicates that backfilling may proceed. Any work covered up or concealed without the knowledge or consent of the ENGINEER may be required to be uncovered or exposed at no cost to the OWNER.

Pipeline trenches shall be backfilled with a select backfill material to a level twelve inches (12") above the top of the pipe. Such material shall be placed in six-inch (6") layers, and compacted to the densities specified herein. Only hand operated mechanical compacting equipment shall be used within six inches (6") of the installed pipe. After the select backfill has been placed as specified above, and after all excess water has completely drained from the trench, backfilling of the remainder of the trench may proceed. The remainder of the backfill shall be placed in horizontal layers, the depth of which shall be exceed the ability of the compaction equipment employed, and in no event shall exceed a depth of twelve inches (12"). No lift shall be placed until satisfactory compaction has been achieved on the preceding lift. Each layer shall be moistened, tamped, rolled, or compacted to the densities specified below:

Location of Use of Fill	Percentage of Maximum Density
Backfill beneath paved areas, roadways, or driveways. (Backfill beneath roadways, or driveways shall be inclusive of any backfill within 7 feet from edge of pavement unless specified otherwise by governing Public Works Department).	98% AASHTO T-180
Backfill beneath structures, hydraulic structures.	98% AASHTO T-180
Backfill not beneath paved areas or structures.	95% AASHTO T-180
Backfill around structures but not below paved areas.	95% AASHTO T-180

If more stringent compaction requirements are given in any other documentation applicable to the work being performed, those requirements will apply.

Materials utilized for backfill and compaction shall be within 2% of optimum moisture as determined by the applicable proctor test. Moisture content with greater than 2% variance from optimum will be permitted only if it can be demonstrated satisfactory compaction is being achieved.

Flooding or puddling with water to consolidate backfill is not acceptable.

Magnetic location tape with a minimum width of two and one half inches (2-1/2") is to be laid directly above the pipe and eighteen inches (18") below the ground surface. Tape is to be of color and marking to correspond to the piping laid. Tape ends are to be spliced together so as to produce a continuous length of location tape. Electronic marker 3M model #1258 is to be installed at all PVC main line fittings.

All well point holes that will be under parking, driveway or roadway surfaces shall be backfilled with concrete immediately after pulling the well points. All other well point holes shall be backfilled with FDOT No. 89 stone immediately after pulling the well points, unless specified to do otherwise.

- J. Concrete Encasement - Concrete encasement will be used only as directed by the ENGINEER or shown on the drawings.

3.11 GRADING

A. Grading Areas to be Sodded:

1. Perform all rough grading required to attain the elevations indicated on the Drawings or as required.
2. Grade to elevations shown on the Drawings or as required for landscaping. Remove all material, including rock and boulders to a point at least 4 inches below the finished grade of landscaped areas to be sodded.
3. Remove all ruts and other uneven surfaces by surface grading.

B. Grading Areas to be Paved or Surfaced:

1. Perform all rough grading, including shaping, sloping, and any work necessary to prepare the subgrades of all roadways, walks and parking areas. Subgrade shall be brought to the bottom elevation of the base course under paved or surfaced areas.

2. Accomplish all grading within the slope and grade lines as indicated on the Drawings or as necessary to accomplish the Work, unless otherwise authorized in writing by the OWNER. The roadway shall be graded to full cross section width at subgrade before placing any type of subbase or pavement except that partial width construction may be permissible where necessary for the maintenance of traffic.
3. Slope grade away from structures.
4. Make gradual changes in grade. Slopes shall transition gradually into level areas.
5. Grade all areas completely and remove and dispose of all excess excavated, bedding and backfill materials from site. Backfill to original grade or as indicated herein or on the Drawings. Deviations and settlement shall be corrected at no cost to the OWNER and at no additional time for performance.

3.12 FIELD QUALITY CONTROL

- A. All subgrades must be inspected and accepted by the OWNER prior to proceeding with Work. Sufficient time must be allowed for the OWNER to observe and to have any necessary tests performed on the subgrade.

END OF SECTION

SECTION 02616
POLYVINYL CHLORIDE (PVC) PIPE

PART 1 GENERAL

1.01 WORK INCLUDED

- A. Furnishing pipe for water, sewer, and reclaimed water distribution systems
- B. Furnishing all valves, hydrants and miscellaneous appurtenances
- C. Installation
- D. Testing and disinfection

1.02 REFERENCE STANDARDS

- A. Current Department of Environmental Protection Rules and Regulations relating to water, sewer and/or reclaimed water distribution systems and force mains.

1.03 COMPLY

- A. All excavation and backfilling shall be in conformance with pertinent sections of this Specification.
- B. All plans reflecting water line location details and construction notes.

1.04 SUBMITTALS

- A. Submit shop drawings and product data. Each submittal shall consist of four (4) sets of information.
- B. Submit manufacturer's recommendations for pipe jointing and laying.
- C. No later than two weeks prior to commencing operations, submit to the OWNER for approval, a description of operations, including equipment to be used, qualifications of personnel, traffic control, maintenance of flow and method of protecting existing utilities.

1.05 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Pipe shall be unloaded and inspected in accordance with the manufacturer's instructions.
- B. Pipe and fittings stored on the site shall be stored in the protective unit packages provided by the manufacturer. If packages need to be opened, the pipe shall be stored on a flat surface and not in direct contact with the ground. Do not stack higher than four feet. Keep inside of pipe and fittings free from dirt and debris. Care shall be exercised to avoid compression damage or deformation to the pipe.
- C. All pipe and fittings that are stored shall be covered to provide protection from the sunlight.
- D. Handle all material carefully at all times. Any pipe or fitting having a crack or which has received a severe blow shall be marked rejected and immediately be removed from the work.

PART 2 PRODUCTS

2.01 MATERIALS

- A. Pressure Class-Rated Polyvinyl Chloride (PVC) Pipe

- 1. Pressure class-rated PVC pipe and accessories four to twelve inches (4"-12") in diameter,

- shall meet the requirements of AWWA Specification C-900 "Polyvinyl Chloride (PVC) Pressure Pipe". Pipe shall be Class 150, meeting requirements of Dimension Ratio (DR) 18 and shall have the dimension of ductile iron outside diameters. Each length of pipe shall be hydrotested to four (4) times its class pressure by the manufacturer in accordance with AWWA C-900.
2. PVC pipe 14" through 36" shall meet the requirements of AWWA Standard C-905, Polyvinyl Chloride (PVC) Water Transmission Pipe. Pipe 14" thru 24" for potable and reclaim water shall meet the requirements for dimension ratio (DR) 18. Each length of pipe shall be tested at twice the pressure rating (PR 235 psi) for a minimum dwell of 5 seconds in accordance with AWWA C-905. Fourteen inch (14") thru 36" PVC pipe for sewer force mains shall meet AWWA C-905 requirements for dimension ratio (DR) 21. Each length of pipe shall be tested at twice the pressure rating (PR 200 psi) for a minimum dwell of five seconds in accordance with AWWA C-905.
 3. PVC Class pipe shall be installed as recommended by the manufacturer.
 4. PVC pipe 3" and less in diameter may be constructed using pipe conforming to ASTM D2241 with push-on joints. Pipe shall be 200 psi pipe-SDR 21 unless otherwise specified by the OWNER. This PVC pipe shall not be used for working pressures greater than 125 psi.
 5. Pipe shall be blue for potable water mains, green for sewage force mains and purple for reclaimed water mains.

2.02 MANUFACTURE OF PIPE

- A. The inside and the outside surface of each length of pipe shall be free from nicks, scratches, and other surface defects and blemishes. The pipe shall be homogeneous throughout, free of any bubbles, voids, or inclusions.
- B. The jointing areas of the barrel of each length of pipe shall be free from dents and gouges.

PART 3 EXECUTION

3.01 PIPE UNLOADING AT THE SITE

- A. Inspect each shipment of pipe, fitting and make provision for a timely replacement of any damaged material. Unload by hand or use canvas slings to avoid scratching the pipe. Do not slide or drag PVC pipe over an abrasive surface. Pipe with deep scratches shall be replaced with new pipe and removed from the site.
- B. Stack pipe no higher than four (4) feet and provide support for the pipe barrel to prevent bending of the pipe. Pipe stockpiled for more than thirty (30) days shall be covered to protect it from the sun's rays. Provide for air circulation through the stockpile.
- C. Store rubber rings in a cool, dark place out of the direct rays of the sun.

3.02 DISTRIBUTING PIPE ALONG THE TRENCH

- A. Distribute pipe by hand. Do not drop or drag pipe. Distribute sufficient pipe for one day's work, and place with bell end in the direction of pipe laying. Prevent dirt and contaminants from entering the pipe.

3.03 ASSEMBLING THE PIPE

- A. Closely follow the manufacturer's recommended procedure for cleaning, setting the ring, lubricating the spigot end of pipe, and assembling.

3.04 MAKING SPECIAL JOINTS

- A. Follow manufacturer's recommended procedure, and use only the recommended tools for cutting and beveling.

3.05 PLACING PIPE IN TRENCH

- A. Pipe that is assembled prior to placing in the trench shall be carefully fed by hand (or with the use of approved equipment) on the pipe bed.
- B. Provide pockets in the pipe bed material to accommodate bell ends and eliminate a concentration of load at these points.

3.06 PREVENTING TRENCH WATER FROM ENTERING PIPE

- A. When pipe laying is not in progress, close the open ends of pipe with a watertight plug and allow no water or other objectionable materials to enter the pipe.

3.07 VALVES AND FITTINGS

- A. Buried valves shall be installed in the manner specified in Section 02663. Valves shall be firmly set on a foundation or footing of solid concrete or stone, not less than one cubic foot in volume, which shall have been placed on firmly compacted ground.
- A. The height of the valve and its supporting foundation shall conform to the height of the connecting pipe so there will be no strain on the joints.

3.08 PREPARATION PRIOR TO MAKING CONNECTIONS INTO EXISTING PIPING SYSTEMS

- A. Approximate locations for existing piping systems are shown in the construction documents. Prior to making connections into existing piping systems, the CONTRACTOR shall:
 - 1. Field verify location, size, piping material and piping system of the existing pipe.
 - 2. Obtain all required fittings, which may include saddles, sleeve type couplings, flanges, tees, or others as shown in the construction documents.
 - 3. Have installed all temporary pumps and/or pipes in accordance with established connection plans.
- B. Unless otherwise approved, new piping systems shall be completely assembled and successfully tested prior to making connections into existing pipe systems.

END OF SECTION

SECTION 02661
PIPING SPECIALTIES

PART 1 GENERAL

1.01 WORK INCLUDED

- A. Furnishing valve boxes, flexible or transition couplings and appurtenances.
- B. Installation.

1.02 SUBMITTALS

- A. Submit Shop Drawings and product data in accordance with Section 01340.

PART 2 PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

- A. Specifications based on equipment produced by the following manufacturers:
 - 1. Valve boxes - Clow Corporation.
 - 2. Flexible couplings - Dresser Company.
 - 3. Transition couplings - Dresser Company.
- B. Substitutions: Products of equal quality, detail, function and performance may be proposed for substitution by following the procedures in Section 01630.

2.02 VALVE BOXES

- A. Valve boxes shall be cast iron, heavy pattern, sliding adjustable type with cast iron cover.
- B. The upper section shall have a flange to prevent settling.
- C. Valve boxes shall have barrels not less than 5-inch inside diameter and lengths adapted to valve depth. The barrels shall lap at least 6 inches when in the most extended position.
- D. The word "WATER" shall be cast into the cover.

2.03 FLEXIBLE COUPLINGS FOR PRESSURE PIPE

- A. Couplings to be used for joining two plain ends of iron pipe to connect to an existing line or to provide flexibility - Dresser style no. 38 or equal.

2.04 TRANSITION COUPLINGS FOR PRESSURE PIPE

- A. Couplings to be used for joining pipes of different diameter and/or materials - Dresser style no. 162 or equal.

PART 3 EXECUTION

3.01 INSTALLATION

- A. Install products in accordance with plans, specifications and manufacturer's instructions.
- B. All buried couplings shall be completely coated with two coats of bituminous paint.

3.02 VALVE BOXES

- A. All buried valves shall be provided with valve boxes.
- B. The bottom of the lower section shall enclose the valve bonnet and operating nut.
- C. Valve box shall be centered over the valve operating nut.

END OF SECTION

SECTION 02663
GATE VALVES AND TAPPING SLEEVES AND VALVES

PART 1 GENERAL

1.01 WORK INCLUDED

- A. Furnishing gate valves and tapping sleeves and valves.
- B. Installation.

1.02 REFERENCE STANDARDS

- A. AWWA C500 - Gate Valves - 3 Inch Through 48 Inch - for Water and Other Liquids.

1.03 SUBMITTALS

- A. Submit Shop Drawings and product data in accordance with Section 01340.

1.04 QUALITY ASSURANCE

- A. Use workmen experienced in the installation of tapping sleeves and valves.

PART 2 PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

- A. Specifications based on the following manufacturers:
 - 1. Gate Valves: Smith Metropolitan as manufactured by U.S. Pipe & Foundry Company.
 - 2. Tapping Sleeve and Valve: Smith mechanical joint tapping sleeve with Smith Metropolitan tapping valve, as manufactured by U.S. Pipe & Foundry Company.
- B. Substitution: Products of equal quality, detail, function and performance may be proposed for substitution by following the procedures in Section 01630.

2.02 MATERIALS

- A. Gate Valves:
 - 1. Meet or exceed requirements of AWWA C500.
 - 2. Sizes as shown on the Drawings.
 - 3. Mechanical joint with retainer glands, unless otherwise shown on the Drawings.
 - 4. Nonrising stem, double disc, parallel seat, side wedge design.
 - 5. 200 psi working pressure.
 - 6. Nut operated, open left (counterclockwise).
 - 7. Double "O" Ring Seal.
 - 8. Materials of construction:
 - a. Body and Bonnet: Cast Iron.

- b. Stem: Bronze.
 - c. Disc Assembly: 4" All Bronze.
6" - 12" C.I. Disc, Bronze Rings.
 - d. Yoke Stem Nut,
Wedge and Pin Assembly:
4" - 8" All Bronze.
10" - 12" C.I. Wedges, Bronze Faced.
- B. Tapping Sleeves and Valves:
- 1. Meet or exceed requirements of AWWA.
 - 2. Sizes as shown on Drawings.
 - 3. Mechanical joint sleeve with flange fitting for tapping valve.
 - 4. Nonrising stem, double disc, parallel seat, side wedge design.
 - 5. 200 psi working pressure.
 - 6. Nut-operated, open left (counterclockwise).
 - 7. Double "O" ring seal.
 - 8. Materials of construction:
 - a. Body and Bonnet: Cast Iron.
 - b. Stem: Bronze.
 - c. Disc Assembly:
4" All Bronze.
6" - 12" C.I. Disc, Bronze Rings.
 - d. Yoke Stem Nut,
Wedge and Pin Assembly:
4" - 8" All Bronze.
10" - 12" C.I. Wedges, Bronze Faced.
 - 9. Tapping valves shall have flange on sleeve end and mechanical joint on outlet end unless otherwise shown on the Drawings.
- C. All buried valves shall be completely coated with two (2) coats of bituminous paint.

PART 3 EXECUTION

3.01 INSTALLATION

- A. General:
- 1. Valves shall be set with the stem vertical. Valves shall be set on a firm foundation and supported by tamping selected excavated material under and at the sides of the valve.
 - 2. Install couplings and fittings in accordance with manufacturer's instructions.

3. All valves placed within ten feet of mechanical joint fittings shall be restrained to the fittings with four (4) 3/4-inch diameter steel rods or as directed by the ENGINEER. The steel rods shall be heavily coated with two (2) coats of bituminous paint.
4. The installation of all valves and fittings shall assure electrical continuity using mechanical joint retainer glands or grounding straps.
5. Before backfilling, all exposed portions of any bolts shall be heavily coated with two (2) coats of bituminous paint.

B. Tapping Sleeves and Tapping Valves:

1. Shall be set vertically and squarely centered on the main to be tapped. Adequate support shall be provided under the sleeve and valve during the tapping operation. Sleeves shall be no closer than three feet from water main joints.
2. Installations shall be made under pressure and the flow of water through the existing main shall be maintained at all times.
3. Thrust blocks shall be provided behind all tapping sleeves. Proper tamping of supporting earth around and under the valve and sleeve is mandatory. After completing the tap, the valve shall be flushed to ensure that the valve seat is clean.

END OF SECTION

SECTION 02664
PIPING - GENERAL REQUIREMENTS

PART 1 GENERAL

1.01 SCOPE OF WORK

- A. This section specifies the basic administrative and testing requirements for piping. Specific piping materials, systems, and related installation and testing requirements are specified in other Sections of Division 2.

1.02 RELATED REQUIREMENTS

- A. The Contract Documents include, but are not limited to, the following related requirements:
 - 1. Piping materials and systems are included in other Sections of Division 2.
 - 3. Piping specialties are included in Section 02661.

1.03 SUBMITTALS

- A. General submittals for piping and piping systems are listed below. Submittals shall be in accordance with Section 01340. It is not intended that all submittals listed below be provided for all piping materials and systems. Refer to individual System or Piping Sections for specific submittals.
- B. Shop Drawings and Product Data
 - 1. Piping layouts in full detail.
 - 2. Location of pipe hangers and supports..
 - 3. Location and type of backup block or device to prevent joint separation.
 - 4. Large scale details of wall penetrations and fabricated fittings.
 - 5. Schedules of all pipe, fittings, special castings, couplings, expansion joints, and other appurtenances.
 - 6. Catalog cuts of joints, couplings, harnesses, expansion joints, gaskets, fasteners and other accessories.
 - 7. Brochures and technical data on coatings and linings and proposed method for application and repair.
- C. Samples
- D. Design Data
- E. Test Reports
 - 1. Copies of certified shop tests showing compliance with appropriate standard.
 - 2. Copies of all field test reports, signed by CONTRACTOR and ENGINEER.
- F. Manufacturer's Installation (or application) instructions.

- G. Statement of Qualifications
- H. Manufacturer's Field Report
- I. Warranties

1.04 REFERENCE STANDARDS

- A. American Society for Testing and Materials (ASTM)
 - 1. ASTM A307 - Carbon Steel Bolts and Studs, 60,000 psi Tensile Strength
- B. American National Standards Institute (ANSI)
 - 1. ANSI B16.5 - Pipe Flanges and Flange Fittings
 - 2. ANSI B31.1 - Power Piping
- C. American Welding Society (AWS)
 - 1. AWS B3.0 - Welding Procedure and Performance Qualifications
- D. American Water Works Association (AWWA)
 - 1. AWWA Manual M11 - Steel Pipe - A Guide for Design and Installation
- E. Where reference is made to one of the above standards, the revision in effect at the time of bid opening shall apply.

1.05 QUALITY ASSURANCE

- A. All materials shall be new and unused.
- B. Install piping to meet requirements of local codes.
- C. Provide MANUFACTURER'S certification that materials meet or exceed minimum requirements as specified. Reference to standards such as ASTM and ANSI shall apply to those versions in effect at the time of bid opening.
- D. Coordinate dimensions and drilling of flanges with flanges for valves, pumps and other equipment to be installed in piping systems. Bolt holes in flanges to straddle vertical centerline.
- E. Reject materials contaminated with gasoline, lubricating oil, liquid or gaseous fuel, aromatic compounds, paint solvent, paint thinner, and acid solder.
- F. Pipe-joint compound, for pipe carrying flammable or toxic gas, must bear approval of Underwriters' Laboratories or Factory Mutual Engineering Division.
- G. Unless otherwise specified, pressures referred to in all Piping Sections are expressed in pounds per square inch gage above atmospheric pressure, PSIG, and all temperature are expressed in degrees Fahrenheit.

1.06 DELIVERY, STORAGE AND HANDLING

- A. During loading, transportation and unloading, take care to prevent damage to pipes and coating. Carefully load and unload each pipe under control at all times. Place skids or blocks under each pipe in the shop and securely wedge pipe during transportation to ensure no injury to pipe and lining.

PART 2 PRODUCTS

2.01 MATERIALS

- A. Specific piping materials and appurtenances are specified in the respective Piping or System Sections.
- B. General installation materials shall be as specified below.
 - 1. Unions shall be brass or bronze unions for joining nonferrous pipe; malleable brass or bronze-seated iron or steel unions for joining ferrous pipe; PVC unions for joining PVC pipe; CPVC unions for joining CPVC pipe.
 - 2. Flanged Joints. Bolt and nuts, Type 304 stainless steel, bolt number and size same as flange standard; studs - same quality as machine bolts; 1/16-in thick rubber gaskets with cloth insertions; rust-resistant coatings.
 - 3. Temporary Plugs shall be standard plugs or caps which are suitable for permanent service.
 - 4. Flexible Connections shall be flanged spool type, 180 degree F maximum service, single filled arch with synthetic rubber tube and cover, steel-ring reinforced synthetic fiber carcass, with flanges drilled to 150-lb ANSI B16.5 Standard. Steel retaining rings, control rods and compression sleeves shall be provided where shown and as required for the working pressure of the system in which the joint is installed. All flexible joints shall be rated for the working pressure of the system in which they are installed.

PART 3 EXECUTION

3.01 GENERAL

- A. All dirt, scale, weld splatter, water and other foreign matter shall be removed from the inside and outside of all pipe and sub-assemblies prior to installing.
- B. All pipe joints and connections to equipment shall be made in such a manner as to produce a minimum of strain at the joint.
- C. Install piping in a neat manner with lines straight and parallel or at right angles to walls or column lines and with risers plumb. All work shall be accomplished using recognized methods and procedures of pipe fabrication and in accordance with the latest revision of applicable ANSI Standards, ASME Codes and Pipe Fabrication Institute Standards.
 - 1. Use full length of pipe except where cut lengths are necessary. Do not spring or deform piping to make up joints.
 - 2. Pipe shall be cut square, not upset, undersize or out of round. Ends shall be carefully reamed and cleaned before being installed. Bending of pipe is not permitted. Use fittings for all changes in direction.
 - 3. Do not use bushings except where specifically approved by the ENGINEER. Reducers shall be eccentric to provide for drainage from all liquid-bearing lines and facilitate air removal from water lines.
 - 4. Verify the locations and elevations of any existing piping and manholes before proceeding with work on any system. Any discrepancies between the information in the Contract Documents and the actual conditions found in the field shall be reported at once to the ENGINEER. No claim for extra payment will be considered if the above provision has not been complied with.

5. Where lines of lower service rating tie into services or equipment of higher service rating the isolation valve between the two shall conform to the higher rating.
6. Mitering of pipe to form elbow is not permitted.
7. All piping interiors shall be thoroughly cleaned after installation and kept clean by approved temporary closures on all openings until the system is put in service. Closures should be suitable to withstand the hydrostatic test.
8. End caps on pre-cleaned pipe shall not be removed until immediately before assembly. All open ends shall be capped immediately after completion of installation.

D. Unions

1. Unions screwed or flanged shall be provided where indicated and in the following locations even if not indicated.
 - a. In long runs of piping to permit convenient disassembly for alterations or repairs.
 - b. In by-passes around equipment.
 - c. In connections to tanks, pumps and other equipment between the shut-off valve and the equipment.
 - d. In connections on both sides of traps, controls, and automatic control valves.

3.02 UNIONS

- A. Use unions to allow dismantling of pipe, valves, and equipment.

3.03 WELDING

- A. Welding in accordance with ANSI Standard B31 and AWS B3.0.
- B. Install welding fittings on all welded lines. Make changes in direction and intersection of lines with welding fittings. Do not miter pipes to form elbows or notching of straight runs to form tees, or any similar construction. Do not employ welder who has not been fully qualified in above specified procedure and so certified by approved welding bureau or similar locally recognized testing authority.

3.04 FLANGED JOINTS

- A. Make flanged joints with bolts; bolt studs with nut on each end; or studs with nuts where one flange is tapped. Use number and size of bolts conforming to same ANSI Standard as flanges. Before flanges pieces are assembled, remove rust resistant coating from machined surfaces, clean gaskets and smooth all burrs and other defects. Make up flanged joints tight, care being taken to prevent undue strain upon valves or other pieces of equipment.

3.05 SLEEVE COUPLINGS

- A. Install tierods, pipe clamps or bridles when sleeve type couplings or fittings are used in piping system where indicated, and at changes in direction or other places as necessary, to prevent joints from pulling apart under pressure. Use bridles and tierods at least 3/4-in in diameter, except where tierods replace flange bolts of smaller size, in which case fit with nut on each side of pair of flanges. Joint harnessing shall conform, as a minimum, to the requirements for the bolts and tie bolt lugs as set forth in AWWA Manual M11.

3.06 WALL SLEEVE SEALS

- A. Use expandable rubber segmented sealing device with corrosion- resistant fasteners to make watertight the annular space between pipe and sleeve. Determine the required inside diameter of each individual wall opening or sleeve to fit the pipe and seal to assure a watertight joint as recommended by the manufacturer, before ordering, fabricating or installing. Install pipe concentrically through wall sleeve. Install and tighten seal per MANUFACTURER'S instructions.

3.07 TESTING

- A. Test all pipelines for water/gas tightness as specified in the Piping or System sections. Furnish all labor, testing plugs or caps, pressure pumps, pipe connections, gages, and all other equipment required. Testing shall be performed in accordance with one or more of the testing procedures appended to this Section as specified in each Piping or System Section. All testing shall be performed in the presence of the ENGINEER.
- B. Repair faulty joints or remove defective pipe and fittings and replace as approved by the ENGINEER. Retest.

END OF SECTION

SECTION 02705
RESTORATION AND GENERAL REQUIREMENTS

PART 1 GENERAL

1.01 SCOPE

- A. The work specified in this section consists of restoring existing surfaces or any improvements such as, but not limited to, pavement, curb and gutter, sidewalk, structures, signs, or landscaping damaged during construction.

1.02 SPECIFICATIONS AND STANDARDS REFERENCE

- A. Any reference to a supplementary specification or standard such as ASTM, AWWA, AASHTO, is intended to be a reference to the latest edition of that specification or standard.
- B. All references to "FDOTSPEC" shall mean the latest edition of the "Florida Department of Transportation Standard Specifications for Road and Bridge Construction."
- C. Specifications Section:

02230 GENERAL EXCAVATING, FILLING AND BACKFILLING

PART 2 PRODUCTS

2.01 MATERIALS

- A. Flexible Pavement: Comply with requirements of Sections 901, 902, 911, 913, 914, 916, and 917 of the FDOTSPEC.
- B. Concrete Pavement, Driveway, Sidewalk, Curb and Gutter: Comply with requirements of Sections 901, 902, 921, 923, 924, and 925 of the FDOTSPEC.
- C. Grassing: Comply with requirements of Section 981, 982, and 983 of the FDOTSPEC.

PART 3 EXECUTION

3.01 GENERAL

- A. Existing property damaged during construction shall be restored to a condition at least equal to the original condition of the property, unless otherwise specified in the Contract Documents.
- B. Existing roadway or drainage improvements damaged within a roadway or drainage right-of-way or easement shall be restored in accordance with the requirements of the state, county, and city agencies having jurisdiction thereof.

3.02 UNDERGROUND FACILITIES

- A. Existing underground utilities and drainage systems damaged during construction shall be immediately repaired to the specifications of the owner of the damaged system. Where the utility owner elects to make said repairs under their direction, the CONTRACTOR shall pay for such repair costs directly.
- B. Where damage to existing underground utilities is anticipated due to unavoidable conflicts, the CONTRACTOR shall construct their work so as to cause the least amount of interruption of service as possible.

- C. Where construction changes the land surface elevation and existing valve boxes are present, the valve box will be extended or reduced by means of new extension pieces of proper length for the finished grade.

3.03 TRENCHING AND BACKFILLING

- A. Any trenching and backfilling required to satisfy the requirements of this section shall be in accordance with Section 02230, GENERAL EXCAVATING, FILLING AND BACKFILLING.

3.04 PAVEMENT CUTS

- A. On dead end streets, collector streets, and high traffic streets, trenching and pipe laying shall be performed in such a manner that at least one-way traffic is maintained at all times.
- B. All trench lines across existing pavements, driveways, sidewalks, curbs, etc. shall be saw cut in straight parallel lines prior to trench excavation.
- C. CONTRACTOR shall exercise care to minimize amount of pavement, sidewalk, driveways, and curbing to be removed.

3.05 CONCRETE PAVEMENT, CURB AND GUTTER, ETC.

- A. Concrete pavement, driveway, sidewalk, and curb and gutter damaged during construction shall be restored to the same dimensions as that removed or as specified in the Contract Documents. All such restoration shall be in accordance with the applicable Sections 345, 350, 520, 522, of FDOTSPEC.
- B. Prior to placing concrete, the subgrade shall be compacted to at least 98% of the maximum density determined by the "Modified Proctor Density" (ASTM D-1557).

3.06 FLEXIBLE PAVEMENT

- A. Stabilized subgrade damaged during construction shall be restored in accordance with Section 160 of FDOTSPEC. The restored stabilized subgrade shall have a minimum bearing value of LBR-40, and be compacted to at least 98% of the maximum density determined by the "Modified Proctor Density" (ASTM D-1557).
- B. Soil cement or shell base damaged during construction shall be restored in accordance with Section 200 of FDOTSPEC. The minimum density of the restored base shall be 98% of the maximum density determined by the "Modified Proctor Density" (ASTM D-1557). After completion of the base course, a bituminous prime coat shall be applied in accordance with Section 300 of FDOTSPEC when applicable prior to placement of asphalt surface course.
- C. Asphalt surfaces damaged during construction shall be replaced with a similar surface in accordance with Section 330 of FDOTSPEC. The material used shall be the same type and the thickness of that damaged, except that the minimum thickness shall be 1½". In the case of multiple layers, each layer or course of the damaged asphalt surface shall be reconstructed to duplicate the original.

3.07 LANDSCAPING AND MISCELLANEOUS

- A. Trees and bushes damaged during construction shall be removed and replaced with equal size and type by the CONTRACTOR at their expense unless otherwise specified in the Contract Documents.
- B. Grassed areas damaged during construction shall be repaired with the same type sod unless otherwise specified in the Contract Documents.

- C. Sodding and grassing and mulching operations shall begin within a maximum of three (3) weeks after utility installation, except in cases of front and back slopes which shall be done immediately following installation completion. Any yards or part of right-of-way in front of private property, that has a grass mat, shall be re-sod with like sod. CONTRACTOR shall maintain disturbed areas until acceptable vegetation is re-established.
- D. Areas without established grass mats in front of vacant lands shall be restored by seeding and mulching. The grass mat shall be restored to the required design or finished grade to permit proper drainage.
- E. Unimproved areas such as an open field or lot having its surface disturbed during construction shall be graded to duplicate the existing conditions and seeded and mulched unless otherwise specified in the Contract Documents.
- F. Any damage to an existing irrigation system caused by the construction operations shall be repaired by the CONTRACTOR prior to the installation of sod, seed, or other landscaping unless otherwise specified in the Contract Documents.
- G. Mailboxes, railroad ties, or any other miscellaneous items damaged during construction shall be repaired to the satisfaction of the OWNER's representative unless otherwise specified in the Contract Documents.

3.08 DENSITY TESTS

- A. Density tests shall be performed in accordance with 3.08B and elsewhere in the specifications as may apply. The CONTRACTOR shall pay for all tests related to soil restoration work.
- B. Field density tests shall be required for each stage of fill, stabilized subgrade, soil cement base, and asphalt surface in accordance with the frequency listed below unless otherwise authorized by the OWNER's representative.
 - * Transverse Trench Crossing - one/location/stage
 - * Longitudinal Trench - one/300 LF/stage
 - * Pavement Repair - one/1000 SY/stage
- C. Concrete shall be tested for slump, air content, and compressive strength every 50 cubic yards for continuous pours. For smaller volume work, the same tests shall be taken for each separate pour. A minimum of four (4) sample cylinders shall be made when testing for compressive strength.

3.09 GENERAL REQUIREMENTS

Maintenance of Service - CONTRACTOR shall provide facilities and be responsible for protection of all structures, buildings and utilities, underground, on the surface, or above ground, against trenching, dewatering or any other activity connected with work covered by this modifications of existing utilities, CONTRACTOR shall provide for maintaining continuous water electric, telephone, gas, sewage and other utilities, to all present customers of such utilities unless approval is obtained in writing from the utility company or OWNER for the interruption of such services.

- A. Existing Facilities - Underground structures shown on the plans are according to the best available information, but it shall be the responsibility of the CONTRACTOR to acquaint himself with the exact location and to avoid conflict with all existing facilities. Where underground structures are damaged, they shall be immediately repaired to the specifications of the owner of the utility. If the owner of the utility elects to make such repairs with their own forces, CONTRACTOR shall make arrangements as to protect the OWNER from all

damages. Where such conflicts are unavoidable, every effort shall be made to construct the work so as to cause as little interference as possible with services rendered by the structure disturbed.

- B. Utility Installation Permits - CONTRACTOR shall obtain necessary permits for construction across public and private property, streets, railroads, telephone lines, power lines, etc. CONTRACTOR shall abide by all rules, regulations and requirements of the owner of such property in regard to construction under this contract, including giving of notices, provisions for inspection and employment of such methods of construction as may be required. Costs of any permits shall be incidental to construction and reflected in unit prices bid.
- C. Work in State Rights-of-Way - Construction in state rights-of-way shall comply with the State of Florida Department of Transportation (FDOT) Utility Accommodation Guide.
- D. Work in County/City Rights-of-Way - Construction in county/city rights-of-way shall comply with the utility accommodation manual for the agency having jurisdiction.
- E. Clearing of Excavation Corridor - Only items necessary to provide adequate work space including space for hubs, batter boards, and equipment shall be removed within the right-of-way, easement, or designated construction corridor. Trees, shrubbery, poles, mailboxes, and other items not to be removed shall be protected from damage during construction. When necessary to cut tree roots and branches, such cutting shall be performed with saws in a neat and workmanlike manner.

END OF SECTION

SECTION 02734
CONTRACTOR'S STORM PREPAREDNESS/RECOVERY PLAN

PART 1 - GENERAL

1.01 INTRODUCTION

The National Weather Service names a tropical weather system and begins to issue advisories as soon as the system reaches tropical storm strength. The advisories are issued every 6 hours. Supplemental advisories are issued at 3 hour intervals when landfall is expected in 24 hours or less.

Contractors are fully responsible for any aspect of their construction work that may affect the city utility operations. The duration of this responsibility starts from the first construction day to final acceptance of the equipment or facilities installed. Therefore, during inclement weather, contractor shall protect, maintain and repair installations as needed in a timely manner.

1.02 DEFINITIONS:

- A. *Tropical Storm* - a tropical storm/cyclone in which the maximum sustained surface winds are 39 miles per hour (34 knots) to 73 miles per hour (63 knots). At this point, the system is given a name to identify and track it.
- B. *Tropical Storm Watch* - a forecast issued well in advance of a severe weather event to alert the public of the possibility of a particular hazard.
- C. *Tropical Storm Warning* - a forecast issued when severe weather has developed, is already occurring and reported, or is detected on radar. Warning states a particular hazard or imminent danger.
- D. *Hurricane* - the name for a tropical cyclone with sustained winds of 74 miles per hour (65 knots) or greater in the North Atlantic Ocean, Caribbean Sea, Gulf of Mexico, and in the Eastern North Pacific Ocean. The same tropical cyclone is known as a typhoon in the Western Pacific and a cyclone in the Indian Ocean.
- E. *Hurricane Watch* - a formal advisory issued by forecasters at the National Hurricane Center when they have determined that hurricane conditions are a potential threat to a coastal area or group of islands within a 24 to 36 hour period. A watch is used to inform the public and marine interests of the storm's location, intensity, and movement. Everyone in the area covered by the watch should listen for further advisories and be ready to take precautionary actions including evacuation if directed.
- F. *Hurricane Warning* - a formal advisory issued by forecasters at The National Hurricane Center when they have determined that hurricane conditions are expected in a coastal area or group of islands within a 24 hour period. A warning is used to inform the public and marine interests of the storm's location, intensity, and movement. The warning will specify areas where sustained winds of 74 mph, or higher, are expected to make landfall within 24 hours.

1.03 PREPAREDNESS:

This plan is designed to supplement any storm preparedness/recovery plan currently established by the contractor. The preparedness & recovery steps listed below shall be the minimum requirements set by the City of Sarasota for construction areas under contract with the City. City project managers or administrative personnel may also direct specific site requirements.

1. AFTER A STORM WATCH IS ISSUED:

- a) Contractor's field supervisor or project manager shall communicate with the City's field inspector or City's Utilities Engineer to discuss necessary actions. The contractor shall obtain a copy of this plan. Emergency phone numbers, including cellular phone numbers will be exchanged.
- b) General cleanup of loose construction items shall be accomplished. All storm inlets shall be protected and all loose dirt shall be swept from the roadway. Excess signs and barricades shall be stored in a secured location.
- c) Seal and secure all wells that are under repairs to prevent entry of debris or water intrusion.

2. AFTER A STORM WARNING IS ISSUED:

- a) Contractor's field supervisor or project manager shall communicate with the City's field inspector or City's Utilities Engineer to discuss necessary actions if not previously accomplished. The contractor shall obtain a copy of this plan. Emergency phone numbers, including cellular phone numbers will be exchanged.
- b) Complete clean up of construction items and equipment shall be accomplished. All storm inlets shall be protected and all loose dirt shall be swept from the roadway. Excess signs and barricades shall be stored in a secured location. 80# of sand/shell bags shall be placed on each side barricades that must stay in place.
- c) No open holes shall be left at the end of daily construction activities.
- d) Tighten down all panel fasteners (cover with plastic if needed) and lock electric panels.

3. AFTER A HURRICANE WATCH IS ISSUED:

- a) Contractor shall meet with his/her key personnel and a city representative to discuss preparedness procedures, resolve any unusual circumstances and confirm communication lines.
- b) All construction power equipment shall be removed from the public right-of-way and stored at contractor's facilities. All storm inlets shall be protected and all loose dirt shall be swept from the roadway. Excess signs and barricades shall be stored in a secured location. 120# of sand/shell bags shall be placed on each side barricades that must stay in place. All barricades must be lighted.
- c) Be alert for tornado warnings, as hurricanes often spawn tornadoes.
- d) All auxiliary and standby equipment should be thoroughly checked out to determine its operational condition. Engage stand-by generators when interruptions or fluctuations in power occur.
- e) Fill all fuel tanks of vehicles and auxiliary equipment to capacity. Have sufficient fuel reserves for at least 48 hours of operation stored in approved 5 gallon gas cans.
- f) Have spare parts which are critical to the operation of the system stocked on hand.
- g) Store drinking water, if necessary, enough for personnel who may remain on-site for several days.
- h) Protect any installed electronic equipment (control panels, pull boxes, computers, etc.) from driving rain or flooding.
- i) If an evacuation order is given by local emergency managers. Constructional personnel who are in an evacuation area have to make a personal decision as to whether or not they will comply with the order. It may be true that a near-by city or county storm shelter is the safest location to wait

the storm out.

- j) Secure food and water supplies for personnel assigned to keep constructed facilities operational. Supply each individual with a minimum of 8 food packs per person assigned to facility or equipment (military MRE's).

4. AFTER A HURRICANE WATCH IS ISSUED:

- a) Board up and secure all water treatment facilities, including pump stations. This includes sandbagging opening to prevent water intrusion.
- b) Make sure all operators staying at the construction site during the storm know their assignments as well as the reporting locations for other personnel after the storm.
- c) All auxiliary and standby equipment should be thoroughly re-checked out to determine its operational condition.
- d) Tighten down all electric panel fasteners (cover with plastic if needed) and lock electric panels and fence gate.
- e) Prior to the storm hitting, turn off all unnecessary electrical equipment including lighting.

RECOVERY PLAN:

1. AFTER THE TROPICAL STORM OR HURRICANE PASSES:

- a) Survey all construction site damage and notify emergency management agencies, city utilities and local regulators about utility status including estimation of placing contracted *items back in service time*.
- b) Take photos and video of damaged areas to suit any proposed claims.
- c) Check installed potable storage tanks and distribution lines for contamination. Proceed with disinfection procedures if required.
- d) Determine the status of installed sewer facilities. Power outages can be wide spread and long lasting. Certain equipment such as lift stations can require portable power and/or portable pumping equipment.
- e) Coordinate with the City's utility office if additional assistance in manpower or equipment is required.
- f) Have electrical systems inspected by qualified electrical technicians before placing the equipment on line.
- g) Hurricane recovery activities including labor hours, inventory & supply usage, equipment & vehicle usage and necessary purchases should be well documented for insurance reimbursement purposes. Repairs to facilities should be differentiated as to whether the repair is temporary or permanent.

PART 2 - PRODUCTS

Not Used

PART 3 - EXECUTION

Not Used

PART 4 MEASUREMENT AND PAYMENT

4.01 BASIS OF PAYMENT

- a) There shall be no separate payment for any work defined in this section. The cost of the storm plan preparation and work described within the plan shall be included in the various work items that necessitate the work described with in this specification.

END OF SECTION

SECTION 02933
SODDING

PART 1 GENERAL

1.01 WORK INCLUDED

- A. Furnishing, hauling, and placing approved live sod on prepared areas in accordance with this specification at the locations shown on the plans or as directed by the Engineer.

PART 2 MATERIALS

2.01 SOD

- A. Sod furnished by the Contractor shall be Argentine Bahia and shall have a good cover of living or growing grass. All sod shall be obtained from areas where the soil is reasonably fertile and contains a high percentage of loamy topsoil. Sod shall be cut or stripped from living, thickly matted turf relatively free of weeds or other undesirable foreign plants, large stones, roots, or other materials which might be detrimental to the development of the sod or to future maintenance.

2.02 LIME

- A. Lime shall be ground dolomite limestone, designated for agricultural use.

2.03 FERTILIZER

- A. Fertilizer shall be standard commercial fertilizers containing 12% nitrogen, 8% phosphoric acid, 8% potassium, in conformance with Section 982 of the Florida Department of Transportation Specifications, latest edition. The fertilizers shall meet the specified requirements of the applicable State and Federal laws. They shall be furnished in standard containers with name, weight, and guaranteed analysis of contents clearly marked thereon.

2.04 WATER

- A. The water shall be sufficiently free from oil, acid, alkali, salt, or other harmful materials that would inhibit the growth of grass.

2.05 SOIL FOR REPAIRS

- A. Topsoil shall conform with Section 162-2 of the Florida Department of Transportation Specifications, latest edition. It shall be reasonably free from subsoil, stumps, roots, brush, stones (2" or more in diameter), clay lumps or similar objects. The topsoil and or soil mixture, unless otherwise specified or approved, shall have a pH range of approximately 5.5 pH to 8.0. The organic content shall be not less than 1%.

PART 3 EXECUTION

3.01 PREPARING THE GROUND SURFACE

- A. Before applying fertilizer and limestone, areas to be seeded shall be rolled or otherwise cleared of stones larger than 2" in any diameter, sticks and other debris which might interfere with sowing of seed, growth of grass or subsequent maintenance of grass covered areas.
- B. Topsoil shall be evenly spread on the prepared area to a uniform depth of 4", after compaction. Spreading shall not be done when the ground or topsoil is excessively wet or otherwise in a condition detrimental to the work. Spreading shall be carried on so that seeding operations can proceed with a minimum of soil preparation or tilling. After spreading, any large stiff clods and hard lumps shall be broken with a pulverizer or by other effective means and all stones or rocks

(2" or more in diameter), roots litter, or any foreign material shall be raked up and disposed of by the contractor. The topsoil surface shall conform to the required lines, grades and cross sections. Any topsoil or other dirt falling upon pavements as a result of hauling or handling of topsoil shall be promptly removed.

3.02 APPLYING FERTILIZER AND GROUND LIMESTONE

- A. The rate and method of application of lime and fertilizer shall be as recommended by the supplier.

3.03 OBTAINING AND DELIVERING OF SOD

- A. After inspection and approval of the source of sod by the Engineer, the sod shall be cut with approved sod cutters to such a thickness that after it has been transported and placed on the prepared bed, but before it has been compacted, it shall have a uniform thickness of not less than 2 inches (50 mm). Sod sections or trips shall be cut in uniform widths, not less than 10 inches (250 mm), and in lengths of not less than 18 inches (45 cm), but of such length as may be readily lifted without breaking, tearing, or loss of soil.

The sod shall be transplanted with 24 hours from the time it is stripped, unless circumstances beyond the Contractor's control make storing necessary. In such cases, sod shall be stacked, kept moist, the protected from exposure to the air and sun and shall be kept from freezing. Sod shall be cut and moved only when the soil moisture conditions are such that favorable results can be expected. Where the soil is too dry, permission to cut sod may be granted only after it has been watered sufficiently to moisten the soil to the depth the sod is to be cut.

3.04 LAYING SOD

- A. Sodding shall be performed only during the seasons when satisfactory results can be expected. Frozen sod shall not be used and sod shall not be placed upon frozen soil. Sod may be transplanted during periods of drought with the approval of the Engineer, provided the sod bed is watered to moisten the soil to a depth of at least 4 inches (100 mm) immediately prior to laying the sod.

The sod shall be moist and shall be placed on a moist earth bed. Pitch forks shall not be used to handle sod, and dumping from vehicles shall not be permitted. The sod shall be carefully placed by hand, edge to edge, and with staggered joints, in rows at right angles to the slopes, commencing at the base of the area to be sodded and working upward. The sod shall immediately be pressed firmly into contact with the sod bed by tamping or rolling with approved equipment to provide a true and even surface, and insure knitting without displacement of the sod or deformation of the surfaces of sodded areas. Where the sod may be displaced during sodding operations, the workmen when replacing it shall work from ladders or treaded planks to prevent further displacement. Screened soil of good quality shall be used to fill all cracks between sods. The quantity of the fill soil shall not cause smothering of the grass. Where the grades are such that the flow of water will be from paved surfaces across sodded areas, the surface of the soil in the sod after compaction shall be set approximately 1 inch (25 mm) below the pavement edge. Where the flow will be over the sodded areas and onto the paved surfaces around manholes and inlets, the surface of the soil in the sod after compaction shall be placed flush with pavement edges.

On slopes steeper than 1 vertical to 2-1/2 horizontal and in v-shaped or flat-bottom ditches or gutters, the sod shall be pegged with wooden pegs not less than 12 inches (300 mm) in length and have a cross-sectional area of not less than 3/4 square inch (18 square millimeter.) The pegs shall be driven flush with the surface of the sod.

3.05 WATERING

- A. Adequate water and watering equipment must be on hand before sodding begins, and sod shall be depth moist until it has become established and its continued growth assured. In all cases,

watering shall be done in a manner which will avoid erosion from the application of excessive quantities and will avoid damage to the finished surface.

3.06 ESTABLISHING TURF

- A. The Contractor shall provide general care for the sodded areas as soon as the sod has been laid and shall continue until final inspection and acceptance of the work. All sodded areas shall be protected against traffic or other use by warning signs or barricades approved by the Engineer.

3.07 REPAIRING

- A. When the surface has become bulged or otherwise damaged during the period covered by this contract, the affected area shall be repaired to re-establish the grade and the condition of the soil, as directed by the Engineer, and shall then be sodded as specified in 3.04.

END OF SECTION

SECTION 02990
MISCELLANEOUS WORK AND CLEAN UP

PART 1 GENERAL

1.01 WORK INCLUDED

- A. Furnishing all labor, materials, equipment and incidentals required to do all miscellaneous work and cleaning up not otherwise specified including, but not limited to, the following:
 - 1. Cleaning up the construction site.
 - 2. Disposing of material and debris.
 - 3. The extra work of crossing existing sewers, drains, electrical and telephone conduits and water mains.
 - 4. Miscellaneous work associated with connecting to existing utilities.
 - 5. Furnishing, installing and removing project signs.
 - 6. All other work incidental to completing the project.

PART 2 PRODUCTS

Not used

PART 3 EXECUTION

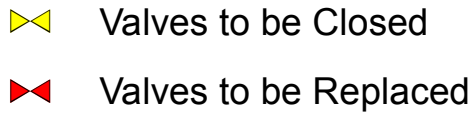
3.01 CLEANUP

- A. Remove all construction material, excess excavation, equipment or other debris remaining on the construction site as a result of construction operations and shall render the site of the work in a neat and orderly condition at least equal to that which existed prior to the start of construction.
- B. Dispose of all materials and debris off-site in accordance with local, state and federal regulations.

3.02 INCIDENTAL WORK

- A. Do all incidental work not otherwise specified but obviously necessary for the proper completion of the Work as specified and as shown on the Drawings.

END OF SECTION



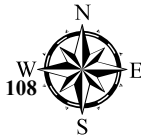
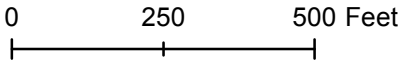
Detail A

S01-0321

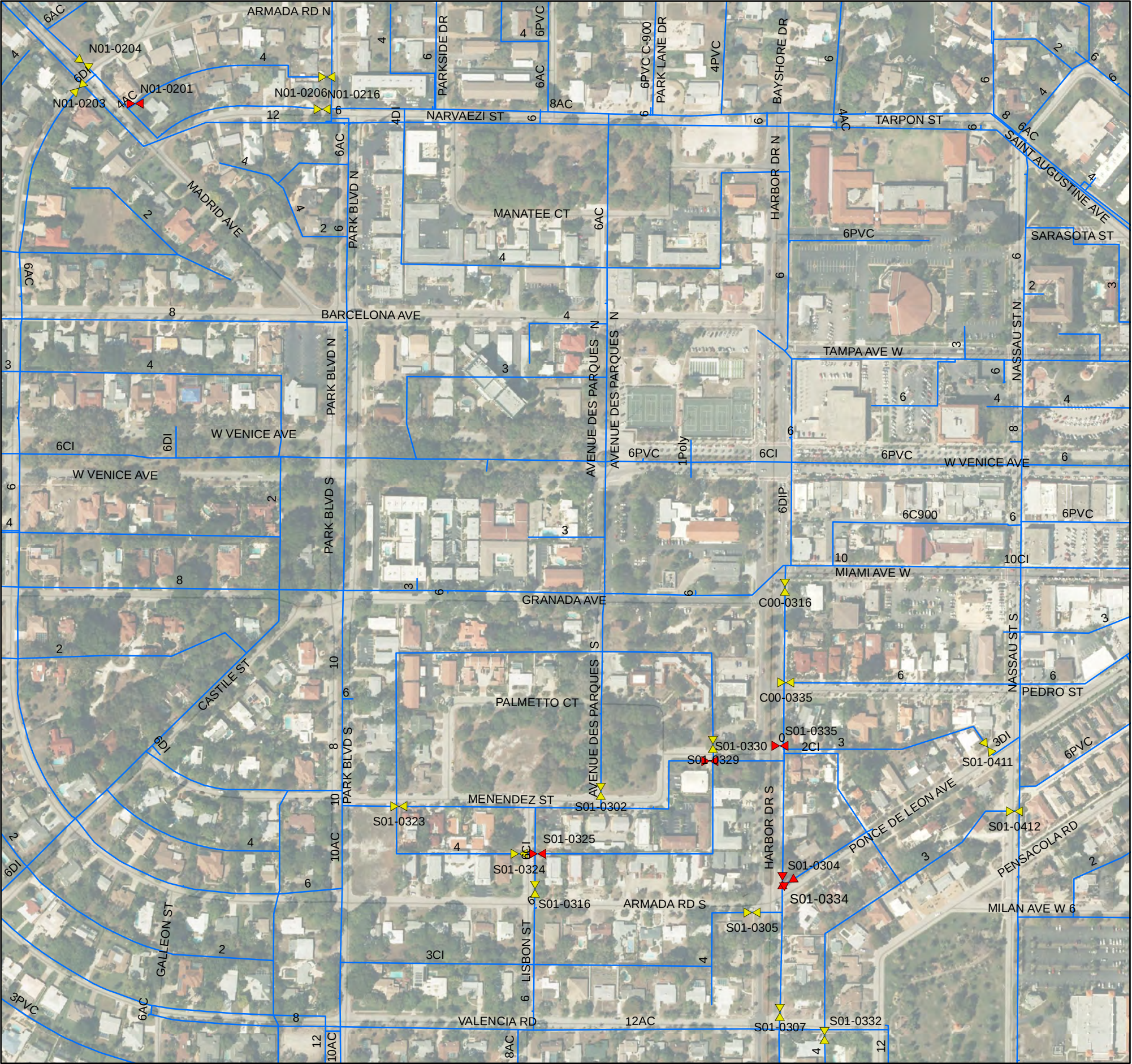
S01-0323

6"

4"



Item	Map #	Valve #	Address/Location	Size	Type	Actual Turns	Field Notes
1	C-03	C00-0302	205 Park Blvd S	8	gate		
2	C-03	C00-0304	Ave Des Parques & Barcelona	6	gate		
3	C-03	C00-0307	Ave Des Parques & Granada	6	gate		
4	C-03	C00-0306	Ave Des Parques & Granada	6	gate		
5	C-03	C00-0312	205 Ave Des Parques	4	gate		
6	S01-03	S01-0321	528 Menendez St	4	gate		
7	S01-03	S01-0322	517 Menendez St	4	gate		
8	S01-03	S01-0323	517 Menendez St	6	gate		
Valves Required for Shut Down							
Item	Map #	Valve #	Address/Location	Size	Type	Actual Turns	Field Notes
1	C-03	C00-0324	Ave Des Parques	3	gate		
2	C-03	C00-0215	Granada Ave	8	gate		
3	C-03	C00-0301	Park Blvd S	8	gate	25	
4	C-03	C00-0317	Granada Ave	10	Inserta		DO NOT USE MACHINE
5	C-03	C00-0329	Venice Ave	6	gate	13	
6	C-03	C00-0320	Venice Ave	6	gate	13	
7	C-03	C00-0316	Harbor & Miami	6	gate		
8	C-03	C00-0335	Harbor & Pedro	6	gate		
9	S01-04	S01-0411	Ponce De Leon	2	curb stop	1/4	
10	S01-04	S01-0412	Nassau S	4	gate		
11	S01-03	S01-0305	Aramada S	3	gate		
12	S01-03	S01-0307	Harbor Dr S	6	gate		
13	S01-03	S01-0332	Valencia Rd	3	gate		
14	S01-03	S01-0316	Aramada S	6	gate		
15	S01-03	S01-0312	Park Blvd S	6	gate		
16	S01-03	S01-0313	Park Blvd S	6	gate		
17	N01-03	N01-0309	Ave Des Parques N	6	gate		
18	N01-03	N01-0308	Ave Des Parques N	4	gate		
19	N01-03	N01-0332	Narvaezi St	4	gate		
Critical Areas			St/Dr/Ave/Circ/Other	Customers		649 Customers without water	
			341 Miami	Family Dentistry			
			413 Menendez	Assisted Living Facility			
			505 Menendez	Venice Beach Villas			
			401 W Venice Ave	City Hall			
			112 Harbor Dr	Fire Station 1			



- Phase 5 valves to be replaced
- Phase 5 valves to be closed

Area 2

Phase 5 Valve Replacement (Aerial)

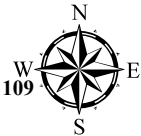
Phase 6 Valve Replacement							
Item	Map #	Valve #	Address/Location	Size	Type	Actual Turns	Field Notes
1	S01-03	S01-0335	229 Harbor by F. Hydrant	6	gate		
2	S01-03	S01-0330	405 Menendez St unit #2	6	gate		
3	S01-03	S01-0325	Lisbon between Armada & Menendez	4	gate		
4	S01-03	S01-0304	344 Ponce DeLeon	6	gate		
5	S01-03	S01-0334	344 Ponce DeLeon	6	gate		
6	N01-02	N01-0201	630 Madrid Ave	4	gate		

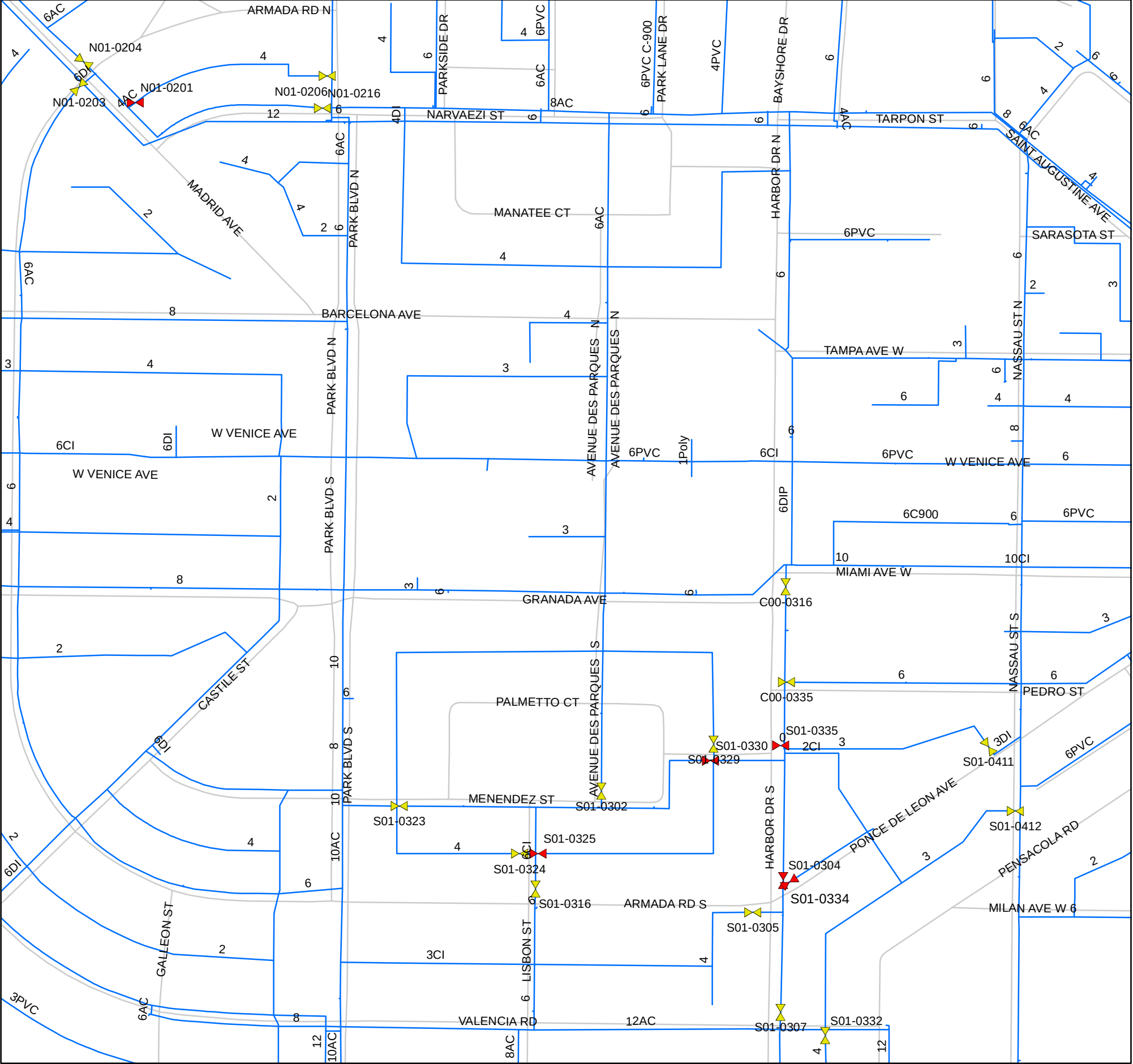
Valves Required for Shut Down							
Item	Map #	Valve #	Address/Location	Size	Type	Actual Turns	Field Notes
1	C-03	C00-0316	Harbor & Miami	6	gate		
2	C-03	C00-0335	Harbor & Pedro	6	gate		
3	S01-03	S01-0305	Aramada S	6	gate		
4	S01-03	S01-0307	Harbor Dr S	6	gate		
5	S01-03	S01-0316	Aramada S	6	gate		
6	S01-03	S01-0324	Lisbon	4	gate		
7	S01-03	S01-0302	Menendez	6	gate		
8	S01-03	S01-0329	Menendez	4	gate		
9	S01-04	S01-0411	Nassau	3	curb stop		
10	S01-04	S01-0412	Nassau	3	gate		
11	S01-03	S01-0332	Valencia	3	gate		
12	S01-03	S01-0323	Menendez	6	gate		
1	N01-02	N01-0204	Madrid	8	gate		
2	N01-02	N01-0203	Armada	6	gate		
3	N01-02	N01-0206	N Park Bv	4	gate		
4	N01-02	N01-0216	Narvaezi	8	gate		

Critical Areas							
			St/Dr/Ave/Circ/Other		Customers		173 Customers without water
			341 Miami		Family Dentistry		



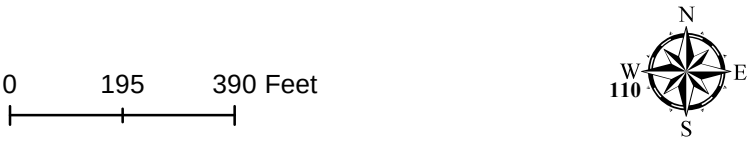
0 195 390 Feet





Phase 6 Valve Replacement							
Item	Map #	Valve #	Address/Location	Size	Type	Actual Turns	Field Notes
1	S01-03	S01-0335	229 Harbor by F. Hydrant	6	gate		
2	S01-03	S01-0330	405 Menendez St unit #2	6	gate		
3	S01-03	S01-0325	Lisbon between Armada & Menendez	4	gate		
4	S01-03	S01-0304	344 Ponce DeLeon	6	gate		
5	S01-03	S01-0334	344 Ponce DeLeon	6	gate		
6	N01-02	N01-0201	630 Madrid Ave	4	gate		

Valves Required for Shut Down							
Item	Map #	Valve #	Address/Location	Size	Type	Actual Turns	Field Notes
1	C-03	C00-0316	Harbor & Miami	6	gate		
2	C-03	C00-0335	Harbor & Pedro	6	gate		
3	S01-03	S01-0305	Aramada S	6	gate		
4	S01-03	S01-0307	Harbor Dr S	6	gate		
5	S01-03	S01-0316	Aramada S	6	gate		
6	S01-03	S01-0324	Lisbon	4	gate		
7	S01-03	S01-0302	Menendez	6	gate		
8	S01-03	S01-0329	Menendez	4	gate		
9	S01-04	S01-0411	Nassau	3	curb stop		
10	S01-04	S01-0412	Nassau	3	gate		
11	S01-03	S01-0332	Valencia	3	gate		
12	S01-03	S01-0323	Menendez	6	gate		
1	N01-02	N01-0204	Madrid	8	gate		
2	N01-02	N01-0203	Armada	6	gate		
3	N01-02	N01-0206	N Park Bv	4	gate		
4	N01-02	N01-0216	Narvaezi	8	gate		
Critical Areas			St/Dr/Ave/Circ/Other	Customers			173 Customers without water
			341 Miami	Family Dentistry			



- FORMS FOR THE ABOVEVERMITS ARE AVAILABLE AT THE CITY ENGINEERING DEPARTMENT OR IN THE ENGINEERING DEPARTMENT SECTION OF THE CITY WEBSITE @ www.venicegov.com
- 7.) A PRE-CONSTRUCTION CONFERENCE SHALL BE CONDUCTED BY EITHER THE PROJECT ENGINEER OF RECORD (EOR) OR CONSTRUCTION MANAGER AT A TIME AND PLACE ACCEPTABLE TO THE CITY ENGINEER, FOR THE PURPOSE OF OUTLINING CITY STANDARDS, TESTING AND INSPECTION REQUIREMENTS. CITY DEPARTMENT RESPONSIBILITY AND OBLIGATION TO CLARIFY AND ELABORATE CONCERNS. THE EOR OR CONSTRUCTION MANAGER SHALL PROVIDE COPIES OF ALL APPLICABLE STATE AND FEDERAL PERMITS AT THIS MEETING, INCLUDING SWFWMD ERP, NPDES NOI LETTER AND SWPPP, FDEP ANDER FDOT.
- 8.) ALL SHOP DRAWINGS SHALL BE SUBMITTED AS ONE PACKAGE, ONE COMPLETE SUBMITTAL ONLY. SHOP DRAWINGS MUST BE APPROVED BY THE ENGINEER OF RECORD (EOR) PRIOR TO SUBMISSION TO THE CITY ENGINEERING DEPARTMENT FOR REVIEW. EACH SHEET OF THE SUBMITTAL WILL BE INDIVIDUALLY STAMPED AND INITIALED BY THE E.O.R. SHOP DRAWINGS SUBMITTED FOR REVIEW SHALL BE INCLUSIVE AND COMPREHENSIVE. ANY CONSTRUCTION PRIOR TO THE REVIEW AND ACCEPTING PROCESS IS SUBJECT TO REMOVAL AT THE CONTRACTOR'S EXPENSE.
- 9.) THE CITY OF VENICE UTILITIES DEPARTMENT WILL OPERATE ALL WATER VALVES.

THE ENGINEER OF RECORD SHALL PROVIDE TESTING SPECIFICATIONS WHICH ARE CONSISTENT WITH THE FOLLOWING.

ALL ROADWAYS SHALL BE TESTED IN ACCORDANCE WITH THE CITY OF VENICE STANDARD DETAILS & FDOT SPECIFICATIONS.

a) **COMPACTION TESTING**

- SHALL BE PERFORMED UPON THE UPSTREAM AND DOWNSTREAM SIDE OF EACH MANHOLE/STRUCTURE.
- SHALL BE PERFORMED AT THE MID-POINT OF EACH RUN OF PIPE INSTALLED.
- SHALL BE PERFORMED AT 12" LIFTS, BEGINNING AT THE SPRINGLINE OF THE PIPE AND ALTERNATE SIDES OF THE PIPELINE WITH EACH LIFT.
- SHALL BE MINIMUM OF 98% OF MAXIMUM COMPACTION UPON PAVEMENT, 95% OF MAXIMUM COMPACTION UNDER OTHER SURFACES AS DETERMINED BY AASHTO METHOD T-190.

b) **DEFLECTION TESTING (MANDREL)**

- SHALL BE PERFORMED IN ACCORDANCE WITH ASTM D3034, LATEST REVISION.
- MINIMUM MANDREL DIAMETER SHALL BE 95% OF THE PIPELINE INTERIOR DIAMETER.
- PROVIDE 48 HOUR ADVANCE NOTIFICATION TO THE CITY OF VENICE ENGINEERING DEPARTMENT (941) 486-2626, EXT. 25003.

c) **AIR TEST GRAVITY LINES AND SERVICES**

- THE MAXIMUM PRESSURE DROP ALLOWABLE SHALL BE ONE (1) POUND PER SQUARE INCH (PSIG): REFER TO AIR TEST TABLE, DETAIL "6", SHEET WSR-3. THE MINIMUM INITIAL TEST PRESSURE SHALL BE THREE (3) AND 1/2 (3 1/2) POUNDS PER SQUARE INCH (psig) EXCEPT WHEN TESTING IN AREAS WITH HIGH WATER TABLE. FOR EVERY FOOT OF GROUNDWATER ABOVE THE SPRINGLINE OF THE PIPE, INCREASE THE TEST PRESSURE BY (0.43 psig). MINIMUM TEST PRESSURE SHALL BE NINE (9) psig, OR NOT EXCEEDING MANUFACTURER'S RECOMMENDATIONS. PROVIDE 48 HOUR ADVANCE NOTIFICATION TO THE CITY OF VENICE ENGINEERING DEPARTMENT (941) 486-2626, EXT. 25003.

d) **TELEVISION INSPECTION**

- UPON CONSTRUCTION COMPLETION, ANY DEFLECTION CAUSING A DEPTH OF WATER GREATER THAN 1/2" IS UNACCEPTABLE AND MUST BE REPAIRED OR REPLACED.
- AT TIME OF ONE-YEAR WARRANTY INSPECTION, ANY DEFLECTION CAUSING A DEPTH OF WATER GREATER THAN 1" IS UNACCEPTABLE AND MUST BE REPAIRED OR REPLACED.

- a) STORM SEWERS SHALL BE TESTED AS PER FDOT SPECIFICATIONS AND INCLUDE COMPACTION TESTING IN CONFORMANCE WITH SECTION 2.a ABOVE.
- b) THE OWNER SHALL PROVIDE A VIDEO TAPE OF THE CAMERA INSPECTION FOR ALL DRAINAGE PIPING BEING TURNED OVER TO THE CITY PRIOR TO ACCEPTANCE OF THE IMPROVEMENTS. VIDEO INSPECTION SHALL BE CONDUCTED WITHIN ONE YEAR AND SHALL BE COMPLETED WHEN THE GROUND WATER IS AT OR ABOVE NORMAL ELEVATION.

a) COMPACTION TESTING SHALL BE PERFORMED EVERY 250 FEET.

b) PRESSURE TEST (MAIN)

- PRIOR TO TESTING, ALL AIR MUST BE EXPELLED FROM THE PRESSURE MAIN.
- TEST PRESSURE SHALL BE
WATER (POTABLE & RECLAIMED) MAINS: 150 PSI
FORCE (WASTEWATER) MAINS: 100 PSI
- TEST PRESSURE SHALL BE HELD FOR A MINIMUM OF 2 HOURS
- ALLOWABLE LEAKAGE SHALL BE CALCULATED WITH THE FOLLOWING:

$$L = \frac{S \cdot D \cdot \sqrt{P}}{133,200}$$

L= ALLOWABLE LEAKAGE, GPH
S= LENGTH OF PIPE TESTED, FT
D= DIAMETER OF PIPE, IN
P= AVERAGE TEST PRESSURE, PSI

c) PRESSURE TEST (TAPPING SLEEVE & VALVE)
SHALL BE IN CONFORMANCE WITH DETAIL 5, SHEET 5 OF THESE CITY DETAILS.

d) BACTERIOLOGIC TESTING OF POTABLE MAINS SHALL BE COORDINATED THROUGH COW UTILITIES DEPT.
AND IN CONFORMANCE WITH STATE OF FLORIDA DEPARTMENT OF HEALTH. BACTERIAL SAMPLE SHALL
BE TAKEN BY A CERTIFIED LABORATORY OR FDOH PERSONNEL ONLY.

e) FOR ALL WATER NEEDED FOR FLUSHING, PRESSURE TESTING OR BACTERIOLOGICAL SAMPLING, PLEASE
PROVIDE 48 HOURS ADVANCE NOTICE TO THE CITY OF VENICE UTILITIES DEPARTMENT (480-3333). THE
CITY WILL OPERATE ALL MAINS UNDER PRESSURE.

f) DISINFECTING OF WATER MAINS MUST FOLLOW ANSI/AWWA 651-99 AND MUST BE WITNESSED BY CITY
UTILITIES. 48 HR. ADVANCE NOTICE IS REQUIRED (480-3333). DISINFECTION PLAN TO BE SUBMITTED TO COW
UTILITIES DEPT. FOR REVIEW & APPROVAL PRIOR TO SCHEDULING DISINFECTION.

g) FORCE MAINS SHALL BE A MINIMUM OF 4" IN DIAMETER.

- a) BACKFLOW ASSEMBLIES SHALL BE TESTED UPON INSTALLATION BY A CERTIFIED PLUMBER & RESULTS SUBMITTED TO THE UTILITIES DEPARTMENT WITHIN 72 HOURS.
- b) COORDINATE WITH DISTRIBUTION DIVISION FOR A LIST OF INDEPENDENT INSPECTION SERVICE PROVIDERS.

CITY ENGINEER
ENGINEERING PROJECTS COORDINATOR
ENGINEERING TECHNICIAN
GIS SPECIALIST
UTILITIES DIRECTOR
FIELD OPERATION SUPERVISOR

ADMINISTRATION AND FINAL APPROVAL
PERMITS, TURNOVER PACKAGES
CONSTRUCTION OBSERVATION
MAPS, DETAIL SHEETS
FINAL UTILITIES APPROVAL
PLAN REVIEW, UTILITIES INSPECTIONS, COST ESTIMATES, METERS,
SERVICES, BACKFLOW DEVICES
PLAN REVIEW (WASTEWATER ONLY), LOCATES FOR CITY UTILITIES,
UTILITIES FIELD SUPERVISOR

(941) 486-2626
(941) 486-2626
(941) 486-2626
(941) 486-2626
(941) 480-3333 X224
(941) 486-2788 X229

1001 SARASOTA CENTER BLVD
SARASOTA, FL 34232

CONSTRUCTION OF ANY WATER MAIN OR EXTENSION OF AN EXISTING SYSTEM (INCLUDING FIRE SERVICES) IS REQUIRED TO SUBMIT FDEP FORM 62-555.900(7); NOTICE OF INTENT TO USE THE GENERAL PERMIT FOR CONSTRUCTION OF WATER MAIN EXTENSIONS FOR PWSs. THIS FORM IS AVAILABLE IN ELECTRONIC FORMAT AT THE FOLLOWING WEB ADDRESS:
<http://www.dep.state.fl.us/water/drinkingwater/forms.htm>

A CERTIFICATION OF CONSTRUCTION COMPLETION AND REQUEST FOR CLEARANCE TO PLACE PERMITTED PWS COMPONENTS INTO OPERATION (FDEP FORM 62-555.900(9)) AND REPRODUCIBLE RECORD DRAWINGS MUST BE SIGNED, SEALED, AND SUBMITTED BY THE EOR (ENGINEER OF RECORD) TO FDH. PLEASE CONTACT THE DEPARTMENT OF HEALTH FOR MORE INFORMATION.

SARASOTA COUNTY ENVIRONMENTAL SERVICES
WATER RESOURCES
1001 SARASOTA CENTER BLVD
SARASOTA, FL 34232

CONSTRUCTION OF ANY WASTEWATER FACILITY OR EXTENSION OF AN EXISTING SYSTEM IS REQUIRED TO SUBMIT DEP FORM 62-604.300(8)(a): NOTIFICATION/APPLICATION FOR CONSTRUCTION A DOMESTIC WASTEWATER COLLECTION/TRANSMISSION SYSTEM. THIS FORM IS AVAILABLE IN ELECTRONIC FORMAT AT THE FOLLOWING WEB ADDRESS: <http://www.dep.state.fl.us/water/wastewater/forms.htm>. PLEASE SUBMIT APPLICATION TO THE ENGINEERING DEPT. PERMIT APPLICATION WILL NOT BE SIGNED BY THE UTILITIES DIRECTOR UNTIL THE PLANS HAVE BEEN APPROVED BY THE UTILITY AND ENGINEERING DEPARTMENTS.

A CERTIFICATE OF CONSTRUCTION COMPLETION FORM, REQUEST FOR APPROVAL TO PLACE A DOMESTIC WASTEWATER TRANSMISSION SYSTEM INTO OPERATION (FDEP FORM 62-60Y 3003)(B) AND REPRODUCIBLE RECORD DRAWINGS MUST BE SIGNED, SEALED, AND SUBMITTED BY THE EOR TO FDEP. PLEASE CONTACT THE DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR MORE INFORMATION. PLEASE SUBMIT APPLICATION TO THE ENGINEERING DEPT. CERTIFICATE OF COMPLETION WILL NOT BE SIGNED BY THE UTILITIES DIRECTOR UNTIL THE RECORD DRAWINGS HAVE BEEN APPROVED BY THE UTILITY AND ENGINEERING DEPARTMENTS.

1) RECORD DRAWINGS SHALL BE IN THE SAME FORMAT AS THE APPROVED CONSTRUCTION DRAWINGS (PLAN AND PROFILE). THE RECORD DRAWINGS SHALL BE DEVELOPED, SIGNED, AND SEALED BY THE EOR. IN ORDER TO VERIFY CONFORMANCE WITH THE DESIGNED AND APPROVED CONSTRUCTION PLANS. THIS CERTIFIED INFORMATION SHALL BE PROVIDED TO THE EOR BY A PROFESSIONAL SURVEYOR & MAPPER (PSM) LICENSED IN THE STATE OF FLORIDA. FDEP CERTIFICATION OF COMPLETION WILL NOT BE SIGNED BY UTILITIES MANAGER UNTIL RECORD DRAWINGS ARE APPROVED.

2) SPECIFICALLY, AS A MINIMUM, THE RECORD DRAWINGS SHALL CONSIST OF THE FOLLOWING:

- a) ACCURATE DIMENSION SHALL BE PROVIDED FOR ALL IMPROVEMENTS TO BE TURNED OVER TO THE CITY UPON CONSTRUCTION COMPLETION. TYPICALLY, THIS INCLUDES PIPES, VALVES, MANHOLES, LIFT STATIONS, ROADWAYS, SIGNAGE, SIDEWALKS, SWALES, STORMWATER FACILITIES, ETC.
- b) A MINIMUM OF 10' SHALL BE PROVIDED FOR EACH VALVE, FITTING, AND OTHER UNDERGROUND APPURTENANCES AND SHOWN IN TABLE FORMAT.
 - IF DISTANCE TO SWING THE TIE (MANHOLE, CURB INLET, ETC.) IS MORE THAN 200', A BRASS DISC (SEE VALVE BOX DETAIL) MAY BE SET IN CURB WITH DESIGNATION "STK." PROPOSED SWING THE TABLE SHOULD BE INCLUDED WITH CONSTRUCTION PLANS.
- c) TOP OF PIPE ELEVATIONS AND FINISH GRADE ELEVATIONS SHALL BE PROVIDED AT A MAXIMUM OF 100 FOOT INTERVALS.
- d) EASEMENTS, RIGHT-OF-WAYS AND PROPERTY LINES SHALL BE CORRECTLY SHOWN AND CONSISTENT WITH ANY RECORDED PLATS. IF A BLANKET EASEMENT HAS BEEN GRANTED, PLACE APPROPRIATE NOTE ON EACH PERTINENT PLAN SHEET.

3) RECORD DRAWING SUBMITTAL PROCEDURE:

- a) SUBMIT THREE (3) COPIES TO THE CITY ENGINEER'S OFFICE AS PRELIMINARY RECORD DRAWING. FOR REVIEW AND COMMENT BY CITY STAFF. FIELD VERIFICATION OF SAID IMPROVEMENTS WILL BE CONDUCTED AT THIS TIME. ALL SPARE PARTS SHALL BE DELIVERED TO THE CITY OF VENICE PRIOR TO RECORD DRAWING REVIEW.
- b) UPON INTEGRATION OF CITY COMMENTS, SUBMIT THREE (3) ORIGINAL SETS OF FINAL RECORD DRAWINGS (WITH EOR SIGNATURE AND SEAL) TO THE CITY ENGINEER'S OFFICE.
- c) SUBMIT, IN AUTOCAD AND PDF FORMAT, ALL ELECTRONIC FILES NECESSARY TO PRINT/PLOT THE RECORD DRAWINGS. THIS SHALL BE PROVIDED ON CD-ROM.
- d) THE EOR (ENGINEER OF RECORD) SHALL SUBMIT SWFWMD STORMWATER RECORD DRAWINGS AND "STATEMENT OF COMPLETION FORM AND REQUEST TO TRANSFER TO OPERATION ENTITY" FORM TO THE CITY.
- e) A CERTIFICATE OF OCCUPANCY (C.O.) SHALL NOT BE GRANTED IF THE ABOVE RECORD DRAWING SUBMITTAL REQUIREMENTS HAVE NOT BEEN MET.

UPON CONSTRUCTION COMPLETION, PORTIONS OF THE PROJECT THAT WILL BE MAINTAINED BY THE CITY MUST BE TURNED OVER TO THE CITY. CITY ACCEPTANCE OF IMPROVEMENTS, SUCH AS WATER, RECLAIMED, SEWER, STORMWATER SYSTEMS AND ROADWAYS, REQUIRE THAT ALL IMPROVEMENTS BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST VERSION OF THE CITY STANDARD DETAILS AND SUBMITTAL OF ALL REQUIRED TURNOVER PACKAGE DOCUMENTATION. A CO WILL NOT BE ISSUED UNTIL THIS PROCESS IS COMPLETED.

THE CITY IS REQUIRED TO HAVE THE PLAT REVIEWED FOR CONFORMITY WITH FL STATUTES BY A PROFESSIONAL SURVEYOR AND MAPPER CONTRACTED OR EMPLOYED BY THE CITY AND REGISTERED UNDER CHAPTER 472 F.A.C. COSTS SHALL BE BORNE BY THE LEGAL ENTITY OFFERING THE PLAT FOR RECORDING. A MINIMUM OF FOUR WEEKS IS NECESSARY BEFORE ANY PLAT CAN BE SENT TO CITY COUNCIL FOR APPROVAL.

- ALL REQUIRED TURNOVER PACKAGE DOCUMENTATION MUST BE SUBMITTED TO THE CITY ENGINEERING DEPARTMENT A MINIMUM OF TWO WEEKS PRIOR TO THE CITY COUNCIL MEETING. CITY COUNCIL MEETINGS ARE NORMALLY THE 2ND AND 4TH TUESDAY OF THE MONTH; THEREFORE, THE DEADLINE FOR SUBMITTAL OF COMPLETE TURNOVER PACKAGES IS 4 P.M. ON THE TUESDAY TWO WEEKS PRIOR TO THE CITY COUNCIL MEETING. A COPY OF THE CITY COUNCIL CALENDAR IS AVAILABLE ON-LINE AT www.venicegov.com.
- A COMPLETE TURNOVER PACKAGE INCLUDES ALL OF THE FOLLOWING ITEMS IF APPLICABLE TO THE PROJECT:
- a) BILL OF SALE FOR THE LINES, AND/OR SYSTEMS
 - b) AFFIDAVIT OF NO LIENS
 - c) CERTIFICATION OF CONTRIBUTIONS IN AID OF CONSTRUCTION
 - d) FINAL COST LETTER & COST BREAKDOWN WORKSHEET (VERIFICATION OF FINAL COSTS)
 - e) LEGAL DESCRIPTION
 - f) COPY OF PLAT (IF NEW SUBDIVISION, OR IF EXISTING IS RE-DIVIDED)
 - g) CONTRACTUAL GUARANTEES FROM OWNER
 - h) EASEMENTS GRANTING RIGHT OF ACCESS TO LINES AND/OR SYSTEMS WITHIN PRIVATE PROPERTY
 - i) A MAINTENANCE BOND IN THE AMOUNT OF AT LEAST 15% OF THE COST OF CONSTRUCTION OF THE IMPROVEMENTS TO BE TURNED OVER, SECURED BY AN IRREVOCABLE LETTER OF CREDIT OR BOND FROM AN APPROVED SURETY COMPANY, OR CASH, WHEREBY THE PRINCIPAL AGREES TO PERFORM ANY REQUIRED MAINTENANCE OR TESTING FOR A PERIOD OF ONE YEAR FROM THE DATE OF ACCEPTANCE BY THE CITY.
 - j) DECLARATION OF MAINTENANCE RESPONSIBILITIES
 - k) SIGNED AND SEALED FINAL RECORD DRAWINGS APPROVED BY THE CITY OF VENICE ENGINEERING AND UTILITY DEPARTMENTS. (PLEASE SEE SHEET 2, DETAIL 5 OF THE STANDARD DETAILS FOR THE RECORD DRAWING REQUIREMENTS AND SUBMITTAL PROCEDURES)
- RECORD DRAWINGS MUST BE APPROVED BY THE ENGINEERING AND UTILITY DEPARTMENTS PRIOR TO PROCESSING COMPLETION CERTIFICATIONS FOR FDEP OR DOH. MINOR CORRECTIONS TO THE SUBMITTAL PACKAGE WILL BE ALLOWED UNTIL FRIDAY OF THE SUBMITTAL WEEK (TWO WEEKS PRIOR TO COUNCIL MEETING) AT 4 P.M. NO FURTHER ITEMS WILL BE ACCEPTED BY THE ENGINEERING DEPARTMENT AFTER 4 P.M. ON FRIDAY. AN INCOMPLETE TURNOVER PACKAGE WILL NOT BE PLACED ON THE COUNCIL AGENDA FOR THE NEXT SCHEDULED MEETING.
 - IN ORDER TO EXPEDITE THE RECORD DRAWING AND TURNOVER PROCESS, PLEASE VERIFY THAT RECORD DRAWINGS ARE ACCURATE AT FIRST SUBMITTAL. RECORD DRAWINGS MUST BE REVIEWED BY THE ENGINEERING AND UTILITY DEPARTMENTS EACH TIME REVISED DRAWINGS ARE SUBMITTED. TURNOVER PACKAGES WILL NOT BE CONSIDERED COMPLETE UNTIL SIGNED AND SEALED COPIES OF THE RECORD DRAWINGS APPROVED BY THE ENGINEERING AND UTILITY DEPARTMENTS ARE SUBMITTED.

THESE REQUIREMENTS ARE BASED ON RESOLUTION 853-84, APPROVED AND ADOPTED BY THE CITY COUNCIL ON NOVEMBER 27, 1984

A TURNOVER PACKAGE, INCLUDING INSTRUCTIONS AND REQUIRED FORMS, IS AVAILABLE FOR PICK-UP AT THE CITY ENGINEERING DEPARTMENT.

AT TIME OF ONE-YEAR WARRANTY INSPECTION, ALL SYSTEMS MUST BE OPERATIONAL. CITY STAFF MAY REQUIRE PROPERTY OWNER TO CONDUCT VERIFICATION TESTING IF NECESSARY TO DETERMINE CONDITION OF IMPROVEMENTS. TYPICALLY THIS INCLUDES, BUT IS NOT LIMITED TO, THE FOLLOWING:

- VALVES
- FIRE HYDRANTS
- BACKFLOW ASSEMBLY
- LIFT STATION
- GRAVITY COLLECTION PIPES
- FORCE MAINS
- WATER LINES
- MANHOLES
- ROADWAY CONDITION
- STORM SEWERS

SUBMIT EIGHT (8) SETS OF CONSTRUCTION PLANS, SIGNED AND SEALED BY A FLORIDA LICENSED PROFESSIONAL ENGINEER TO THE ENGINEERING DEPARTMENT FOR REVIEW AFTER PLANNING & ZONING TECHNICAL REVIEW APPROVAL. CONSTRUCTION PLANS WILL NOT BE ACCEPTED FOR REVIEW UNTIL PERMIT FEE HAS BEEN PAID. CONSTRUCTION PLAN APPROVAL WILL NOT BE ISSUED UNTIL PLANNING COMMISSION APPROVAL IS OBTAINED, AND ALL REQUIRED PLAN REVISIONS ARE SUBMITTED. CONSTRUCTION PLANS MUST BE SIGNED AND SEALED BY THE SAME ENGINEER WHO PREPARED THE SITE PLAN AND SWFPM/D PERMIT DOCUMENTS. A CITY OF VENICE CONSTRUCTION PERMIT AND ALL APPLICABLE STATE AND FEDERAL PERMITS ARE REQUIRED BEFORE BEGINNING ANY WORK. CONSTRUCTION PLANS SHALL INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING:

- a) PROJECT NAME, AS REFERENCED IN TECHNICAL REVIEW PROCESS OR NOTE OF DISCREPANCY
- b) PLANS SHALL BE TITLED "CONSTRUCTION PLANS"
- c) LOCATION MAP
- d) INDEX OF SHEETS
- e) NAME OF OWNER AND CONTACT INFORMATION
- f) NAME OF ENGINEER AND CONTACT INFORMATION
- g) NAME OF SURVEYOR AND CONTACT INFORMATION
- h) NAME OF PROVIDER OF ALL UTILITIES AND SERVICES FOR THE PROPERTY
- i) DESIGNATION OF PUBLIC VERSUS PRIVATE IMPROVEMENTS (UTILITIES, ROADS, ETC.)
- j) DATE PLANS ISSUED
- k) PERCENTAGE OF AVERAGE OF IMPERVIOUS/PERVIOUS AREA EXISTING AND PROPOSED
- l) ENGINEER'S QUANTITY ESTIMATE OF INFRASTRUCTURE IMPROVEMENTS

- LINEAR FEET OF RECLAIMED WATER
- LINEAR FEET OF POTABLE WATER MAIN
- LINEAR FEET OF GRAVITY SEWER MAIN
- LINEAR FEET OF FORCE MAIN
- NUMBER OF MANHOLES

1) REQUIRED NOTES:

1. ALL WORK CONDUCTED IN THE CITY OF VENICE RIGHT-OF-WAY (ROW) WILL REQUIRE THE ISSUANCE OF A ROW PERMIT.
2. ALL WORK CONDUCTED IN SARASOTA COUNTY AND/OR FDOT ROW SHALL REQUIRE A COPY OF THE ISSUED PERMITS.
3. TREE REMOVAL PERMIT MUST BE OBTAINED FROM SARASOTA COUNTY NATURAL RESOURCES DEPARTMENT.
4. POST DEVELOPMENT RUNOFF DOES NOT EXCEED PRE-DEVELOPMENT RUNOFF VOLUME OR RATE FOR A 24-HOUR, 25-YEAR STORM EVENT.
5. ALL FIRE SERVICE BACKFLOW ASSEMBLIES SHALL BE INSTALLED BY A CERTIFIED CONTRACTOR WITH A CLASS II, I, OR V CERTIFICATE OF COMPETENCY ISSUED BY THE STATE FIRE MARSHALL AS PER F.S. 633.521
6. CONSTRUCTION SITE MUST BE POSTED WITH 24-HOUR CONTACT INFORMATION
7. ALL UTILITIES, WHETHER PUBLIC OR PRIVATE, SHALL MEET CITY OF VENICE STANDARDS
8. CONTACT PUBLIC WORKS SOLID WASTE DIVISION (941-486-2422) FOR APPROVAL OF DUMPSITE LOCATION AND LAYOUT PRIOR TO CONSTRUCTION.

a) BOUNDARY AND TOPOGRAPHIC SURVEY WITH EXISTING IMPROVEMENTS
b) FLOOD ZONE DESIGNATION AND LOCATIONS

- a) SITE PLAN MUST CONFORM TO PLAN APPROVED BY PLANNING COMMISSION
- b) SITE PLAN TO SHOW PLAN VIEW OF ALL PROPOSED IMPROVEMENTS.

- a) CONSTRUCTION PLANS MUST CONFORM TO THE SWFWMD STAMPED, APPROVED PLANS AND PERMIT CONDITIONS.
- b) INDIVIDUAL LOT GRADING PLAN SHALL BE SHOWN WITH THE PROPOSED FINISHED FLOOR ELEVATION.

- a) PROFILES SHALL BE SHOWN FOR ALL PIPELINES. MINIMUM SEPARATION AND COVER SHALL BE MAINTAINED AND NOTED AT CROSSING WITH OTHER UTILITIES IN ACCORDANCE WITH DETAIL 5, SHEET 5 OF THESE STANDARD DETAILS.
- b) PROPOSED SWING TABLE SHALL BE INCLUDED IN CONSTRUCTION PLAN SUBMITTAL.
- c) PROPOSED SITE LIGHTING WITH UTILITY OVERLAY SHALL BE PROVIDED TO VERIFY THAT CONFLICTS DO NOT EXIST (EXISTING AND PROPOSED).

- a) DESIGNATION (SEE SHEET) SHALL BE PROVIDED ON APPLICABLE SHEET FOR IMPROVEMENTS TO BE CONSTRUCTED IN ACCORDANCE WITH THE COV STANDARD DETAILS. ALL APPLICABLE CITY STANDARD DETAILS SHEETS SHALL BE INCLUDED IN THE CONSTRUCTION SUBMITTAL IN THEIR ENTIRETY. NO ALTERATION OR MODIFICATION OF THE CITY DETAIL SHEETS IS ALLOWED WITH THE EXCEPTION OF THE TITLE BLOCK. ANY PROPOSED CHANGES SHALL BE PROVIDED ON A SEPARATE SHEET OF THE CONSTRUCTION PLAN SUBMITTAL.
- c) DETAILS PROVIDED BY EOR MUST MEET OR EXCEED THE MINIMUM DESIGN STANDARD IN THE COV STANDARD DETAILS.
- d) DIGITAL COPIES OF THE LATEST STANDARD DETAILS MAY BE OBTAINED BY CONTACTING THE ENGINEERING DEPARTMENT AT 941-486-2626 EXT. 2061 OR IN THE ENGINEERING DEPARTMENT SECTION OF THE CITY WEBSITE AT www.venicegov.com.
- e) CITY OF VENICE STANDARD DETAILS INCLUDED IN CONSTRUCTION PLANS SHALL BE SIGNED AND SEALED BY THE EOR. DETAILS THAT DO NOT APPLY MAY BE CROSSED OUT.

THE APPROVED TRC LANDSCAPE PLAN SHALL BE INCLUDED IN THE CONSTRUCTION PLAN SET. THE LANDSCAPE PLAN SHALL INDICATE ALL PLANTS PROPOSED FOR INSTALLATION AND INCLUDE A UTILITY OVERLAY TO VERIFY THAT CONFLICTS DO NOT EXIST.

- a) NORTH ARROWS AND SCALES SHALL BE SHOWN ON EACH SHEET.
- b) ADDITIONAL SHEETS MAY BE NECESSARY TO ACCURATELY DEPICT THE SCOPE OF THE PROJECT OR AS REQUIRED BY THE CITY STAFF FOR CLARITY.
- c) MAXIMUM CONSTRUCTION PLAN SIZE ALLOWED IS 24"x36" SHEETS. NO BLUEPRINTS WILL BE ACCEPTED.
- d) ALL RIGHT-OF-WAYS, EASEMENTS FOR DRAINAGE, UTILITIES, OR OTHER PUBLIC FACILITIES, WHICH WILL BE RELINQUISHED TO THE CITY, SHALL BE SHOWN ON THE RESPECTIVE MASTER PLAN SHEETS.
- e) AS REQUIRED BY THE FLORIDA BOARD OF PROFESSIONAL ENGINEERS, EACH PLAN SHEET MUST BE SIGNED AND SEALED BY THE EOR.

CITY OF VENICE
ENGINEERING DEPARTMENT

401 WEST VENICE AVE.
VENICE FL 34285
(941) 486-2626
FAX (941) 480-3031

FILE NO. **1030 123**

SHEET **2** OF **12**

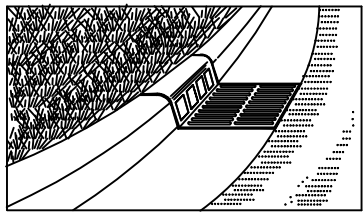
G-11

2013 STANDARD DETAILS

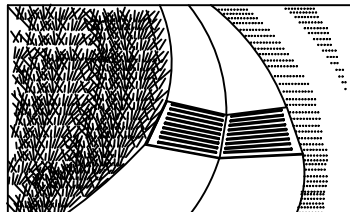
GENERAL NOTES AND

TESTING REQUIREMENTS

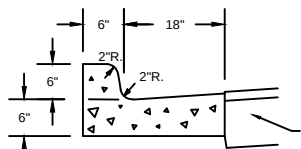
No.	Date	Revision	BY	DATE:
1	1/15/2010	2010 UPDATE	MG	7/15/2013
2	1/15/2011	2011 UPDATE	MG	DRAWN BY:
3	1/15/2012	2012 UPDATE	MT	JRC
4	7/15/2012	2012 MID YEAR UPDATE	MT	CHECKED BY:
5	1/15/2013	2013 UPDATE	JC	K.W.
6	7/15/2013	2013 MID YEAR UPDATE	JC	SCALE:
				AS SHOWN



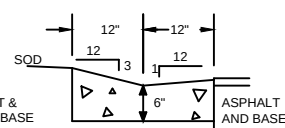
INLET IN TYPE F CURB



INLET IN MIAMI CURB



TYPE F CURB



MIAMI CURB

- ALL STREETS SHALL HAVE A TWO-FOOT WIDE CONCRETE (3000 PSI AT 28 DAYS WITH FIBER REINFORCEMENT) CURB AND GUTTER, AND MEET OR EXCEED FDOT SPECIFICATIONS UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.
- ALTERNATE CURB DESIGNS THAT MEET OR EXCEED FDOT SPECIFICATIONS MAY BE USED UPON APPROVAL BY THE CITY ENGINEER.

1 CURB DETAILS

- A) **HEAVY DUTY:** COMMERCIAL AND INDUSTRIAL DEVELOPMENTS WITHIN PRIMARY ACCESSWAYS, PARKING LOTS, ETC. WITH EXPOSURE TO TRUCK TRAFFIC
- B) **LIGHT DUTY:** RESIDENTIAL SUBDIVISIONS AND COMMERCIAL DEVELOPMENTS WITHIN LOW VOLUME ACCESSWAYS, PARKING LOTS, ETC. (LESS THAN 10% TRUCK TRAFFIC)

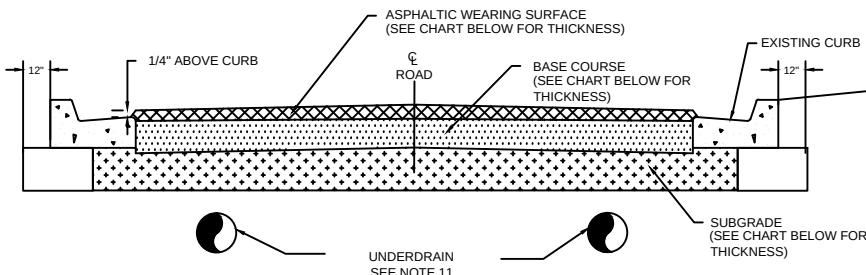
	A	B
SUBGRADE - TYPE B STABILIZED LBR 40 MIN.	12"	8"
ABC3 - ASPHALT BASE	5"	4"
CTB	10"	7"
CCA	10"	7"
ASPHALTIC CONCRETE	1 1/2" OF S-1	1 1/2" OF S-1/S-3

ALTERNATE PAVEMENT FOR PARKING LOTS ONLY:

SUBGRADE - 12" TYPE B STABILIZED LBR 40 MIN.
PAVEMENT - 6" CONCRETE 3000PSI @28 DAYS WITH MAX. 4" SLUMP & FIBER REINFORCEMENT.

NOTE: ALL TRAFFIC CALMING DEVICES MUST BE APPROVED BY THE FIRE CHIEF.

4 PAVEMENT STANDARDS

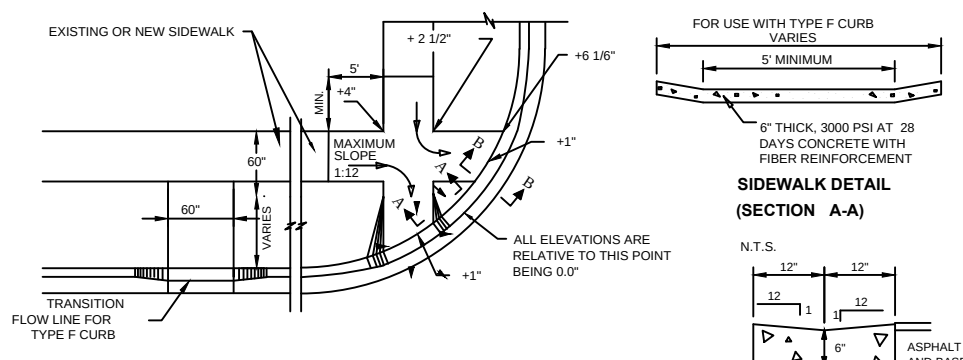


ROADWAY PAVEMENT DESIGN (MINIMUM THICKNESS)						
STREET CLASSIFICATION	(1) ASPHALT SURFACE:	(2) BASE:	ABC3	CTB	CCA	(3) SUB-GRADE:
LOCAL STREET	1 1/2" OF TYPE S-1		5"	10"	10"	12" MIN 40 LBR
COLLECTOR STREET	3" OF TYPE S-1 & 1" OF TYPE FC-3		5"	10"	10"	12" MIN 40 LBR
ARTERIAL STREET	3" OF TYPE S-1 & 1" OF TYPE FC-3		5"	10"	10"	12" MIN 40 LBR

NOTES:

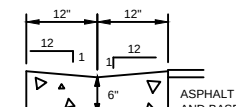
- SHELL IS NOT AN ACCEPTABLE BASE MATERIAL. CTB MATERIAL MUST YIELD COMPRESSIVE STRENGTH WITHIN THE RANGE OF 175 TO 275 PSI. CCA MUST HAVE AN LBR ≥ 150 .
- ROAD DESIGN PROPOSALS SHALL BE SUBMITTED AT LEAST 20 DAYS PRIOR TO CONSTRUCTION.
- ALL GRANULAR COMPONENTS, COURSES OR LIFTS OF ROAD CONSTRUCTION MUST BE COMPACTED TO 98% OF ITS OPTIMUM DENSITY AS PER T-180 (AASHTO). CTB SHALL BE COMPACTED TO 98% OF ITS LAB FORMULATION DENSITY (AASHTO T-99).
- ALL MINERAL MATERIALS USED IN CONSTRUCTION OF ROADWAYS MUST MEET THE FOLLOWING CRITERIA:
 - FINES (PASSING # 200 SIEVE) MUST BE LIMITED TO $\leq 12\%$.
 - ORGANICS LIMITED TO $\leq 5\%$
 - NO DELETERIOUS MATERIALS.
- CEMENT TREATED BASE:
 - THE MATERIAL TO BE USED AS THE FILLER AGGREGATE IN CTB MUST BE LBR TESTED PRIOR TO DESIGN FORMULATION (ADDING CEMENT). THIS MATERIAL MUST ACHIEVE AN LBR VALUE OF ≥ 100 .
 - CTB DESIGN CRITERION SHOULD TARGET RANGE FROM 175 TO 275 PSI ON 7 DAY BREAK.
- ALL MATERIALS & METHODS OF CONSTRUCTION WITH THE EXCEPTION OF ASPHALT PAVING AND BASE MATERIAL SHALL BE IN ACCORDANCE WITH LATEST EDITION OF THE FDOT, "STANDARDS FOR ROAD & BRIDGE CONSTRUCTION" AND "ROADWAY AND TRAFFIC DESIGN STANDARDS". ASPHALT PAVING AND BASE MATERIAL SHALL MEET THE CRITERIA OF 2006 VERSION OF THE FDOT "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" OR LATEST CITY OF VENICE STANDARD DETAIL, WHICHEVER IS MORE RESTRICTIVE. IN ADDITION, ALL CONCRETE SHALL BE 3000 PSI AT 28 DAYS WITH A MAXIMUM 4" SLUMP AND FIBER REINFORCEMENT.
- SIGNAGE AND PAVEMENT MARKINGS TO BE IN ACCORDANCE WITH LATEST EDITION OF THE FDOT "ROADWAY AND TRAFFIC DESIGN STANDARDS".
- ALL CITY STREET SIGNS WILL BE BLUE BACKGROUND WITH 6" WHITE LETTERS AND CONSTRUCTED WITH HIGH INTENSITY REFLECTORIZED MATERIAL. LOCAL ROAD SIGNS SHALL BE 9 INCHES WIDE. ALL STREET SIGNS DESIGNS TO BE APPROVED BY THE DIRECTOR OF PUBLIC WORKS PRIOR TO INSTALLATION.
- ALL STREETS WITHIN CITY LIMITS SHALL MEET THE MINIMUM DESIGN STANDARDS ESTABLISHED IN CITY STANDARD DETAILS.
- ALL CURB PADS SHALL MEET SIMILAR STRUCTURAL AND COMPACTION STANDARDS AS DOES ROAD SUB GRADE (SUB BASE). THESE PADS WILL EXTEND TO AT LEAST 12" BEYOND THE CURB.
- UNDERDRAINS OR SIDEDRAINS MAY BE CONSIDERED WHEN THE PERSISTENT GROUND WATER LEVELS ARE MEASURED WITHIN 24 INCHES OF THE PAVEMENT GRADE AND ARE LIKELY TO AFFECT THE STRUCTURAL INTEGRITY OF THE ROAD. IF APPROPRIATE, THIS DESIGN SHALL BE THE RESPONSIBILITY OF ENGINEER OF RECORD.
- ALL TRAFFIC CALMING DEVICES MUST BE APPROVED BY THE FIRE CHIEF.

2 TYPICAL ROADWAY SECTION



SIDEWALK DETAIL (SECTION A-A)

N.T.S.

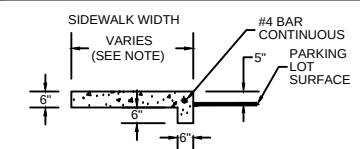


CURB DETAIL (SECTION B-B)

NOTES:

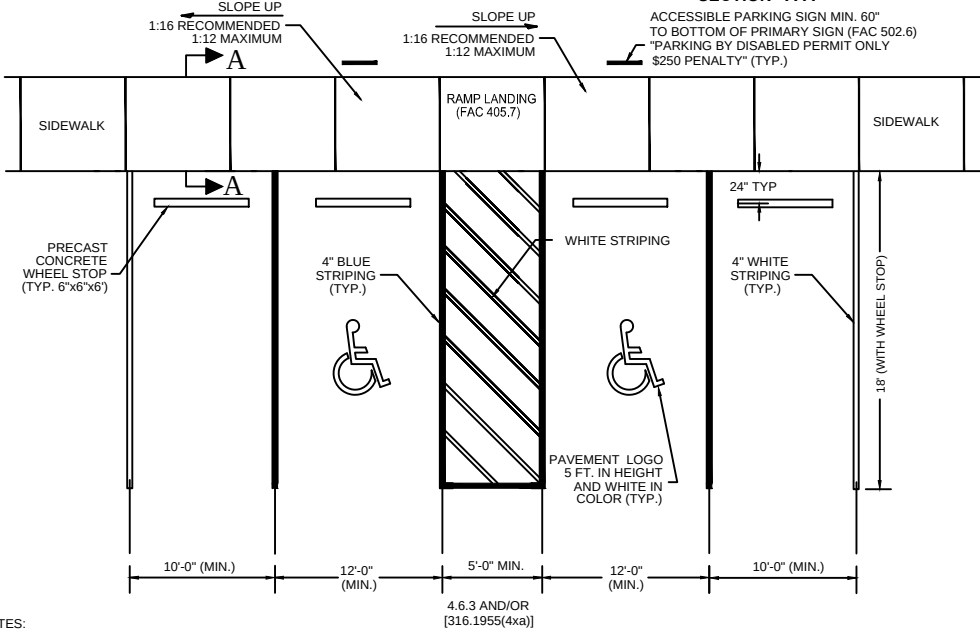
- ALL CONCRETE RAMPS SHALL BE 4" THICK, INCREASING TO 6" THICK WITHIN 48" OF THE CURB
- ALL CONNECTIONS TO AN EXISTING SIDEWALK SHALL BE AT AN EXPANSION OR CONTRACTION JOINT
- WHERE PEDESTRIAN MOVEMENT CROSSES RAMP, THE MAXIMUM SLOPE SHALL BE 1:12
- ALL RAMPS AND WALKS WITHIN THREE FEET OF A FREQUENTLY USED DRIVE (GREATER THAN DUPLEX) SHALL HAVE A TACTILE SURFACE. RAMPS ARE DEFINED AS WALKS WITH A SLOPE GREATER THAN 1:12 AND/OR ADJACENT TO CURBS.
- TACTILE SURFACE WITHIN PUBLIC RIGHT-OF-WAY SHALL BE CAST-IN-PLACE COMPOSITE TACTILE (BRICK RED) (ADA SOLUTIONS OR APPROVED EQUALS), OR CAST-IN-PLACE ULTRA-ADA PADS (BRICK RED) (ULTRA TECH OR APPROVED EQUALS).
- TACTILE SURFACE WITHIN PRIVATE PROPERTY MAY BE SURFACE MOUNT (SCREW DOWN, BRICK RED).
- ALL MATERIALS & METHODS OF CONSTRUCTION SHALL BE IN ACCORDANCE WITH LATEST EDITION OF THE FDOT, "STANDARDS FOR ROAD & BRIDGE CONSTRUCTION". IN ADDITION, CONCRETE SHALL BE 3000 PSI AT 28 DAYS WITH A MAXIMUM 4" SLUMP AND FIBER REINFORCEMENT.

3 TYPICAL HANDICAPPED RAMP



SECTION A-A

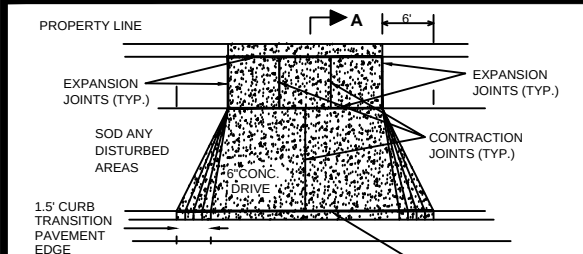
ACCESSIBLE PARKING SIGN MIN. 60" TO BOTTOM OF PRIMARY SIGN (FAC 502.6)
"PARKING BY DISABLED PERMIT ONLY \$250 PENALTY" (TYP.)



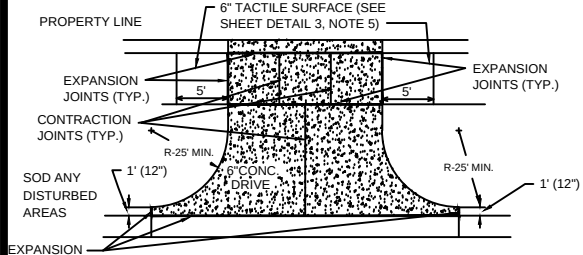
NOTES:

- IF AN ADJACENT SIDEWALK IS A MINIMUM OF SEVEN (7) FEET IN WIDTH AND PROVIDES A 5" INCH CURB, THE SIDEWALK MAY SERVE AS THE WHEEL STOP AND THE STANDARD PARKING SPACE MAY BE 16' DEEP.
- IF AN ADJACENT LANDSCAPE AREA IS A MINIMUM OF 3.5' PER ABUTTING PARKING SPACE AND PROTECTED BY CONCRETE CURBING OR WHEEL STOP, 2 FEET OF THE REQUIRED DEPTH MAY ENCR OACH INTO THE LANDSCAPE AREA. IF THE REQUIRED DEPTH ENCR OACHES INTO THE LANDSCAPE AREA, THE WHEEL STOP MUST BE PLACED AT THE EDGE OF PAVEMENT.
- ACCESSIBLE PARKING SPACES AND ACCESS AISLES SHALL BE CONSTRUCTED WITH SURFACE SLOPES NOT TO EXCEED 1:50 (2%) IN ALL DIRECTIONS
- NO COLORS OTHER THAN WHITE AND BLUE SHALL BE USED FOR PARKING SPACE PAVEMENT MARKINGS.
- ALL DIMENSIONS SHOWN ARE TO THE CENTERLINE OF PAVEMENT MARKINGS.

6 ACCESSIBLE AND TYPICAL PARKING SPACE

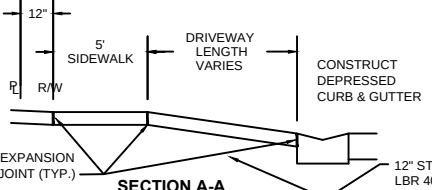


RESIDENTIAL ONLY



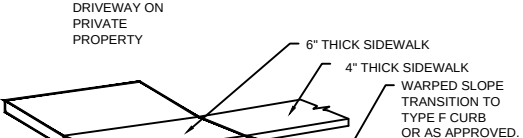
COMMERCIAL/ INDUSTRIAL/ MULTI-FAMILY

PLAN VIEW



SECTION A-A

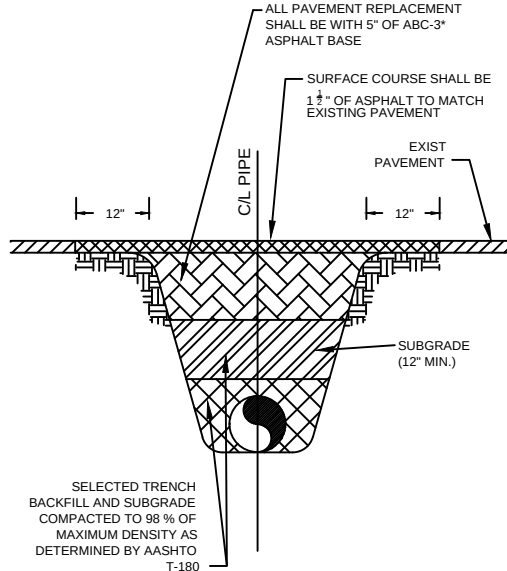
5 DRIVEWAY AND SIDEWALK DETAILS



6" CONCRETE RESIDENTIAL DRIVEWAY

NOTES:

- SIDEWALKS SHALL BE CONSTRUCTED OF 3000 PSI AT 28 DAYS CONCRETE (MAXIMUM 4" SLUMP) WITH FIBER REINFORCEMENT.
- ALL SIDEWALKS SHALL BE 5' WIDE AND CONSTRUCTED WITH A SLOPE OF 1/4-INCH PER FOOT TOWARD CURB AND GUTTER.
- CONTRACTION SAW-CUTS SHALL BE CONSTRUCTED EVERY 5' LENGTH OF SIDEWALK. EXPANSION JOINTS SHALL BE CONSTRUCTED AT 50' INTERVALS.
- 1/2-INCH THICK ASPHALTIC FELT OR "PRESSURE TREATED WOOD" SHALL BE PLACED AT EACH EXPANSION JOINT.
- EXISTING CURB AND GUTTER SHALL BE REMOVED ONLY AT EXISTING JOINTS.
- DRIVEWAY WIDTH AND LOCATION SHALL COMPLY WITH ZONING CODES, SECTIONS 122-446, 62-64, 62-65.
- ALL MATERIALS & METHODS OF CONSTRUCTION SHALL BE IN ACCORDANCE WITH LATEST EDITION OF THE FDOT, "STANDARDS FOR ROAD & BRIDGE CONSTRUCTION". IN ADDITION, CONCRETE SHALL BE 3000 PSI AT 28 DAYS WITH A MAXIMUM 4" SLUMP AND FIBER REINFORCEMENT.
- DRIVEWAY SLOPES SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE FDOT, "ROADWAY AND TRAFFIC DESIGN STANDARDS", INDEX 515.



ALL PAVEMENT REPLACEMENT SHALL BE WITH 5" OF ABC-3" ASPHALT BASE
SURFACE COURSE SHALL BE 1 1/2" OF ASPHALT TO MATCH EXISTING PAVEMENT
EXIST PAVEMENT
SUBGRADE (12" MIN.)
C/L PIPE

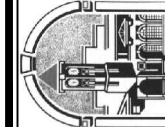
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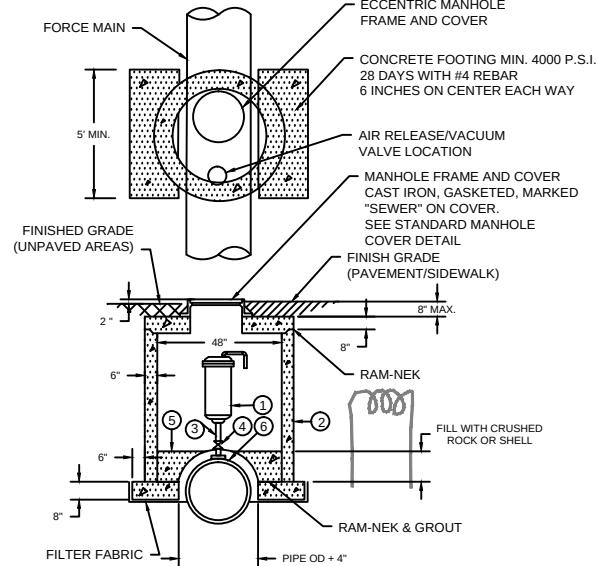
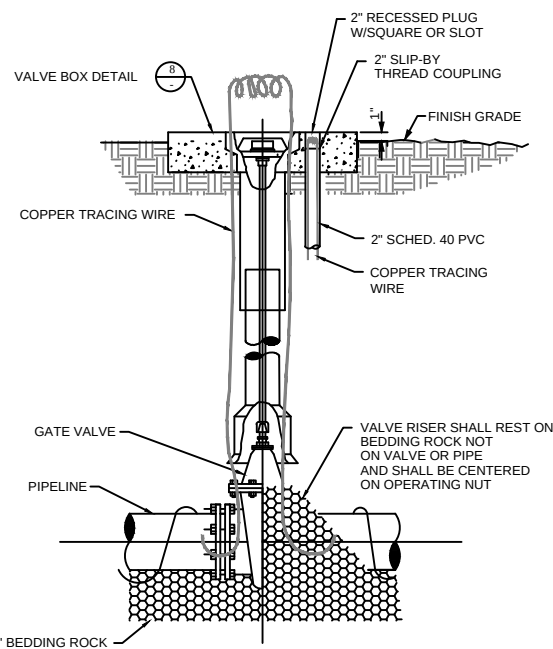
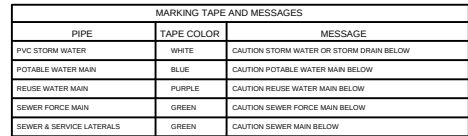
- ALTERNATIVE BASE COURSE MATERIALS WITH EQUIVALENT STRUCTURAL THICKNESSES WILL BE CONSIDERED. HOWEVER, SHELL IS UNACCEPTABLE. CEMENT TREATED BASE MATERIAL MUST YIELD COMPRESSIVE STRENGTH WITHIN THE RANGE OF 175 TO 275 PSI. CRUSH CONCRETE AGGREGATE MUST HAVE AN LBR ≥ 150 .
- REQUIREMENTS FOR INSTALLATION OF PIPELINES IS SHOWN IN DETAIL 1, SHEET 4 OF THESE STANDARDS.
- FLOWABLE FILL CONCRETE MAY BE USED IN LIEU OF BACKFILL AND PAVEMENT SUBCOURSES WITH APPROVAL BY THE CITY ENGINEER. DESIGN AND ACCEPTANCE OF FLOWABLE FILL WILL BE GOVERNED BY APPLICABLE FDOT STANDARDS.

7 PAVEMENT RESTORATION FOR UTILITY TRENCHES

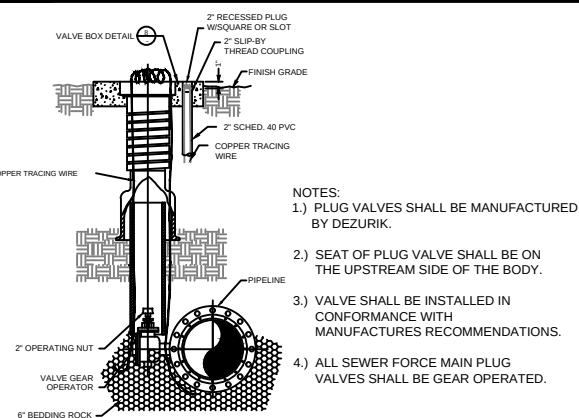
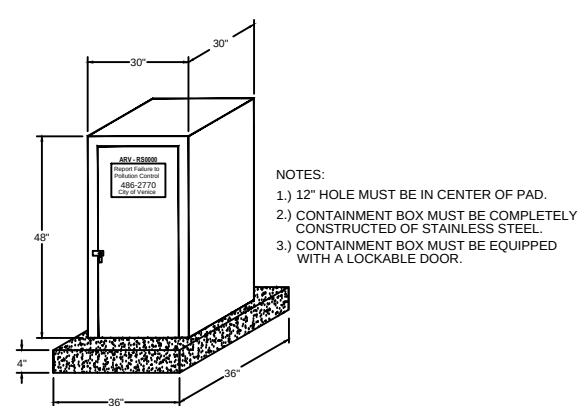
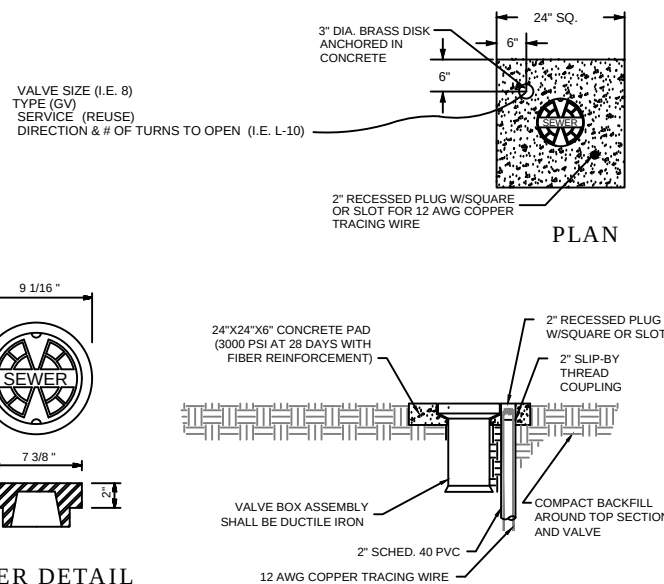
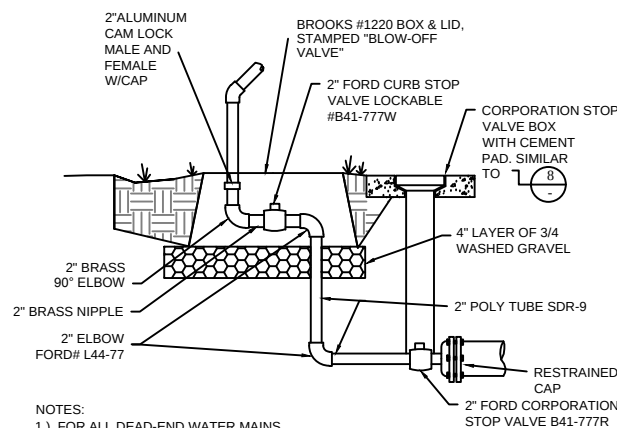
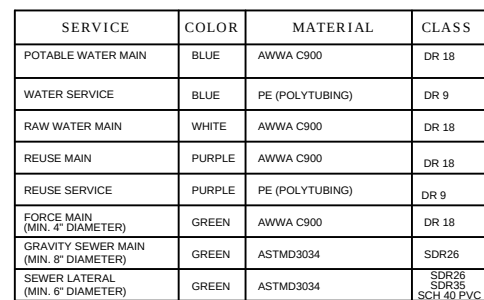
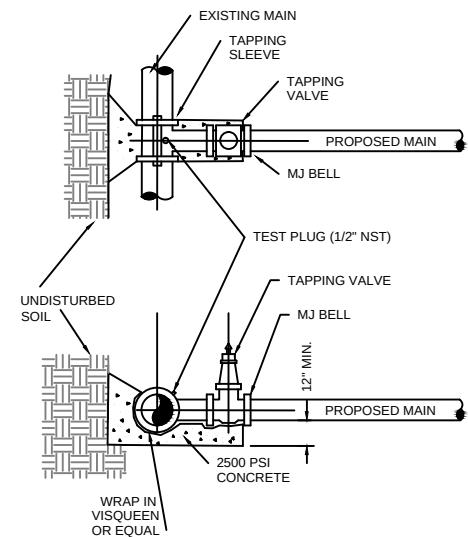
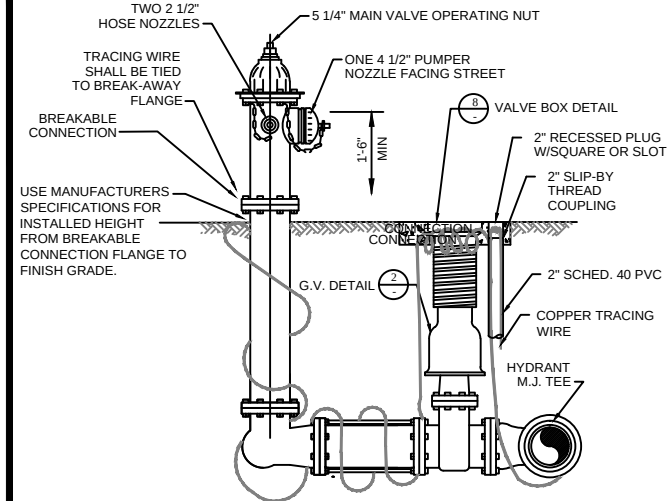
2013 STANDARD DETAILS PAVING AND SIDEWALK DETAILS

CITY OF VENICE
ENGINEERING DEPARTMENT
401 WEST VENICE AVE.
VENICE FL 34285
(941) 486-2626
FAX (941) 480-3031





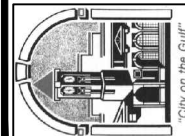
- 1) AUTOMATIC AIR RELEASE WITH BACKWASH ACCESSORIES, MANUFACTURED BY APCO MODEL 400, VAL-MATIC MODEL 48 OR H-TEC MODEL 986.
- 2) PRECAST CONCRETE 4 FOOT DIA. MANHOLE OR APPROVED COW STAINLESS STEEL ABOVE GROUND VALVE BOX SECTION WITH TOP SLAB, ASTM C478, LATEST REVISION. SEE DETAIL 9 THIS SHEET.
- 3) SS 316 PIPING
- 4) SS 316 BALL VALVE
- 5) CRUSH ROCK OR SHELL
- 6) ALL SS DOUBLE BAND SERVICE SADDLE (INCLUDING BODY).
- 7) CAV'S SHALL BE PLACED AT THE HIGH POINT OF THE MAIN.
- 8) PIPE CAV'S DISCHARGE TO NEAREST GRAVITY SEWER MANHOLE.



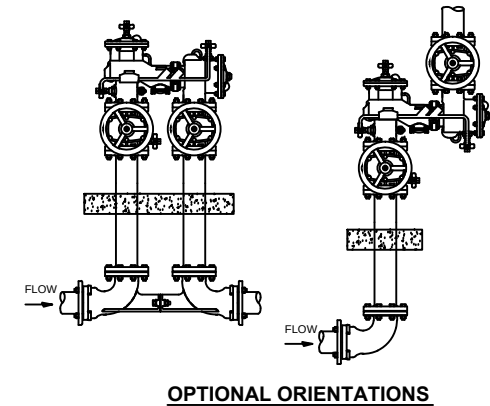
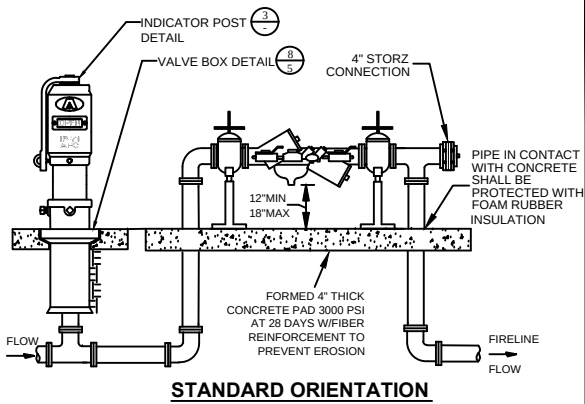
No.	Date	Revision	BY	DATE:
1	1/15/2009	2009 UPDATE	MG	7/15/2013
2	1/15/2010	2010 UPDATE	MG	DRAWN BY:
3	1/15/2011	2011 UPDATE	MG	JRC
4	1/15/2012	2012 UPDATE	MT	CHECKED BY:
5	1/15/2013	2013 UPDATE	JC	K.W.
6	7/15/2013	2013 MID YEAR UPDATE	JC	SCALE:
				AS SHOWN

**2013 STANDARD DETAILS
WATER, SEWER AND
REUSE DETAILS**

CITY OF VENICE
ENGINEERING DEPARTMENT

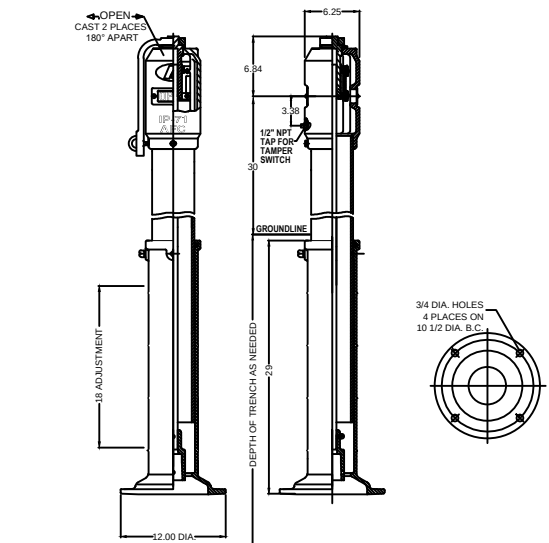


FILE NO. **1030 126**
SHEET **413** OF **12**
WSR-1



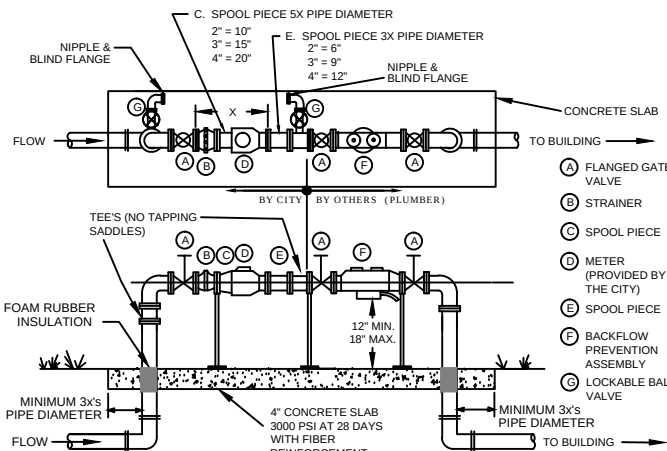
- NOTES:
- 1.) ALL BACKFLOW PREVENTION ASSEMBLIES SHALL BE APPROVED BY THE UNIVERSITY OF SOUTHERN CALIFORNIA FOUNDATION FOR CROSS-CONNECTION CONTROL AND HYDRAULIC RESEARCH AND/OR 1047 OR 1048 ASSE AS APPLICABLE
 - 2.) 45° FITTINGS MAY BE SUBSTITUTED FOR 90° FITTINGS.
 - 3.) PIPE BETWEEN TAP & ISOLATION VALVE SHALL BE C900 PVC OR DUCTILE IRON.
 - 4.) IF TEEING OFF FOR POTABLE SERVICE, INSTALL ISOLATION VALVE BETWEEN TEE FOR POTABLE SERVICE AND FIRE SERVICE BACKFLOW ASSEMBLY.
 - 5.) ASSEMBLY SHALL BE PAINTED RED WITH ALKYO ENAMEL, EPOXY OR POLYURETHANE BASED PAINT, EXCEPT FOR STAINLESS STEEL PARTS.
 - 6.) VALVE ASSEMBLIES SHALL MEET NFPA 24 REQUIREMENTS AND INDICATOR VALVES SHALL BE PROVIDED.
 - 7.) FOR CLEARANCE ISSUES, PLEASE REFER TO THE CURRENT FLORIDA FIRE PREVENTION CODE REQUIREMENTS.
 - 8.) FOR FIRE PROTECTION SYSTEMS EQUIPPED WITH A FIRE PUMP, THE PIPE BETWEEN THE CHECK VALVE AND THE OUTSIDE CONNECTION SHALL BE EQUIPPED WITH AN APPROVED BALL DRIP.
 - 9.) BACKFLOW PREVENTION ASSEMBLY TYPE SHALL BE DETERMINED BY THE CITY OF VENICE UTILITIES DEPARTMENT'S MOST CURRENT CROSS-CONNECTION CONTROL PROGRAM.

1 FIRE SERVICE BACKFLOW ASSEMBLY



- NOTES:
- 1.) AMERICAN FLOW CONTROL IP-71 INDICATOR POST OR EQUIVALENT SHALL BE INSTALLED.
 - 2.) UNDERWRITERS LABORATORIES LISTED AND FACTORY MUTUAL RESEARCH APPROVED.
 - 3.) FOR USE WITH VALVES WITH O-RING STEM SEALS.
 - 4.) ALL EXPOSED EXTERIOR SURFACES COATED WITH TNEMEC 140 EPOXY AND TOP COATED WITH "RED" ENAMEL PER MANUFACTURER'S STANDARD PAINT.

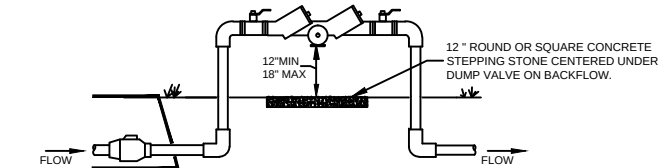
3 INDICATOR POST



METER SIZE (IN.)	BY-PASS SIZE
1 1/2"	1"
2"	1 1/2"
3"	2"
4"	3"

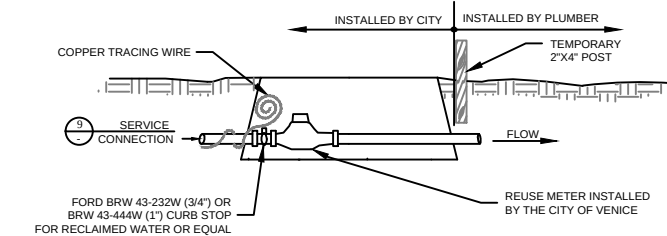
- NOTES:
- 1.) EITHER 90°-DEGREE OR 45°-DEGREE FITTINGS MAY BE USED WITH THE REQUIRED LENGTH OF RESTRAINED JOINT FITTINGS.
 - 2.) BACKFLOW PREVENTION ASSEMBLY TYPE SHALL BE DETERMINED BY THE CITY OF VENICE UTILITIES DEPARTMENT'S MOST CURRENT CROSS-CONNECTION CONTROL PROGRAM.
 - 3.) ALL BACKFLOW PREVENTION ASSEMBLIES SHALL BE APPROVED BY THE UNIVERSITY OF SOUTHERN CALIFORNIA FOUNDATION FOR CROSS-CONNECTION CONTROL AND HYDRAULIC RESEARCH AND/OR ASSE 1013
 - 4.) ALL CONCRETE PENETRATIONS SHALL REQUIRE PIPE TO BE WRAPPED WITH INSULATING MATERIAL.
 - 5.) VALVES SHALL BE FULL PORTED FULL FLOW BALL VALVES OR RESILIENT WEDGE NON-RISING STEM GATE VALVES.
 - 6.) ALL METERS 1 1/2" & UP WILL HAVE FLANGES.
 - 7.) PIPE BETWEEN TAP & ISOLATION VALVE SHALL BE C900 PVC OR DUCTILE.
 - 8.) THE WATER METER AND BACKFLOW PREVENTER SHALL BE THE SAME SIZE.
 - 9.) 2" AND SMALLER METERS REQUIRE A LOCKABLE CURB STOP. 3" AND LARGER METERS WILL HAVE A FLANGED WHEEL HANDLE RESILIENT WEDGE GATE VALVE.
 - 10.) NO SPOOL PIECE REQUIRED FOR 3/4", 1", OR 1 1/2".
 - 11.) ALL COMMERCIAL AND MULTI FAMILY UNIT METERS MUST BE ABOVE GRADE.
 - 12.) BACKFLOW PREVENTION ASSEMBLY NOT REQUIRED FOR REUSE METER ONLY.
 - 13.) BACKFLOW PREVENTION ASSEMBLIES SHALL NOT BE BY-PASSED.
 - 14.) NO BRANCH OR TEE SERVICE CONNECTIONS, OTHER THAN THE UTILITIES METER BY-PASS RETURN TEE, SHALL EXIST BETWEEN THE WATER METER AND BACKFLOW PREVENTER.

2 WATER & REUSE METER & BACKFLOW PREVENTION ASSEMBLY ABOVE GROUND COMMERCIAL/MULTI-UNIT/SINGLE SERVICE/MASTER METER (WITH BY-PASS AROUND METER ONLY)



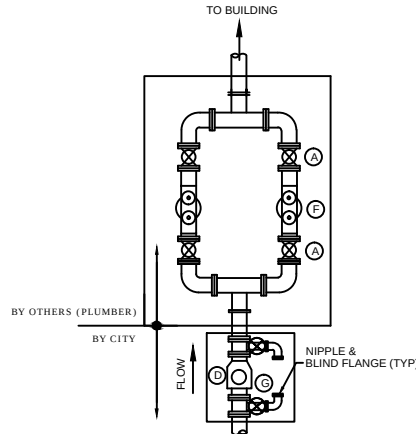
- NOTES:
- 1.) BACKFLOW PREVENTION ASSEMBLY TYPE SHALL BE DETERMINED BY THE CITY OF VENICE UTILITIES DEPARTMENT'S MOST CURRENT CROSS-CONNECTION CONTROL PROGRAM.
 - 2.) ALL BACKFLOW PREVENTION ASSEMBLIES SHALL BE APPROVED BY THE UNIVERSITY OF SOUTHERN CALIFORNIA FOUNDATION FOR CROSS-CONNECTION CONTROL AND HYDRAULIC RESEARCH AND/OR ASSE 1013.
 - 3.) ALL PIPING SHALL BE RIGID COPPER.
 - 4.) THE WATER METER AND BACKFLOW PREVENTER SHALL BE THE SAME SIZE.
 - 5.) INSTALLED IMMEDIATELY AFTER THE UTILITY WATER METER UNLESS OTHERWISE APPROVED BY THE CITY OF VENICE UTILITIES DEPARTMENT.
 - 6.) NO BRANCH OR TEE CONNECTIONS SHALL EXIST BETWEEN THE WATER METER AND BACKFLOW PREVENTER.

4 BACKFLOW PREVENTION ASSEMBLY RESIDENTIAL - NOT MASTER METERED

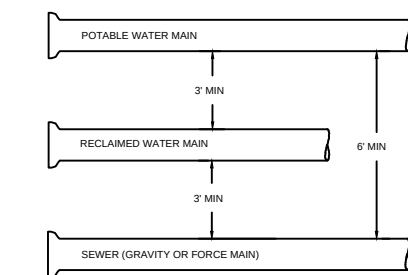


- NOTES:
- 1.) THE REUSE SYSTEM SHALL USE A BROOKS # 1419, THE LID SHALL BE STAMPED "NON-POTABLE" & "DO NOT DRINK" IN BOTH ENGLISH AND SPANISH AND MUST BE LOCKABLE, METER BOX AND LID SHALL BE PURPLE (COLOR PANTONE 522C).
 - 2.) CURB STOP MUST BE LOCATED INSIDE THE METER BOX.
 - 3.) CENTER METER IN BOX.
 - 4.) BLOCK ENDS OF BOX TO PREVENT DIRT FROM ENTERING.
 - 5.) COPPERHEAD TRACING WIRE PART #1230HS #12 AWG SHALL BE USED. IT SHALL BE COLOR CODED TO REFLECT WHAT THE PIPE CARRIES. (PURPLE = REUSE)

7 RESIDENTIAL REUSE METER RESIDENTIAL USE ONLY



OPTIONAL PARALLEL CONFIGURATION (TO PROVIDE UNINTERRUPTED WATER SERVICE FOR BACKFLOW ASSEMBLY, REPAIR & TESTING)

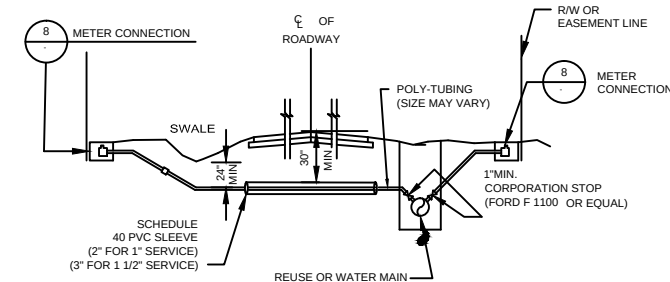


MINIMUM HORIZONTAL SEPARATION DISTANCES (FT)

	WATER MAIN	FORCE MAIN	SANITARY SERVICE	REUSE MAIN	STORM WATER	OTHER UTILITIES (TELEPHONE CABLE, ETC.)
WATER MAIN	3	6	6	3	3	3
FORCE MAIN	6	3	3	3	3	3
SANITARY SEWER	6	3	3	3	3	3
REUSE MAIN	3	3	3	3	3	3
STORM WATER	3	3	3	3	3	3
OTHER UTILITIES	3	3	3	3	3	3

- NOTES:
- 1.) MAXIMUM JOINT DEFLECTION SHALL BE 90% OF MANUFACTURER'S RECOMMENDATION.
 - 2.) WHEREVER POSSIBLE, THE STRATIGRAPHY OF UTILITIES SHALL PLACE SANITARY SEWER AND SEWER FORCE MAINS BELOW RECLAIMED MAINS AND BELOW WATER MAINS, RESPECTIVELY. WHERE WATER MAINS ARE ABOVE GRAVITY SEWERS OR WASTEWATER FORCE MAINS, A VERTICAL CLEARANCE OF 6 INCHES IS ACCEPTABLE.
 - 3.) ACCEPTABLE VARIANCES
 - A. WHERE HORIZONTAL SEPARATION CANNOT BE MAINTAINED, C900 DR14 PVC PIPE SHALL BE USED FOR ONE OF THE PIPELINES.
 - B. WHERE VERTICAL CLEARANCE CANNOT BE MAINTAINED, ONE FULL LENGTH OF DR14 C900 PIPE SHALL BE INSTALLED CENTERED AT THE POINT OF CROSSING.
 - C. WHERE 30" MINIMUM DEPTH OF COVER CANNOT BE MAINTAINED, SPECIAL PROTECTION OR PIPE MATERIAL UPGRADE MAY BE REQUIRED, AT THE DISCRETION OF THE CITY ENGINEER.
 - 4.) NO WATER PIPE SHALL PASS THROUGH, OR COME IN CONTACT WITH ANY PART OF A SANITARY MANHOLE OR STORMWATER STRUCTURE.

5 UTILITY CONFLICT DETAILS

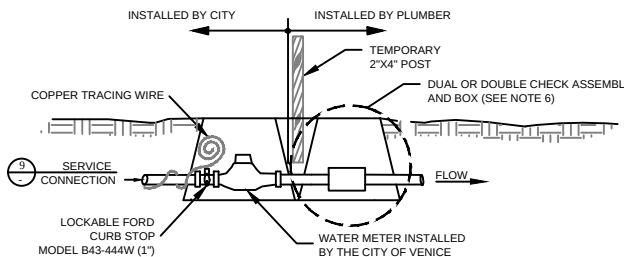


- NOTES:
- 1.) TAPS SHALL NOT BE CLOSER THAN TWO FEET APART OR WITHIN TWO FEET OF ANY JOINT.
 - 2.) TAPS IN MULTIPLE GROUPS SHALL NOT BE MADE IN THE SAME LONGITUDINAL LINE OF THE PIPE BUT MUST BE STAGGERED VERTICALLY.
 - 3.) TAPPING SADDLE SHALL BE EPOXY COATED, DUCTILE IRON BODY WITH STAINLESS STEEL BAND(S) AND HARDWARE.
 - 4.) BRASS FITTINGS AND BALL VALVES SHALL BE FORD F1100 OR EQUAL.
 - 5.) ALL SERVICES SHALL BE 1" MIN. FROM THE CORPORATION STOP TO THE CURBSTOP. ALL SERVICES SHALL HAVE COPPER TRACING WIRE.
 - 6.) ALL SLEEVE ENDS SHALL BE SEALED WITH FOAM SEAL.
 - 7.) STEEL INSERT STIFFENERS WILL NOT BE ACCEPTABLE.

9 SERVICE CONNECTIONS

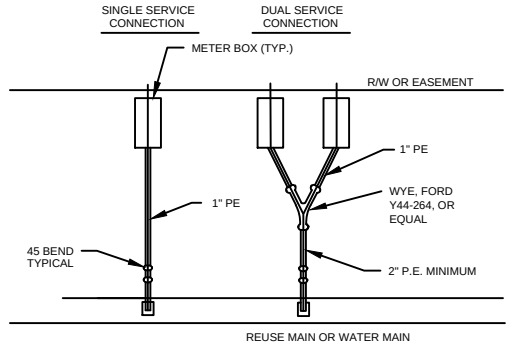
- 1.) A DRILLING BORE LOG SHALL BE SUBMITTED WITHIN SEVEN (7) DAYS OF PERFORMING THE BORE. DEPTHS SHALL BE RECORDED AT A MAXIMUM OF EVERY TEN (10) FEET. RECORD DRAWINGS SHALL INDICATE ELEVATIONS.
- 2.) ALL DBs SHALL BE HIGH-DENSITY POLYETHYLENE (HDPE) WITH DR-11 MINIMUM OR EQUAL.
- 3.) PIPE SHALL BE COLOR-CODED BY THE PIPE MANUFACTURED DURING FABRICATION INDICATING APPROPRIATE SERVICE.
- 4.) AIR RELEASE VALVES SHALL BE INSTALLED ON THE UPSTREAM SIDE OF THE BORE.
- 5.) WELDED MJ ADAPTERS ARE REQUIRED AT BOTH ENDS OF THE BORE. STEEL INSERT STIFFENERS WILL NOT BE ACCEPTABLE.
- 6.) TRACE WIRES REQUIRED. SECURE TO PIPE PRIOR TO PULLING.
- 7.) ISOLATION VALVE SHALL BE INSTALLED ON BOTH SIDES OF DIRECTIONAL BORE.
- 8.) DIRECTIONAL BORING MUST BE COMPLETED BETWEEN THE HOURS OF 8:00 A.M. AND 3:00 P.M.
- 9.) ALL D.B.'S CROSSING A DITCH/SWALE MUST BE AT LEAST 36" BELOW ACTUAL/DESIGN BOTTOM OF CONVEYANCE.

10 DIRECTIONAL BORING (DB)



- NOTES:
- 1.) THE POTABLE WATER SYSTEM SHALL USE A BROOKS MODEL# 1220 BLACK PLASTIC METER BOX WITH METAL READER AND BLACK SOLID RODS.
 - 2.) CENTER METER IN BOX.
 - 3.) BLOCK ENDS OF BOX TO PREVENT DIRT FROM ENTERING.
 - 4.) COPPERHEAD TRACING WIRE PART #1230HS #12 AWG SHALL BE USED AND COLOR CODED TO REFLECT WHAT THE PIPE CARRIES (BLUE = WATER).
 - 5.) CURB STOP MUST BE LOCATED IN BOX.
 - 6.) DUEL OR DOUBLE CHECK ASSEMBLY, WHEN REQUIRED BY THE CITY OF VENICE UTILITIES DEPARTMENT'S MOST CURRENT CROSS-CONNECTION CONTROL PROGRAM, SHALL BE INSTALLED BY A PLUMBER IN A SEPARATE BOX IMMEDIATELY AFTER THE WATER METER BOX.

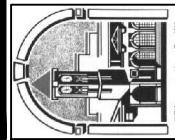
6 RESIDENTIAL WATER METER RESIDENTIAL USE ONLY



8 METER CONNECTION RESIDENTIAL USE ONLY

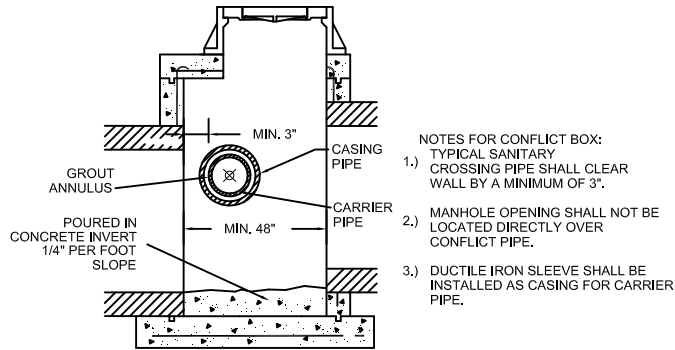
2013 STANDARD DETAILS WATER, SEWER AND REUSE DETAILS

CITY OF VENICE
ENGINEERING DEPARTMENT
401 WEST VENICE AVE.
VENICE FL 34285
(941) 486-2626
FAX (941) 480-3031



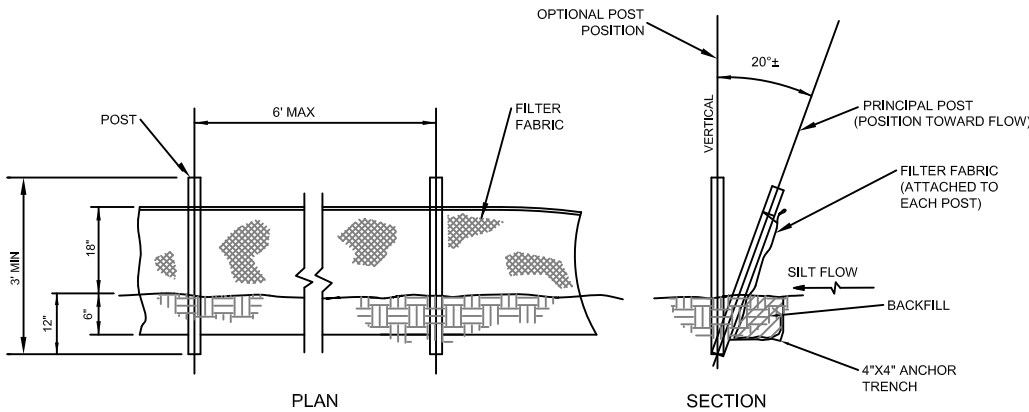
- 1.) ALL STORMWATER STRUCTURES SHALL BE BEDDED ON 6" MIN. COMPACTED GRAVEL OR CRUSHED STONE.
- 2.) STORMWATER PIPES INSTALLED BELOW THE WATER TABLE, WITHIN WET CONDITIONS WILL REQUIRE 6" MIN. COMPACTED GRAVEL OR CRUSHED STONE BEDDING.
- 3.) ALL STORMWATER PIPES AND STRUCTURES WITHIN PUBLIC TRAFFICABLE AREAS SHALL BE REINFORCED CONCRETE UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.
- 4.) STORMWATER PIPES WITHIN PRIVATE PROPERTY MAY BE SMOOTH WALLED HDPE OR A-2000 PVC WITH WATERTIGHT CONNECTIONS AND SUFFICIENT COVER AS CALCULATED BY THE EOR. ROOF DRAINAGE PIPE MAY BE C900 DR-25 PVC WHITE COLOR OR BLUE COLOR WITH WHITE TAPE.
- 5.) NO LIFTING HOLES OR OTHER SIMILAR PENETRATIONS OF STORMWATER PIPING PERMITTED. ALL PIPING JOINTS SHALL BE WRAPPED WITH A MIRAFI FILTER FABRIC OR EQUAL.
- 6.) ALL PIPE JOINTS WILL BE GASKETED ACCORDING TO THE MANUFACTURER, FDOT AND ASTM STANDARDS TO PROVIDE A LEAK PROOF CONNECTION.
- 7.) ALL PRE-CAST STRUCTURES SHALL MEET FDOT AND ASTM C-478 STANDARDS.
- 8.) INLET GRATINGS IN AREAS ACCESSIBLE TO BICYCLE OR TO PEDESTRIAN USE MUST BE RETICULINE OR OF SIMILAR MANUFACTURE.
- 9.) INLET GRATINGS IN CORROSIVE AREAS SHALL BE GALVANIZED.
- 10.) STORMWATER INLETS SHOULD BE DESIGNED TO REJECT DEBRIS, TRASH, AND OTHER POLLUTANTS FROM ENTERING INTO PUBLIC STORMWATER CONVEYANCES.
- 11.) OUTFALLS INTO THE SURFACE WATERS SHOULD BE DESIGNED WITH DEVICES TO REDUCE THE DISCHARGE OF FOREIGN MATERIALS.

1
-
STORMWATER GENERAL NOTES



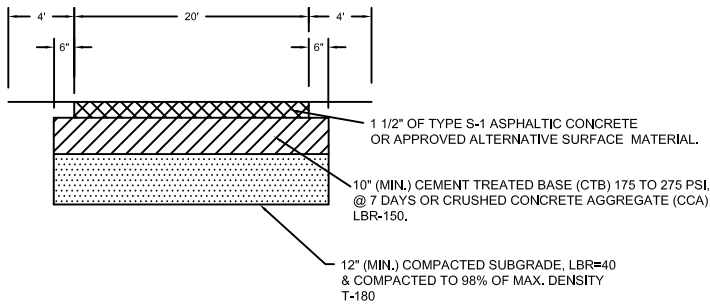
CONFLICT BOX SECTION VIEW

4
-
STORM SEWER CONFLICT MANHOLE



STEEL 1.33 LBS/FT MIN.) POST OPTIONS:
WOOD 2"x4" OR 2 1/2" DIA.

5
-
SILT FENCE
(FDOT INDEX No. 102)



- 1.) ACCESS ROADS SHALL HAVE AN UNOBSTRUCTED WIDTH OF NOT LESS THAN 20' AND AN UNOBSTRUCTED VERTICAL CLEARANCE OF NOT LESS THAN 13'6"
- 2.) ACCESS ROADS SHALL BE DESIGNED AND MAINTAINED TO SUPPORT THE IMPOSED LOADS OF FIRE APPARATUS AND SHALL BE PROVIDED WITH A SURFACE SUITABLE FOR ALL WEATHER DRIVING CAPABILITIES.
- 3.) REQUIREMENTS MAY BE SUBJECT TO CHANGE AS PER UNIFORM FIRE CODE, FLORIDA LATEST EDITION.
- 4.) FIRE LANE SIGNS THAT COMPLY WITH THE REQUIREMENTS OF THE FLORIDA FIRE PREVENTION CODE MUST BE INSTALLED. THE REQUIREMENTS FOR THE SIGNS ARE:

-THE SIGNAGE FOR REQUIRED EMERGENCY ACCESS SHALL BE MARKED WITH FREESTANDING SIGNS WITH THE WORDING:

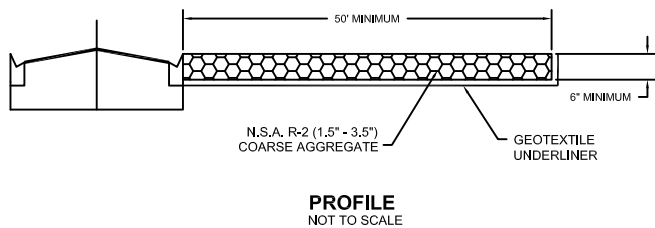
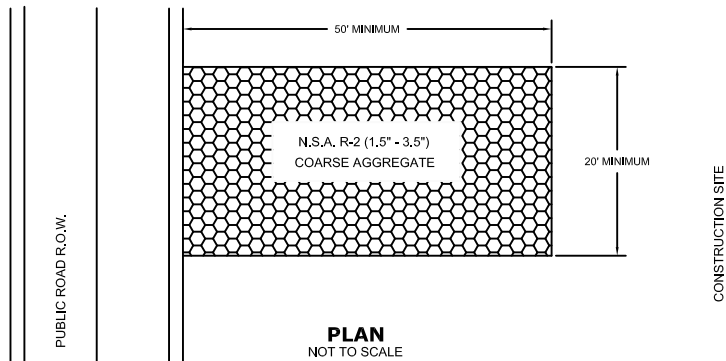
NO PARKING
FIRE LANE
TOW AWAY ZONE
F.S.316-1945

-SUCH SIGNS SHALL BE 12 INCHES BY 18 INCHES WITH A WHITE BACKGROUND AND RED LETTERS AND SHALL BE A MAXIMUM OF 7 FEET IN HEIGHT FROM THE ROADWAY TO THE BOTTOM PART OF THE SIGN.

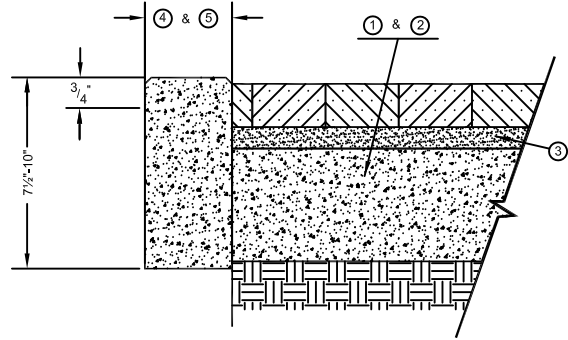
-THE SIGNS SHALL BE WITHIN SIGHT OF THE TRAFFIC FLOW AND BE A MAXIMUM OF 60 FEET APART.

- 5.) IT IS IMPERATIVE THAT THIS EMERGENCY ACCESS REMAINS OPEN AT ALL TIMES. IT IS THEREFORE INCUMBENT UPON YOUR STAFF TO NOTIFY THE VENICE POLICE DEPARTMENT ANYTIME A VEHICLE IS BLOCKING THIS REQUIRED EMERGENCY ACCESS.

2
-
EMERGENCY VEHICLE ACCESS DETAIL



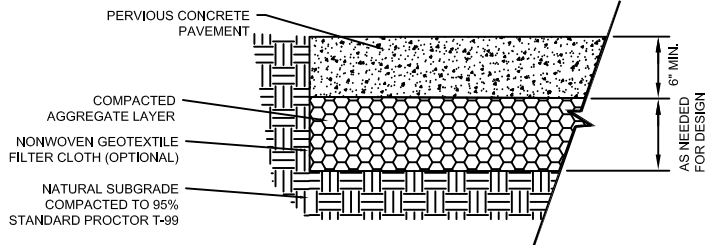
6
-
CRUSHED STONE CONSTRUCTION EXIT



NOT TO SCALE

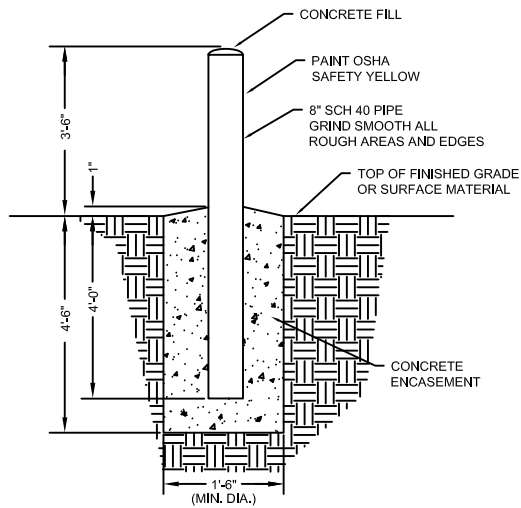
- 1.) 4" POURED CONCRETE 3,000 P.S.I. @ 28 DAYS OR COMPACTED CCA BASE FOR SIDEWALK.
- 2.) 6" POURED CONCRETE 3,000 P.S.I. @ 28 DAYS OR COMPACTED CCA BASE FOR DRIVEWAY.
- 3.) 1" MIN. TO 1 1/2" MAX. SAND BEDDING.
- 4.) 6" POURED CONCRETE BOND BAND SHALL BE INSTALLED WHERE CURB IS NOT PRESENT WITH 3/4" REVEAL AT EDGE OF TRAVEL WAY.
- 5.) 6" POURED CONCRETE BOND BAND SHALL BE INSTALLED ON ALL OUTSIDE EDGES WHERE NO EXISTING OR NEW SOLID STRUCTURE IS PRESENT TO HOLD PAVERS IN PLACE.
- 6.) ALL PAVERS WITHIN TRAFFIC AREAS MUST BE TRAFFIC BEARING.
- 7.) A RIGHT OF WAY USE PERMIT AND AN APPROVED LICENSE AGREEMENT MUST BE OBTAINED IF PAVERS ARE TO BE INSTALLED IN RIGHT OF WAY.
- 8.) PAVES INSTALLATION SPECIFICATIONS APPLY TO PUBLIC AND PRIVATE IMPROVEMENTS EXCEPT FOR NON-TRAFFIC BEARING SIDEWALKS CONSTRUCTED ENTIRELY ON PRIVATE PROPERTY.

3
-
PAVER INSTALLATION GUIDELINES



- 1.) FOR USE IN PARKING AREAS AND LOW VOLUME ACCESSWAYS ONLY.
- 2.) ENGINEER OF RECORD SHALL SUBMIT PERVIOUS PAVEMENT DESIGN AND SPECIFICATIONS BASED ON THE SITE SPECIFIC SOIL CONDITIONS, STORMWATER STORAGE REQUIREMENTS AND THE ANTICIPATED TRAFFIC LOADINGS.
- 3.) PERVIOUS CONTRACTORS SHALL BE NRMCA CERTIFIED CRAFTSMEN.
- 4.) PERVIOUS PRODUCER/SUPPLIERS AND TESTING FIRMS SHALL USE NRMCA CERTIFIED TECHNICIANS.
- 5.) POROUS ASPHALT MAY BE USED AS AN ALTERNATIVE MATERIAL AS DESIGNED BY THE EOR.

7
-
PERVIOUS PAVEMENT TYPICAL SECTION



NOT TO SCALE

- 1.) REMOVABLE BOLLARDS SHALL BE PERMITTED IN APPROPRIATE AREAS AS APPROVED BY THE CITY ENGINEER.

8
-
BOLLARD DETAIL

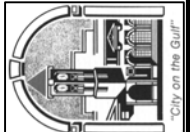
DATE:	BY	REVISION
1/15/2013	MG	2008 UPDATE
JRC	MG	2009 UPDATE
CHECKED BY:	MG	2010 UPDATE
K.W.	MG	2011 UPDATE
SCALE:	MT	2012 UPDATE
AS SHOWN	JC	2013 UPDATE

No.	Date	Revision
1	1/15/2008	2008 UPDATE
2	1/15/2009	2009 UPDATE
3	1/15/2010	2010 UPDATE
4	1/15/2011	2011 UPDATE
5	1/15/2012	2012 UPDATE
6	1/15/2013	2013 UPDATE

2013 STANDARD DETAILS
MISCELLANEOUS DETAILS

CITY OF VENICE
ENGINEERING DEPARTMENT

401 WEST VENICE AVE.
VENICE FL 34285
(941) 436-2626
FAX (941) 480-3031



APPENDIX

REQUIRED FORMS LIST

Each respondent shall return the required information forms as attached:

- o Bid Submittal Form
- o Proposal Bond
- o Local Preference Form
- o Qualifications Statement
- o Co-operative Procurement with Other Jurisdictions
- o Form 3A- Interest in Competitive Bid for Public Business
- o Indemnification/Hold Harmless
- o FDEP & U.S. EPA Construction Notices of Intent (NOI)
- o Statement of References for Contractor
- o Contractor's Statement of Sub-contractors
- o Drug Free Workplace Certification
- o Non-Collusive Affidavit
- o Public Entity Crime Information
- o Statement of "No Bid" (if applicable)

All required forms are included in this package. All forms must be filled out and returned with the firm's proposal.

Failure to do so will result in the firm being considered non-responsive and their proposal will be disallowed.

BID ITEM	DESCRIPTION	UNIT	QTY	UNIT PRICE	TOTAL AMOUNT
PHASE 5					
1	MOBILIZATION/DEMOBILIZATION	LS	1	\$	\$
2	PRE-CONSTRUCTION VIDEO	LS	1	\$	\$
3A	REPLACEMENT OF VALVE C00-0302 (8-INCH)	EA	1	\$	\$
3B	REPLACEMENT OF VALVE C00-0304 (6-INCH)	EA	1	\$	\$
3C	REPLACEMENT OF VALVE C00-0307 (6-INCH)	EA	1	\$	\$
3D	REPLACEMENT OF VALVE C00-0306 (6-INCH)	EA	1	\$	\$
3E	REPLACEMENT OF VALVE S01-0323 (6-INCH)	EA	1	\$	\$
3F	REPLACEMENT OF VALVE C00-0312 (4-INCH)	EA	1	\$	\$
3G	REPLACEMENT OF VALVE S01-0321 (4-INCH)	EA	1	\$	\$
3H	REPLACEMENT OF VALVE S01-0322 (4-INCH)	EA	1	\$	\$
3I	REPLACEMENT OF VALVE S01-0335 (6-INCH)	EA	1	\$	\$
3J	REPLACEMENT OF VALVE S01-0330 (6-INCH)	EA	1	\$	\$
3K	REPLACEMENT OF VALVE S01-0325 (4-INCH)	EA	1	\$	\$
3L	REPLACEMENT OF VALVE S01-0304 (6-INCH)	EA	1	\$	\$
3M	REPLACEMENT OF VALVE S01-0334 (6-INCH)	EA	1	\$	\$
3N	REPLACEMENT OF VALVE N01-0201 (4-INCH)	EA	1	\$	\$
4	OWNER'S ALLOWANCE	LS	1		\$10,000.00
TOTAL BASE BID PRICE		\$			
TOTAL BASE BID PRICE (WRITTEN IN WORDS)					

(SEAL)

THIS BID MADE BY AND ON BEHALF OF:

Company: _____

Address: _____

Fax #: _____

Email Address: _____

BY: _____

Authorized Signature

PRINT: _____

TITLE: _____

PROPOSAL BOND

****Not to be completed if a certified check is submitted.***

KNOW ALL MEN BY THESE PRESENTS: That we, the undersigned,

_____ as Principal,

and _____ as Surety

are held and firmly bound unto the City of Venice, Florida, in the sum of

_____ \$_____, for the payment of which, well and truly to be made, we hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors and assigns.

The condition of the above obligation is such that if the attached Proposal of Principal and Surety for work specified as:

all as stipulated in said Proposal, by doing all work incidental thereto, in accordance with the plans and specifications provided heretofore, all within Sarasota County, is accepted and the bidder shall within ten (10) days after notice of said award, enter into a contract, in writing, and furnish the required Performance Bond with surety or sureties to be approved by the Director of Finance, this obligation shall be void; otherwise the same shall be in full force and virtue by law and the full amount of this Proposal Bond will be paid to the City as stipulated or liquidated damages.

Signed this _____ day of _____, 2013.

Principal

Surety

Principal must indicate whether corporation, partnership, company, or individual.

The person signing shall, in his own handwriting, sign the Principal's name, his own name, and his title. The person signing for a corporation must, by affidavit, show his authority to bind the corporation.

HOW DO I DETERMINE “LOCAL PREFERENCE”

The following questions will help you determine local preference for your company.
Please answer questions 1 through 4 **FIRST**. If you answer **NO** to any questions 1 through 4, local preference does **NOT** apply.
ONLY if you answer **YES** to questions 1 through 4, may you proceed to question 5.
If you answer **YES** to any questions 5 through 7, local preference applies.
If you are unsure of how to answer any questions, please contact the City of Venice’s Procurement- Finance Department at 941-486-2626.

Questions 1 – 4

1. Have you paid a local business tax either to Sarasota, DeSoto or Charlotte County (Manatee County does not have a local business tax) authorizing your company to provide goods or services described in this solicitation ?

YES ____ If “yes”, proceed to question 2.

NO ____ If “no”, **STOP, local preference does not apply.**

* If the name on the local business tax receipt is not the same as the name on the bid/solicitation submittal, local preference does not apply.

2. Does your company maintain a permanent physical business address located within the limits of Sarasota, Manatee, DeSoto or Charlotte County ?

YES ____ If “yes”, proceed to question 3.

NO ____ If “no”, **STOP, local preference does not apply.**

3. Does your local business office (identified in question 2) have a least one full time employee ?

YES ____ If “yes”, proceed to question 4.

NO ____ If “no”, **STOP, local preference does not apply.**

4. Do at least fifty percent (50%) of your company employees who are based in the local business location (identified in question 2) reside within Sarasota, Manatee, DeSoto or Charlotte County ?

YES ____ If “yes”, proceed to question 5.

NO ____ If no, **STOP, local preference does not apply.**

Questions 5 – 7

5. Is your local business office (identified in question 2) the primary location (headquarters) of your company ?

YES ____ If “yes”, **STOP, local preference applies.**

NO ____ If “no”, proceed to question 6.

6. If the local business office (identified in question 2) is not the primary location of your company, are at least ten percent (10%) of your company’s entire full-time employees based at the local office location ?

YES ☐ If “yes”, STOP, local preference applies

NO ☐ If “no”, proceed to question 7

7. If your local business office is not the primary location of your company, does at least one corporate officer, managing partner or principal owner of the company reside in Sarasota, Manatee, DeSoto or Charlotte County ?

YES ☐ If “yes”, STOP, local preference applies

NO ☐ If “no”, local preference does not apply.

QUALIFICATIONS STATEMENT

The undersigned certifies under oath the truth and correctness of all statements and all answers to questions made hereinafter:

SUBMITTED TO:

CITY OF VENICE
Procurement- Finance Department
401 W. Venice Avenue
Venice, Florida 34285

CHECK ONE:

- ☐ Corporation
☐ Partnership
☐ Individual
☐ Joint Venture
☐ Other

SUBMITTED BY:

NAME: _____
ADDRESS: _____
PRINCIPLE OFFICE: _____

State the true, exact, correct and complete legal name of the partnership, corporation, trade or fictitious name under which you do business and the address of the place of business.

The correct name of the Offeror is: _____

The address of the principal place of business is: _____

If the Offeror is a corporation, answer the following:

- a. Date of Incorporation: _____
- b. State of Incorporation: _____
- c. President's Name: _____
- d. Vice President's Name: _____
- e. Secretary's Name: _____
- f. Treasurer's Name: _____
- g. Name and address of Resident Agent: _____

If Offeror is an individual or partnership, answer the following:

- a. Date of Organization: _____
- b. Name, address and ownership units of all partners:

- c. State whether general or limited partnership: _____

If Offeror is other than an individual, corporation partnership, describe the organization and give the name and address of principals:

If Offeror is operating under fictitious name, submit evidence of compliance with the Florida Fictitious Name Statute.

How many years has your organization been in business under its present business name?

a. Under what other former names has your organization operated?

ACKNOWLEDGEMENT

State of _____

County of _____

} SS.
}

On this the _____ day of _____, 2013, before me, the undersigned Notary Public of the State of _____, personally appeared _____ and (Name(s) of individual(s) who appeared before notary) whose name(s) is/are Subscribed to the within instrument, and he/she/they acknowledge that he/she/they executed it.

NOTARY PUBLIC
SEAL OF OFFICE:

NOTARY PUBLIC, STATE OF _____

(Name of Notary Public: Print, stamp, or type as commissioned)

☐ Personally known to me, or ☐ Produced Identification: _____ ☐ **DID** take an oath, or ☐ **DID NOT** take an oath

COOPERATIVE PROCUREMENT WITH OTHER JURISDICTIONS

The vendor, by submitting a bid, authorizes other Public Agencies to "Piggy-Back" or purchase equipment or services being proposed in this invitation to bid at prices bid unless otherwise noted on the proposal sheet.

Yes _____ No _____

AUTHORIZED SIGNATURE

By submission of the ITB, the undersigned certifies that:

1. He/She has not paid or agreed to pay any fee or commission, or any other thing of value contingent upon the award of this contract, to any City of Venice, Florida employee or official or to any current consultant to the City of Venice, Florida;
2. He/She has not paid or agreed to pay any fee or commission or any other thing of value contingent upon the award of this contract to any broker or agent or any other person;
3. The prices contained in this proposal have been arrived at independently and without collusion, consultation, communication or agreement intended to restrict competition.
4. He/She has the full authority of the Offeror or to execute the proposal and to execute any resulting contract awarded as the result of, or on the basis of, the proposal.

Authorized Representative: _____

Signature: _____

Title: _____

Company Name: _____

Address: _____

City, State, ZIP: _____

Telephone Number: _____

Fax Number: _____

E-mail address: _____

FORM 3A INTEREST IN COMPETITIVE BID FOR PUBLIC BUSINESS

LAST NAME — FIRST NAME — MIDDLE INITIAL			OFFICE / POSITION HELD
MAILING ADDRESS			AGENCY
CITY	ZIP	COUNTY	ADDRESS OF AGENCY

WHO MUST FILE THIS STATEMENT

Sections 112.313(3) and 112.313(7), Florida Statutes, prohibit certain business relationships on the part of public officers and employees, their spouses, and their children. See Part III, Chapter 112, Florida Statutes, and/or the brochure entitled "A Guide to the Sunshine Amendment and Code of Ethics for Public Officers and Employees" for more details on these prohibitions. However, Section 112.313(12), Florida Statutes, provides certain limited exemptions to the above-referenced prohibitions, including one where the business is awarded under a system of sealed, competitive bidding; the public official has exerted no influence on bid negotiations or specifications; AND where disclosure is made, prior to or at the time of the submission of the bid, of the official's or his spouse's or child's interest and the nature of the intended business. This form has been promulgated by the Commission on Ethics for such disclosure, *if and when applicable* to a public officer or employee.

INTEREST IN COMPETITIVE BID FOR PUBLIC BUSINESS (Required by § 112.313(12)(b), Fla. Stat.)

1. The competitive bid to which this statement applies has been / will be (strike one) submitted to the following government agency:		
2. The person submitting the bid is:	NAME ▼	POSITION ▼
3. The business entity with which the person submitting the bid is associated is:		
4. My relationship to the person or business entity submitting the bid is as follows:		
5. The nature of the business intended to be transacted in the event that this bid is awarded is as follows:		
a. The realty, goods, and / or services to be supplied specifically include: _____ _____		
b. The realty, goods, and / or services will be supplied for the following period of time: _____		
c. Will the contract be subject to renewal without further competitive bidding? ☐ Yes ☐ No. If so, how often?		
6. Additional comments:		
7. SIGNATURE	DATE SIGNED	DATE FILED

FILING INSTRUCTIONS

If you are a state officer or employee required to disclose the information above, please file this form with the Department of State in Room 316, R.A. Gray Building, 500 South Bronough Street, Tallahassee, Florida 32399-0250. If you are an officer or employee of a political subdivision of this state and are subject to this disclosure, please file the statement with the Supervisor of Elections of the county in which the agency in which you are serving has its principal office.

NOTICE: UNDER PROVISIONS OF FLORIDA STATUTES §112.317, A FAILURE TO MAKE ANY REQUIRED DISCLOSURE CONSTITUTES GROUNDS FOR AND MAY BE PUNISHED BY ONE OR MORE OF THE FOLLOWING: IMPEACHMENT, REMOVAL OR SUSPENSION FROM OFFICE OR EMPLOYMENT, DEMOTION, REDUCTION IN SALARY, REPRIMAND, OR A CIVIL PENALTY NOT TO EXCEED \$10,000.

CE FORM 3A — REV. 1-95

INDEMNIFICATION/HOLD HARMLESS

The elected firm shall (if required by City) defend, indemnify and hold the City, the City's representatives or agents, and the officers, directors, agents, employees, and assigns of each harmless for and against any and all claims, demands, suits, judgments, damages to persons or property, injuries, losses or expenses of any nature whatsoever (including attorneys' fees at trial at appellate level) arising directly or indirectly from or out of any negligent act or omission of the elected firm, its Sub-Offerrors and their officers, directors, agents or employees; any failure of the elected firm to perform its services hereunder in accordance with generally accepted professional standards; any material breach of the elected firm's representations as set forth in the proposal or any other failure of the elected firm to comply with the obligations on its part to be performed under this contract.

Concur _____

Variance _____

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

_____ located at City

_____, State _____, Zip Code _____ Phone:

_____ Fax: _____. Having read and

understood the contents above, hereby submit accordingly as of this Date,

_____, 2013.

Please Print Name

Signature

This signed document shall remain in effect for a period of one (1) year from the date of signature or for _____ the contract period, _____ whichever is _____ longer.

CITY OF VENICE, FLORIDA
FDEP & U.S. EPA CONSTRUCTION NOTICES OF INTENT (NOI)

The undersigned bidder acknowledges the requirement of the U.S. Environmental Protection Agency (EPA) and the Florida Department of Environmental Protection (FDEP) which have published the rules for NPDES General Permits for stormwater discharges from construction sites and said bidder agrees to assist the owner in the preparation of these permits and associated plans. The bidder acknowledges that he has taken these permits and associated construction costs into account in the preparation of his lump sum bid. These permits are mandated under Section 402(p) of the Clean Water Act for "Stormwater Discharge from Construction Activities (including clearing, grading, and excavation activities) that result in the disturbance of five (5) or more acres total land area, including areas that are part of a larger common plan of development or sale." The EPA has published summary guidance for: "Developing Prevention Plans and Best Management Practices" (EPA 833-R-92-001, October 1992).

The EPA permit format is a *Notice of Intent (NOI) for Stormwater Discharges Associated with Construction Activity to be covered under a NPDES Permit*, and it is to be submitted according to the NOI instructions. The Stormwater Pollution Prevention Plan which must accompany the NOI must be signed by authorized representatives of the contractor and subcontractors as well as the facility Owner. Copies of the EPA NOI must be provided to state and local agencies who have issued stormwater management, grading, or land alteration permits or approvals.

An NOI must also be submitted to the Florida Department of Environmental Protection, NPDES Stormwater Notices Center, MS 2510, 2600 Blair Stone Road, Tallahassee, FL 32399. FDEP forms may be downloaded from the State's web site <http://www.dep.state.fl.us/water/stormwater/npdes/> or phone 850-921-9870 if you have questions.

Acceptance of the bid to which this certification and disclosure applies in no way represents the Owner or its Representative has evaluated and thereby determined that the information is adequate to comply with the applicable U.S. EPA or FDEP requirements nor does it in any way relieve the contractor of its sole responsibility to comply with the applicable U.S. EPA and FDEP requirements, including inspection of all control measures at least once each week and following any storm (rainfall) event of 0.5 inches or greater and maintaining reports of each inspection.

Bidder (Company): _____

Name and Title: _____

Address: _____

Telephone: _____

BY SIGNATURE BELOW OF AUTHORIZED REPRESENTATIVE, CONTRACTOR ACKNOWLEDGES RECEIPT OF A COPY OF CITY ORDINANCES 95-12 and 96-09 AND AGREES TO ABIDE BY THE REQUIREMENTS OF SAID ORDINANCES.

Signature: _____ Date: _____
Printed name/title: _____

ORDINANCE 95-12

AN ORDINANCE OF THE CITY OF VENICE, FLORIDA, AMENDING THE CODE OF ORDINANCES BY AMENDING CHAPTER 9, HEALTH AND SANITATION, ARTICLE IV, DISPOSAL OF EXCRETA, SECTION 9-71, DISCHARGE OF RAW SEWAGE INTO STORMWATER; DELETING ARTICLE V, PROHIBITED STORMWATER DISCHARGES; ADDING CHAPTER 19, WATER AND SEWERS, ARTICLE VI, STORMWATER QUALITY; DELETING CHAPTER 15, STREETS AND SIDEWALKS, ARTICLE IV, EXCAVATIONS, SECTION 15-53, STORM DRAINAGE AND POLLUTION; PROVIDING FOR CONFLICT WITH OTHER ORDINANCES; PROVIDING FOR A SEVERABILITY CLAUSE AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, control of stormwater runoff is necessary from individual lots that do not require a permit from the Southwest Florida Water Management District and requiring compliance with the provisions of the Clean Water Act 33 U.S.C.1251 et.seq., as amended by the Water Quality Act of 1987; and

WHEREAS, the City is desirous of complying with its U.S. Environmental Protection Agency National Pollutant Discharge Elimination System Permit and its Stormwater Master Plan, therefore, stormwater runoff and any discharge to the City storm sewer system will be closely monitored and regulated; and

WHEREAS, the control of stormwater runoff is the responsibility of each individual property owner; and

WHEREAS, the City is desirous of controlling stormwater runoff and insuring compliance with the Comprehensive Plan.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF VENICE, FLORIDA:

SECTION 1. Chapter 9, Water and Sewers, Article IV, Disposal of Excreta, Section 9-71, Discharge of Raw Sewage into Storm Sewer, is amended to read as follows:

Sec. 9-71. Discharge of raw sewage into storm sewer.

It shall be unlawful for any person to discharge raw sewage or to discharge the effluent of and from any septic tank into the storm sewer system of the city or to construct or maintain any system of drainage, pipes, conduits or other apparatus whereby raw sewage or the effluent of and from any septic tank shall or may be discharged into or through the storm sewer system of the city.

SECTION 2. Chapter 9, Water and Sewers, Article V, Prohibited Stormwater Discharges, is deleted in its entirety.

SECTION 3. Chapter 19, Water and Sewers, Article VI, Stormwater Quality is added to read as follows:

ARTICLE VI. STORMWATER QUALITY

Sec. 19-141. Definitions.

As used in this article "industrial stormwater" means stormwater runoff from a site with industrial activities, as defined under 40 CFR Section 122.26(a)(14) U.S. Environmental Protection Agency regulation.

As used in this article "construction sites" refers to all sites.

As used in this article, "illicit discharge" is any discharge of anything other than stormwater to the municipal separate storm sewer system (MS4) or the waters of the State of Florida or the United States.

As used in this article "industrial wastewater" refers to liquids used by an entity in their course of business, that if discharged to the MS4, would degrade the quality of stormwater.

Sec. 19-142. Disposal of industrial stormwater discharges.

The following types of discharges to the municipal separate storm sewer of the city must be controlled as indicated.

(1) **Industrial wastewater/illicit discharge:** Industrial wastewater/illicit discharge may not be discharged to the city's municipal separate storm sewer system.

(2) **Industrial stormwater:** As required to comply with NPDES regulations, the quality of industrial stormwater which is discharged through the city's municipal separate storm sewer system may be subject to regulation or permitting, and any violation of such regulation or permit may be subject to an order to immediately cease such

discharge.

Sec. 19-143. Runoff stormwater and Best Management Practice (BMPs) for construction sites.

BMPs shall be implemented as necessary, to insure that all discharges from construction activities are in compliance with the City of Venice EPA/NPDES Stormwater Permit and the Stormwater Master Plan, or the SWFWMD Permit or EPA's NPDES Construction Activity General Permit, whichever is most stringent in its requirements.

Best Management Practices include but are not limited to, the following requirements:

(a) All site grading shall be conducted in such a manner that all stormwater management facilities located adjacent to the site are not altered in any way which will diminish their designated flow or pollutant removal capacity or the shape of the drainage facility.

(b) Maintenance of vegetative buffers or use of a silt fence and/or staked hay bales which minimize erosion and retain sediment on site, shall be implemented prior to any construction activities taking place at sites which discharge to surface water or the municipal separate storm sewer system (MS4). These controls, when utilized, shall be secured and properly maintained during construction activities until the site has been stabilized with sod and/or seed and mulch. A double silt fence may be required as an additional measure to insure that discharges from the site are in compliance with water quality standards as established by the EPA/NPDES Stormwater Permit. Undisturbed vegetative buffers shall be maintained intact to the maximum extent possible to reduce erosion and the discharge of sediment from stormwater runoff. All areas of exposed soil shall be stabilized within 72 hours of attaining final grade.

(c) Storm sewer systems (eg. inlets, pipes and ditches, etc.) adjacent to the site must be protected by a silt fence and/or staked hay bales during construction, to keep solids from entering conveyance systems.

(d) Vehicles such as concrete or dump trucks and other construction equipment shall not be washed at locations where the runoff will flow directly into a lake, wetland, watercourse or stormwater conveyance system. Special areas must be designated for washing vehicles. In all new subdivisions, a wash area may be established by the owner/developer which can be used by the site contractor and home builders. If established, wash areas shall be located where the wash water will spread out and evaporate or infiltrate directly into the ground, or where the runoff can be collected in a temporary holding or seepage basin. Gravel or rock bases are recommended for temporary holding or seepage basins, to minimize mud generation. Underdrains shall be installed where infiltration basins are provided as required by the owner/developer's engineer or the Southwest Florida Water Management District. Upon completion of the project, the wash areas shall be graded and stabilized and any trash or waste shall be collected and disposed of properly.

(e) Fuel, chemicals, cements, solvents, paints, topsoil, or other potential water pollutants shall be stored in areas where they will not cause runoff pollution. Toxic chemicals and materials, such as pesticides, paints, and acids, must be stored in accordance with manufacturer's guidelines. Groundwater resources shall be protected from leaching by placing a plastic mat, packed clay, tar paper, or other impervious material on any areas where toxic liquids are to be opened and stored.

(f) A minimum of one permitted driveway must be established prior to construction and shall be used as the only access for ingress/egress during construction in order to provide minimum disturbance of drainage facilities and vegetative cover on site.

Sec. 19-44. Owner responsibility for stormwater runoff.

(a) The control of stormwater runoff is the responsibility of each individual property owner.

(b) Any property owner constructing or causing to be constructed any building which requires an elevated slab and the elevation of the building pad is higher than that of adjoining properties, will control stormwater runoff during construction. Likewise, any property that is filled more than twelve inches above the adjacent property must provide additional control measures for stormwater during construction. Upon completion of the work, all stormwater runoff shall flow to its natural preconstruction drainage swale, ditch, etc., or be retained in a retention or detention pond(s) designed and constructed for that purpose.

(c) For any construction where the elevation of the building pad or site fill will be higher than adjoining properties, construction plans certified by a professional engineer registered with the State of Florida, retained by the property owner, will be provided to the City prior to issuance of a building permit.

(d) Any single lot not covered under Southwest Florida Water Management District rules, exceeding forty-five percent in impervious coverage (including buildings, drives, sidewalks, patios, etc.) shall require stormwater retention facilities to be designed by a Florida registered engineer. The design is to meet the City of Venice EPA/NPDES Permit requirements for quantity and quality of treatment.

(e) The property owner's engineer will be required to certify to the City Engineer that construction was completed

in accordance with the certified plans, prior to issuance of a Certificate of Occupancy.

(f) All improvements to property affecting stormwater drainage must be done in compliance with the City's Comprehensive Plan.

Sec. 19-145. Illicit discharges.

It shall be unlawful for any person to discharge anything other than stormwater into the city's municipal separate storm sewer system whether such discharges occur through piping connections, runoff, exfiltration, infiltration, seepage, or leaks. No person may maintain, use, or establish any direct or indirect connection to any storm sewer owned by the city that results in any discharge in violation of any provision of federal, state, city, or other law or regulation. This provision is retroactive to January 1, 1995, and applies to connections made prior to the effective date of this provision, regardless of whether made under a permit, or other authorization, or whether permissible under laws or practices applicable or prevailing at the time the connection was made.

No materials other than those composed entirely of stormwater shall be disposed of, dumped, or spilled into the city's municipal separate storm sewer system, whether such materials are in a solid or liquid form.

Sec. 19-146. Inspections.

It shall be the duty of the city engineer or designee to carry out all inspections, surveillance, and monitoring procedures necessary to determine compliance with this article.

SECTION 4. Chapter 15, Streets and Sidewalks, Article IV, Excavations, Section 15-53, Storm Drainage and Pollution, is deleted in its entirety.

SECTION 5. To the extent of any conflict between the provisions of this Ordinance, and any other Ordinance, Resolution, or Agreement of the City of Venice, Florida, the provisions of this Ordinance shall prevail.

SECTION 6. Severability. If for any reason a provision of this Ordinance or the application thereof to any person, group of persons, or circumstances is held invalid, the invalidity shall not effect other provisions or applications of the Ordinance which can be given effect without the invalid provision or application, and to this end the provisions of the Ordinance are severable.

SECTION 7. Effective Date. This Ordinance shall take effect immediately upon its adoption, as required by law.

PASSED BY THE COUNCIL OF THE CITY OF VENICE, FLORIDA, THIS 23RD DAY OF MAY, 1995.

First Reading: May 9, 1995 - Final Reading: May 23, 1995 - ADOPTION: May 23, 1995

ATTEST: /s/LORI STELZER, CMC, CITY CLERK /S/ MERLE L. GRASER, MAYOR

I, LORI STELZER, City Clerk of the City of Venice, Florida, a municipal corporation in Sarasota County, Florida, do hereby certify that the foregoing is a full and complete, true and correct copy of an Ordinance duly adopted by the Venice City Council, at a meeting thereof duly convened and held on the 23rd day of May, 1995, a quorum being present.

WITNESS my hand and the official seal of said City this 24th day of May, 1995.

/S/ LORI STELZER, CMC, CITY CLERK Approved as to form: /S/ ROBERT C. ANDERSON, CITY ATTORNEY

ORDINANCE 96-09

AN ORDINANCE OF THE CITY OF VENICE, FLORIDA, AMENDING THE CODE OF ORDINANCES BY AMENDING CHAPTER 19, WATER AND SEWERS, ARTICLE VI, STORMWATER QUALITY, SECTION 19-141, DEFINITION FOR INDUSTRIAL STORMWATER, SECTION 19-146, INSPECTIONS, PROVIDING FOR CONFLICT WITH OTHER ORDINANCES; PROVIDING FOR A SEVERABILITY CLAUSE AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the City of Venice is responsible for the conservation, management, protection, control, use and enhancement of stormwater within its corporate limits, and for the acquisition, management, maintenance, extension, and improvement of the stormwater systems in the City; and

WHEREAS, the Environmental Protection Agency/National Pollutant Discharge Elimination System (EPA/NPDES) permit requires certain amendments to the existing Ordinance and extension of inspection authority on private properties.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF VENICE, FLORIDA:

SECTION 1. Chapter 19, Water and Sewers, Article VI, Stormwater Quality, Section 19-141, Definition, for Industrial Stormwater is amended to read as follows:

Sec. 19-141. Definitions.

As used in this article, “industrial stormwater” means stormwater runoff from a site with industrial activities, as defined under 40 CFR Section 122.26 (a) (b) (14), U.S. Environmental Protection Agency regulation.

SECTION 2. Chapter 19, Water and Sewers, Article VI, Stormwater Quality, Section 19-146, Inspections, is amended to read as follows:

Sec. 19-146. Inspections.

It shall be the duty of the city engineer or designee to carry out all inspections, surveillance, and monitoring procedures necessary to determine compliance with this article. The city engineer or his duly authorized agents may enter at all reasonable times in or upon any private or public property for the purpose of inspecting and investigating conditions and practices which may be a violation of this ordinance, regulation or permit. The city engineer may, whenever necessary, make an inspection of construction sites to enforce any of the provisions of this ordinance, regulation or permit issued hereunder, or whenever an authorized official has reasonable cause to believe there exists any condition constituting a violation of this ordinance, regulation or permit issued hereunder. The city engineer shall inspect the work and shall require the owner to obtain services to provide adequate on-site inspection. If the city engineer finds that eroded soils are leaving the construction site, the city engineer may direct the owner(s) or his agents or his contractor on the site by written order to install any and all erosion controls that are deemed necessary to prevent said soil erosion from migrating off site. Notwithstanding the existence or pursuit of any other remedy, the City may maintain an action in its own name in any court of competent jurisdiction for an injunction or other process against any person to restrain or prevent violations of this ordinance.

SECTION 3. To the extent of any conflict between the provisions of this Ordinance, and any other Ordinance, Resolution, or Agreement of the City of Venice, Florida, the provisions of this Ordinance shall prevail.

SECTION 4. Severability. If for any reason a provision of this Ordinance or the application thereof to any person, group of persons, or circumstances is held invalid, the invalidity shall not effect other provisions or applications of the Ordinance which can be given effect without the invalid provision or application, and to this end the provisions of the Ordinance are severable.

SECTION 5. Effective Date. This Ordinance shall take effect immediately upon its adoption, as required by law.

PASSED BY THE COUNCIL OF THE CITY OF VENICE, FLORIDA, THIS 26TH DAY OF MARCH, 1996.

First Reading: March 12, 1996 - Final Reading: March 26, 1996 - ADOPTION: March 26, 1996

ATTEST: /s/LORI STELZER, CMC,CITY CLERK /S/ MERLE L. GRASER, MAYOR

I, LORI STELZER, City Clerk of the City of Venice, Florida, a municipal corporation in Sarasota County, Florida, do hereby certify that the foregoing is a full and complete, true and correct copy of an Ordinance duly adopted by the Venice City Council, at a meeting thereof duly convened and held on the 26th day of March, 1996, a quorum being present.

WITNESS my hand and the official seal of said City this 27th day of March, 1996.
/S/ LORI STELZER, CMC, CITY CLERK Approved as to form: /S/ ROBERT C. ANDERSON, CITY ATTORNEY.

STATEMENT OF REFERENCES
FOR CONTRACTOR

NAME OF CONTRACTOR: _____

BUSINESS ADDRESS: _____

How many years have you been engaged in the business under the present firm name? _____

List previous business experience: _____

List at least three construction references:

(1) Person to contact: _____

Company Name: _____

Address: _____

Telephone: _____ Date work performed: _____

(2) Person to contact: _____

Company Name: _____

Address: _____

Telephone: _____ Date work performed: _____

(3) Person to contact: _____

Company Name: _____

Address: _____

Telephone: _____ Date work performed: _____

(4) Person to contact: _____

Company Name: _____

Address: _____

Telephone: _____ Date work performed: _____

**CONTRACTOR'S STATEMENT OF
SUBCONTRACTORS TO BE USED FOR THIS WORK**

NAME OF CONTRACTOR: _____

BUSINESS ADDRESS: _____

CURED-IN-PLACE PIPE INSTALLER (if applicable):

Company Name: _____

Address: _____

Telephone: _____ Phase of Work Sublet: _____

PROPOSED CIPP PRODUCT (if applicable): _____

REQUIRED PRODUCT & INSTALLER COMMERCIALY ACCEPTABLE DOCUMENTATION
ATTACHED: YES _____ NO _____

LIST SUBCONTRACTORS TO BE USED IN THE PROJECT:

(1) Company Name: _____

Address: _____

Telephone: _____ Phase of Work Sublet: _____

(2) Company Name: _____

Address: _____

Telephone: _____ Phase of Work Sublet: _____

(3) Company Name: _____

Address: _____

Telephone: _____ Phase of Work Sublet: _____

(4) Company Name: _____

Address: _____

Telephone: _____ Phase of Work Sublet: _____

DRUG FREE WORKPLACE CERTIFICATION

If identical tie bids exist, preference will be given to the vendor who submits a certification with their bid/proposal certifying they have a drug-free workplace in accordance with Section 287.087, Florida Statutes. The drug-free workplace preference is applied as follows:

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

As the person authorized to sign this statement, I certify that this firm complies fully with the following requirements:

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

Contractor's Name Signature

NON-COLLUSIVE AFFIDAVIT

State of _____

County of _____

}

SS.

_____ being first duly sworn, deposes and says that:

1. He/she is the _____, (Owner, Partner, Officer, Representative or Agent) of _____ the Offeror 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 Offeror nor any of its officers, partners, owners, agents, representatives, employees or parties in interest, including this affiant, have in any way colluded, conspired, connived or agreed, directly or indirectly, with any other Offeror, firm, or person to submit a collusive or sham Proposal in connection with the Work for which the attached Proposal has been submitted; or have in any manner, directly or indirectly sought by agreement or collusion, or have in any manner, directly or indirectly, sought by agreement or collusion, or communication or conference with any Offeror, firm, or person to fix the price or prices in the attached Proposal or of any other Offeror, or to fix any overhead, profit, or cost elements of the Proposal price or the Proposal price of any other Offeror, or to secure through any collusion, conspiracy, connivance, or unlawful agreement any advantage against (Recipient), or any person interested in the proposal Work.

Signed, sealed and delivered
in the presence of:

By: _____

(Printed Name)

(Title)

ACKNOWLEDGEMENT

State of _____

County of _____

On this _____ day of _____, 2013, before me, the undersigned Notary Public of the State of _____, personally appeared _____ and (Name(s) of Individual(s) who appeared before notary) whose name(s) in/are Subscribed to the written instrument, and he/she/they acknowledge that he/she/they executed it.

NOTARY PUBLIC
SEAL OF OFFICE:

NOTARY PUBLIC, STATE OF _____

(Name of Notary Public: Print, stamp, or type as commissioned)

☐ Personally known to me, or ☐ Produced Identification: _____ ☐ DID take an oath, or ☐ DID NOT take an oath

PUBLIC ENTITY CRIME INFORMATION

A person or affiliate who has been placed on the State of Florida's convicted vendor list following a conviction for a public entity crime may not submit a BID/ITB proposal on a contract to provide any goods or services to a public entity, may not submit a response on a contract with a public entity for services in the construction or repair of a public building or public work, may not submit bids on leases of real property to a public entity, may not be awarded or perform work as a Contractor, supplier, Sub-Contractor, or Contractor 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 2876.017, for CATEGORY TWO for a period of 36 months from the date of being placed on the convicted vendor list.**

I, _____, being an authorized representative
of the firm of _____, located at City:
_____ State: _____ Zip: _____, have
read and understand the contents of the Public Entity Crime Information and of this
formal BID/ITB package, hereby submit our proposal accordingly.

Signature: _____

Date: _____

Phone: _____

Fax: _____

Federal ID#: _____

NO BID RESPONSE

IMPORTANT: If you choose not to submit a bid for the attached "Invitation To Bid," please complete and return this form only on/before bid closing date. Failure to respond will result in your company being negatively registered as non-responsive. In the event five (5) "no responses" are posted, you will be automatically dropped from our mailing list for future solicitations for the described product/service.

Thank you for taking this opportunity to help us update and improve the solicitation process.

Bid Open/Close Date: **September 13, 2013 at 2:00 PM**

Bid Number: **2973-13**

Description: **Valve Replacement Program- Phase 5**

Contact: Procurement- Finance Dept.

Please check the appropriate response. We respectfully submit "No bid" for the following reason(s):

- ☐ 1. We are unable to meet the required delivery date
- ☐ 2. We cannot provide a product to meet the required specifications.
- ☐ 3. We no longer provide the requested product.
- ☐ 4. We do not represent the required brand name product.
- ☐ 5. The bid closing date does not allow adequate time to prepare a response.
- ☐ 6. The specifications are too restrictive.
- ☐ 7. We have chosen not to do business with the City
- ☐ 8. Other (feel free to provide our response on your company letterhead.)

Company Name _____ Vendor No. _____

Authorized Signature _____

Print Name _____

Title _____

Date _____ Telephone No. _____

SAMPLE CONTRACT

THIS CONTRACT, pursuant to City Council approval granted on _____, is made and entered into this _____ day of _____, 2013, by and between the CITY OF VENICE, FLORIDA, hereinafter referred to as the City, and _____, of the City of _____, County of _____, and State of _____, hereinafter referred to as the Contractor.

W I T N E S S E T H:

THAT FOR and in consideration of the mutual covenants and obligations hereafter set forth, the parties hereto agree as follows:

(1) The contract documents consist of this contract, standard general conditions, supplemental conditions, special conditions, technical specifications, drawings, bid proposal, payment and performance bonds, all of which are hereby made a part of this agreement.

(2) The Contractor shall perform all the work required by the contract documents for the following described project; and shall include installation of the listed items, per bid specifications:

City Bid # ITB# 2973-13: Valve Replacement Program- Phase 5

(3) The work to be performed under this contract shall be completed within _____ days of the issuance of the Notice To Proceed by the City.

(4) The City shall pay the Contractor for the performance of the work, subject to the terms and conditions of the contract documents and any written change orders, the contract sum of:
Dollars & 00/100.

(5) Time is of the essence in this contract. In the event that the work is not completed within the required time, then from the compensation otherwise to be paid to the Contractor, the City may retain the sum of **Seven-Hundred and Fifty-Eight Dollars (\$ 758.00) per day** for each calendar day that the work remains uncompleted beyond the time limit, which sum shall represent the actual damage which the City will have sustained per day by failure of the Contractor to complete the work within the required time, said sum not being a penalty but being the stipulated damages the City will have sustained in the event of such default by the Contractor.

(6) In connection with the performance of work under this contract, the Contractor agrees not to discriminate against any employee or applicant for employment because of race, sex, religion, color, or national origin. The aforesaid provision shall include, but not be limited to, the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, lay-off or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship. The Contractor agrees to post hereafter in conspicuous places, available for employees or applicants for employment, notices to be provided by the contracting officer setting forth the provisions of the non-discrimination clause. The Contractor further agrees to

insert the foregoing provisions in all contracts hereunder, including contracts or agreements with labor unions and/or workers' representatives, except subcontracts for standard commercial supplies or raw materials.

(7) This contract and the contract documents constitute the entire agreement of the parties and may not be changed or modified, except by a written document signed by both parties hereto. This contract shall be binding upon the successors and assigns of the parties.

IN WITNESS WHEREOF, the parties to the agreement have hereunto set their hands and seals and have executed this agreement, the day and year first above written.

(SEAL)

ATTEST: CITY OF VENICE
IN SARASOTA COUNTY, FLORIDA

CITY CLERK BY: _____

ATTEST: CONTRACTOR

BY: _____

Signed by (typed or printed) Signed by (typed or printed)

SURETY BONDS

At the time of executing the contract documents, the successful proposer shall append to this sheet separate performance and payment bonds each equal to one-hundred percent (100%) of the contract amount. Said bonds become an integral part of these contract documents and shall meet the following requirements:

1. Surety bonds submitted shall be written by a surety company that is approved by the City Finance Director and authorized to do business in the State of Florida, shall be accompanied by evidence of the authority of the issuing agent, and shall be on a form to be approved by the City Attorney. No bond in an amount greater than \$5,000 required by the City Charter, the Ordinances of The City of Venice, or the laws of the State of Florida shall be approved by the City Finance Director unless the surety company executing the bond is listed by the United States Treasury Department as being approved for writing bonds for Federal projects and its current list in an amount not less than the amount of the bond tendered to The City of Venice.

2. Both the separate payment and performance bonds shall be in the general form of AIA documents A311. Additionally, the payment bond shall state as follows:

“This bond is issued in compliance with Section 255.05, Florida Statutes (1994 Supp.), as may be amended. A claimant, except a laborer, who is not in privity with the contractor and who has not received payment for his labor, materials, or supplies shall, within 45 days after beginning to furnish labor, materials, or supplies for the prosecution of the work, furnish the contractor with a notice, that he intends to look to the bond for protection. A claimant who is not in privity with the contractor and who has not received payment for his labor, materials, or supplies shall, within 90 days after performance of the labor or after complete delivery of the materials or supplies, or with respect to rental equipment, within 90 days after the date that the rental equipment was last on the job site available for use, deliver to the contractor and to the surety written notice of the performance of the labor or delivery of the materials or supplies and of the nonpayment. No action for the labor, materials, or supplies may be instituted against the contractor or the surety unless both notices have been given. No action shall be instituted against the contractor or the surety on the payment bond or the payment provisions of a combined payment and performance bond after 1 year from the performance of the labor or completion of delivery of the materials or supplies. A claimant may not waive in advance his right to bring an action under the bond against the surety. In any action brought to enforce a claim against a payment bond under this section, the prevailing party is entitled to recover a reasonable fee for the services of his attorney for trial and appeal or for arbitration, in an amount to be determined by the court, which fee must be taxed as part of his costs, as allowed in equitable actions.”

**GIVE THIS INFORMATION TO YOUR SURETY TO AID IN
PREPARATION OF BONDS**

PUBLIC WORKS PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS:

THAT _____, a _____
Corporation, as Principal, hereinafter called Contractor; and
_____, a corporation of the State
of _____, a surety, hereinafter called Surety, are held and firmly bound unto the
City of Venice as Obligee, hereinafter called the City in the amount of:
_____ Dollars (\$_____) for the payment whereof
Contractor and Surety bind themselves, their heirs, executors, administrators, successors and
assigns, jointly and severally, firmly by these presents.

WHEREAS, Contractor has by written agreement dated the _____ day of
_____, 2013, entered into a Contract with the City for the following described
project:

ITB# 2973-13: Valve Replacement Program- Phase 5

which contract is incorporated by reference herein and made a part hereof, and is hereinafter
referred to as the Contract.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that, if Contractor
shall promptly make payments to all persons supplying Contractor labor, materials and supplies,
used directly or indirectly by the Said Contractor or Subcontractors in the prosecution of the work
provided for in said Contract, then this obligation shall be null and void; otherwise it shall remain
in full force and effect.

PROVIDED FURTHER, that the said Surety for value received hereby stipulates and agrees
that no change, extension of time, alteration or addition to the terms of the Contract or to the work
to be performed thereunder or the Specifications accompanying the same shall in anyway affect its
obligation on this Bond, and it does hereby waive notice of any such change, extension of time,
alteration or addition to the terms of the Contract or to the work or to the Specifications.

PROVIDED FURTHER, that this bond is issued pursuant to Section 255.05, Florida Statutes,
and reference is hereby made to the notice and time limitations in said statute for making claims
against this bond.

PROVIDED FURTHER, that any suit under this bond must be instituted before the expiration
of one (1) year from the performance of the labor or completion of delivery of the materials or
supplies.

PROVIDED FURTHER, no right of action shall accrue on this bond to or for the use of any
person or corporation other than the City named herein and those persons or corporations provided
for the Section 255.05, Florida Statutes, their heirs, executors, administrators, successors or assigns.

Signed and sealed this _____ day of _____, A.D., 2013.

CONTRACTOR

By: _____

IN THE PRESENCE OF:

INSURANCE COMPANY

By: _____
Agent and Attorney-in-Fact

PUBLIC WORKS PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS:

THAT, _____, _____ as Principal, hereinafter called Contractor; and _____, a corporation of the State of _____ as surety, hereinafter called Surety, are held and firmly bound unto the City of Venice as Obligee, hereinafter called the City, in the amount of _____ Dollars (\$_____) for the payment whereof Contractor and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, Contractor has by written agreement dated the _____ day of _____, 2013, entered into a Contract with the City for the following described project:

ITB# 2973-13: Valve Replacement Program- Phase 5

which contract is by reference incorporated herein and made a part hereof, and is hereinafter referred to as the Contract.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that if Contractor shall promptly and faithfully perform Contract during the original term thereof and any extensions thereof which may be granted by the City with or without notice to the Surety and during any guarantee or warranty period, including the obligation to correct any latent defects not discovered until after acceptance of the project by the City, and if he shall satisfy all claims and demands incurred under said Contract and shall fully indemnify and save harmless the City, its agents, Engineer and employees from all losses, damages, expenses, costs and Attorney's Fees, including appellate proceedings which it may suffer by reason of failure to do so, and shall reimburse and repay the City all outlay and expense which the City may incur in making good any default, then this obligation shall be null and void; otherwise it shall remain in full force and effect.

PROVIDED FURTHER, whenever Contractor shall be, and declared by the City to be in default under the Contract, the City having performed its obligations thereunder, the Surety may promptly remedy the default, or shall promptly:

(1) Complete the Contract in accordance with its terms and conditions; or

(2) Obtain a bid or bids for submission to the City for completing the Contract in accordance with its terms and conditions and upon determination by the City and Surety of the lowest responsible bidder, arrange for a contract between such bidder and City and make available as work progresses (even though there should be a default or a succession of defaults under the Contract or Contracts of completion arranged under this paragraph) sufficient funds to pay the cost of completion less the balance of the contract price; but not exceeding, including other costs and damages for which the Surety may be liable hereunder, the amount set forth in the first paragraph hereof. The term "balance of the contract price", as used in this paragraph, shall mean the total amount payable by the City to Contractor under the Contract and any amendments thereto, less the amount properly paid by the City to the Contractor.

PROVIDED FURTHER, the Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract or to the work to be performed thereunder or the contract documents accompanying the same shall in any way affect its obligations on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract or to the work or to the Contract documents.

PROVIDED FURTHER, any suit under this bond must be instituted before the expiration of two (2) years from the date on which final payment under the Contract falls due; except that, when the action involves a latent defect, suit must be instituted within four (4) years from the time the defect is discovered or should have been discovered with the exercise of due diligence.

PROVIDED FURTHER, no right of action shall accrue on this bond to or for the use of any person or corporation other than the City, its successors or assigns.

Signed and sealed this _____ day of _____, A.D., 2013.

IN THE PRESENCE OF:

CONTRACTOR

_____ By: _____

INSURANCE COMPANY

By: _____
Agent and Attorney-in-Fact

CONTRACTOR'S RELEASE OF LIEN

BEFORE ME, the undersigned authority in said County and State, appeared _____, who being first duly sworn, deposes and says that he is _____ of _____ a company and/or corporation authorized to do business under the laws of Florida, which is the contractor on Project known as City of Venice Bid # **2973-13**, located in the City of Venice, County of Sarasota, Florida, under contract with the City of Venice, dated the _____ day of _____, 2012, that the said deponent is duly authorized to make this affidavit by resolution of the Board of Directors of said company and/or corporation; that deponent knows of his own knowledge that said contract has been complied with in every particular by said contractor and that all parts of the work have been approved by the City Engineer; that there are no bills remaining unpaid for labor, material or otherwise, in connection with said contract and work, and that there are no suits pending against the undersigned as contractor or anyone in connection with the work done and materials furnished or otherwise, under said contract.

DEPONENT further says that the final estimate which has been submitted to the City simultaneously with the making of this affidavit, constitutes all claims and demands against the City on account of said contract or otherwise, and that acceptance of the sum specified in said final estimate will operate as a full and final release and discharge of the City from any further claims, demands or compensation by contractor under the above contract.

DEPONENT further agrees that all guarantees under this contract shall start and be in full force from the date of this release as spelled out in the contract documents.

Signature: _____

Printed Name:

STATE OF FLORIDA)
COUNTY OF)

Signed before me this _____ day of _____, 2013,
by _____ who is personally known to me or has produced
_____ as identification.

Notary Public

My Commission Expires:

Commission Number:

WE, the _____, having heretofore executed a performance bond and a payment bond for the above named contractor covering project and section as described above in the sum of (\$ _____) _____ Dollars, hereby agree that the Owner may make full payment of the final estimate, including the retained percentage, to said contractor.

IT IS fully understood that the granting of the right to make the payment of the final

estimate to said contractor and/or his assigns, shall in no way relieve this surety company of its obligations under its bonds, as set forth in the specifications, contract, and bonds pertaining to the above project.

IN WITNESS WHEREOF, the _____ has caused this instrument to be executed on its behalf by its _____, and/or its duly authorized attorney in fact, and its corporate seal to be hereunto affixed, all on this _____ day of _____, A.D., 2013.

Surety Company

Attorney in Fact

Power of Attorney must be attached if executed by Attorney in Fact.

STATE OF)

COUNTY OF)

BEFORE ME, the undersigned authority, appeared _____, who is personally known to me or has produced _____ as identification, and who executed the foregoing instrument in the name of _____ as its _____ and the said _____ acknowledged that he executed said instrument in the name of _____ as its _____ and/or _____, for the purpose therein expressed and that he had due and legal authority to execute the same on behalf of said _____, a corporation.

IN WITNESS WHEREOF, I have hereunto set my hand and official seal at _____ this _____ day of _____, 2013.

Notary Public

My Commission Expires:

CERTIFICATE OF SUBSTANTIAL COMPLETION

PROJECT NO: **ITB# 2973-13**

PROJECT: **Valve Replacement Program- Phase 5**

CONTRACTOR CONTRACT DATE

CONTRACT FOR

Project or Specified Part Shall Include:

DEFINITION OF SUBSTANTIAL COMPLETION

The date of substantial completion of a project or specified part of a project is the date when the work is sufficiently completed, in accordance with the Contract Documents, so that the project or specified part of the project can be utilized for the purpose for which it was intended.

TO: (Contractor)

DATE OF SUBSTANTIAL COMPLETION: _____

The work performed under this contract has been inspected by authorized representatives of the City of Venice and the contractor, and the project or specified part of the project, is hereby declared to be substantially completed on the above date.

A tentative list of items to be completed or corrected is appended hereto. This list may not be exhaustive, and the failure to include an item on it does not alter the responsibility of the contractor to complete all the work in accordance with the contract documents. These items shall be completed by the contractor within _____ days of Substantial Completion.

The date of Substantial Completion is the date upon which all guarantees and warranties begin, except as noted below. The responsibilities between the Owner and the Contractor for maintenance shall be as set forth below.

CITY OF VENICE

By:

Date: _____

The contractor accepts the foregoing Certification of Substantial Completion and agrees to complete and correct the items on the tentative list within the time indicated.

Contractor Authorized Representative

Date: _____

RESPONSIBILITIES:

OWNER:

CONTRACTOR:

EXCEPTIONS AS TO GUARANTEES AND WARRANTIES:

ATTACHMENTS (Identify)