

CITY OF VERO BEACH

**WATER TREATMENT PLANT
INJECTION WELL MECHANICAL INTEGRITY TEST**

BID NO. 060-15/JO

PREPARED BY

PURCHASING DIVISION

COUNCIL MEMBERS

MAYOR – RICHARD WINGER

VICE MAYOR – JAY KRAMER

COUNCIL MEMBERS

AMELIA GRAVES

RANDOLPH B. OLD

PILAR TURNER

CHARTER OFFICERS

CITY MANAGER – JAMES R. O'CONNOR

CITY CLERK - TAMMY K. VOCK

CITY ATTORNEY – WAYNE COMENT

TABLE OF CONTENTS

ARTICLE	PAGE NO.
Invitation to Bid	1 - 2
Instructions to Bidders	
1. General	3
2. Examination of Site and Contract Documents	3
3. Interpretation of the Approximate Quantities	3
4. Interpretations, Inconsistencies and Addenda	3
5. Preparation of Bids	4
6. Bid Pricing	4
7. Time of Completion	4
8. Submission of Bids	5
9. Familiarity with Laws	5
10. Rejection of Bids	5 - 6
11. Withdrawals and Modifications	6
12. Contract Award	6
13. Subletting or Assigning of Contract	6
14. Patent Fees, Royalties and Licenses	6 - 7
15. Payment and Performance Bond	7
16. Liens	7 - 8
17. Financial Statement	8
18. Variances	8
19. Public Entity Crimes	8
20. Local Preference Ordinance	8 - 10
General Conditions	
1. Definition of Terms	11 - 12
2. Schedule of Work	13
3. Extension of Time	13
4. Control, Supervision and Inspection of the Work	13
5. Superintendents	13
6. Subcontractors	14
7. Employees	14
8. Changes in Scope of Work; Extra Work	14
9. Payment for Extra Work	15
10. Omitted Work	15 - 16
11. Termination of Contract	16 - 17
12. Safety; Maintaining the Site	17
13. Risk of Loss	17
14. Suspension of Work	17
15. Clean Up of Site	17

TABLE OF CONTENTS (Continued)

ARTICLE	PAGE NO.
16. Royalties and Patents.....	18
17. Indemnification	18
18. Insurance	18
19. Interpretation of Specifications	19
20. Disputed Work	19
21. No Waiver of Legal Rights	19
22. Defective Work	19 - 20
23. Tools & Equipment	20
24. Testing	21
25. Permits and Fees.....	21
26. Miscellaneous.....	21 - 23
27. Gratuities	23
Supplementary General Conditions	
1. Shop Drawings	24
2. Conflicts	24
3. Coordinating with Other City Projects.....	24
4. Utilities and Structures Relocated, Existing and Others	25
5. Applicable Standards.....	26
6. Security of Work Area	26
7. Quality of Items and Workmanship	26
8. Materials Disposal and Cleanup.....	26
9. Contractor Safety.....	27
10. Miscellaneous.....	27
11. Termination for Convenience.....	27
12. Force Majeure.....	27
13. Qualifications of Bidders.....	28
14. Existing Plans	28
15. Site Usage and Security.....	28 - 29
16. OSHA Compliance.....	29
17. Material Safety Data Sheets	29
18. Drawing Scales.....	29
 Variances	 30
 Identical Tie Bids.....	 31
 Bid Proposal.....	 32
 Bid Schedule	 33 - 34

TABLE OF CONTENTS (Continued)

ARTICLE	PAGE NO.
Questionnaire	35 - 36
Bid Bond	37
Form of Agreement	38 - 42
Payment and Performance Bond.....	43 - 48
Affidavit.....	49
Progress and Final Payment Request By Contractor	50 - 51
Local Business Certification Form	52
Insurance Requirements.....	53 - 54

Attachments:

- General Requirements
- Appendix 'A' Mechanical Integrity Test Plan
- Appendix 'B' Injection Well Record Drawings
- Appendix 'C' FAA Documentation

CITY OF VERO BEACH, FLORIDA

**INVITATION TO BID
BID NO. 060-15/JO**

Sealed Bids will be received by the Manager of Purchasing, 3455 Airport West Drive, Vero Beach, Florida, 32960, until 3:00 p.m., Thursday, February 12, 2015, and subsequently opened in a meeting to be held in the T&D Conference Room for the following:

**WATER TREATMENT PLANT
INJECTION WELL MECHANICAL INTEGRITY TEST
Water & Sewer Department**

Bid Documents may be obtained from DemandStar.com, Inc. at <http://WWW.Demandstar.com>, Telephone No. (800) 711-1712.

All Bids shall be submitted with (1) original and two (2) copies on the Bid Proposal forms provided within the Specifications. A Bid Bond must accompany each Bid and be properly executed by the Bidder and by a qualified Surety, or a certified or cashier's check on any State or National Bank, or an irrevocable letter of credit, in the sum of not less than five percent (5%) of the total amount Bid, made payable to the City of Vero Beach. This Bid Bond will guarantee that the Bidder will not withdraw from the competition after the opening of Bids. In the event the Contract is awarded to the Bidder, said Bidder shall enter into a Contract, under the terms and conditions established herein, with the City and furnish the required Payment and Performance Bonds. Failure to do so will result in forfeiture of said Bid Bond as liquidated damages. The Bid Bond requirements shall be waived if the Bid is in a sum of less than \$25,000.

A Payment and Performance Bond for 125% of the Contract amount on the form provided by the City shall be used for contracts more than \$25,000. This Bond shall be from a Surety authorized to do business in the State of Florida and otherwise meeting the City's bond requirements. In place of the Bonds, an irrevocable letter of credit from a qualified lending institution acceptable to the City for 125% of the Contract amount may be submitted. If the Contract is awarded in a sum less than \$25,000, the Performance and Payment Bond requirement may be waived if permitted by law, in which case the cost of the Bond shall be deducted from the Contract price and only a single, final payment will be made.

All Bidders/Contractors submitting proposals must be authorized to do business in the State of Florida. If said Bidders/Contractors are a corporation, partnership or limited liability company, they must be in continuous good standing, active and current with state of their incorporation or registration and the State of Florida and must keep their active and current status throughout the term of the contract. Any business located within the city limits of Vero Beach must provide a copy of their business occupational license at the time of award.

Bids must be sealed and plainly marked "**BID NO. 060-15/JO WATER TREATMENT PLANT INJECTION WELL MECHCANICAL INTEGRITY TEST** " on the outside of the envelope and addressed as follows:

By Mail:

City of Vero Beach
Manager of Purchasing
P.O. Box 1389
Vero Beach, FL 32961-1389

By Courier:

City of Vero Beach
Manager of Purchasing
3455 Airport West Drive
Vero Beach, FL 32960

The City reserves the right to delay awarding of the Contract for a period of sixty (60) days after Bid Opening, to waive informalities in any Bid, or reject any or all Bids in whole or in part with or without cause and/or to accept the Bid that, in its judgment, will serve the best interest of the City of Vero Beach, Florida. Notwithstanding any clause or statement to the contrary, or in the event of any conflict, inconsistency or need for interpretation concerning any Bid or Bid-related documents, the provisions of Section 2-351, Vero Beach Code concerning Bidding Procedures and this Invitation to Bid shall control in this order.

Issued at Vero Beach, Florida this 29th day of January, 2015.

CITY OF VERO BEACH, FLORIDA

JAMES R. O'CONNOR
CITY MANAGER

CITY OF VERO BEACH, FLORIDA

INSTRUCTIONS TO BIDDERS

1. GENERAL

The following instructions are given for the purpose of guiding Bidders in properly preparing their Bids or proposals. These Instructions and the Invitation to Bid shall be binding on all Bidders, and incorporated into and made part of the Contract.

2. EXAMINATION OF SITE AND CONTRACT DOCUMENTS

The Bidder is required, before submitting his Bid, to visit the Site of the proposed Work and familiarize himself with the nature and the extent of the Work and any surface and subsurface conditions that may in any manner affect the Work to be done, and the equipment, materials, and labor required, and the cost thereof. The Bidder is also required to examine carefully any and all Contract Documents. Ignorance on the part of the Bidder will in no way relieve him of the obligations and responsibilities assumed under the Contract. No information derived from maps, Drawings, Specifications, or from the City, shall relieve the Contractor from any risk or from fulfilling all terms of the Contract.

3. INTERPRETATION OF THE APPROXIMATE QUANTITIES

The Bidder's attention is called to the fact that any of the quantities of Work shown on the Bid Schedule are approximate only and not guaranteed. For each unit of Work contained in the Bid Schedule, the City has the right to require greater or fewer units of Work to be performed than the quantities listed.

4. INTERPRETATIONS, INCONSISTENCIES AND ADDENDA

The Bidder must request interpretations or clarifications regarding the Contract Documents and any Specifications received prior to Bid Opening, in writing from the Manager of Purchasing. To be considered, such request must be received at least four (4) days prior to Bid Opening. The Manager of Purchasing will notify all prospective Bidders of any and all interpretations and supplemental instructions. These notices shall be in the form of written Addenda. The failure of any Bidder to receive any such Addenda shall not relieve the Bidder from the obligation to comply with the terms of the Addenda in addition to all other Contract Documents, should the Bidder submit a Bid and become the Contract Awardee. All Addenda so issued shall become a part of the Contract Documents. The City shall not be bound by any oral interpretations or clarifications.

By Mail:
City of Vero Beach
Manager of Purchasing
P.O. Box 1389
Vero Beach, FL 32961-1389

Telephone: (772) 978-5470

By Courier:
City of Vero Beach
Manager of Purchasing
3455 Airport West Drive
Vero Beach, FL 32960

E-mail: purchase@covb.org

5. PREPARATION OF BIDS

All Bids shall include the Bid Proposal and such other forms and statements, such as the Questionnaire, and Bid Bond as are herein provided or otherwise required. The Bid Schedule must have all blank spaces filled in with a price for each lump sum item and for every item for which a quantity is given. All Bids must be typed or in ink and submitted in duplicate.

One Bid from any individual, partnership, or corporation, under the same or different names, will be considered. Should it appear to the City that any individual, partnership, or corporation has an interest in more than one Bid for the Work contemplated, the City shall reject all Bids in which such individual, partnership, or corporation has such interest.

6. BID PRICING

The Bid price shall include the selling and delivering of all materials, equipment, tools, including applicable taxes, necessary or proper for the completion of the Work except as may be otherwise expressly provided for in the Contract Documents. The unit prices shall be construed as including all of Contractor's direct and indirect costs of doing the Work required, including such costs as insurance, obtaining required permits, testing, etc., unless otherwise expressly provided in the Contract Documents.

The Contractor shall familiarize himself with the requirements of the State of Florida pertaining to the exemption from State Sales Tax as it may apply to the City.

The City may consider Bids as nonresponsive if they contain serious omission, unauthorized alterations of form, unauthorized alternate Bids, incomplete or unbalanced Bid pricing (including via escalator clauses), or irregularities of any kind.

7. TIME OF COMPLETION

Time is of the essence. The Bidder shall include in the Bid Schedule the Time of Completion. The Time of Completion shall be stated as the total number of calendar days from and including the Commencement Date through the Completion Date. The City will consider the Time of Completion in evaluating the award of this Bid.

8. SUBMISSION OF BIDS

All Bid proposals must be delivered to the Manager of Purchasing, T&D Facility, 3455 Airport West Drive, Vero Beach, Florida, by the date and time indicated on the Invitation to Bid. Bidders must allow sufficient time for the Manager of Purchasing to time-stamp the sealed Bid by the time indicated in the Invitation to Bid.

All Bid proposals must be sealed in an envelope marked on the outside with Bidder's name, address, Bid number, description, and date.

EXAMPLE: By Mail:

City of Vero Beach
Manager of Purchasing
P.O. Box 1389
Vero Beach, FL 32961-1389

By Courier:

City of Vero Beach
Manager of Purchasing
3455 Airport West Drive
Vero Beach, FL 32960

BID NO. _____
BID DESCRIPTION _____
BID DATE _____

9. FAMILIARITY WITH LAWS

The Bidder is assumed to be familiar with all federal, state and local laws and regulations that may affect the Work. The Contract Documents may describe some of these laws and regulations; however, the Bidder is responsible for knowing and complying with any and all applicable laws and regulations. Ignorance on the part of the Bidder will in no way relieve him from the responsibility of compliance therewith. The Contractor shall comply with all regulatory conditions. The Contractor is specifically advised that work within the project site is subject to conditions imposed by the FAA as a result of proximity to the airport. As part of the construction of the injection well system in 2009, a change to the Airport Layout Plan was proposed and conditionally approved by the FAA to address the drill rig's effect on the flight plans. Applicable documentation relating to this modification is included in Appendix C for informational purposes only. The intent for providing this information is to make the bidder fully aware that FAA restrictions must be met and to inform the bidder of the criteria to comply with FAA regulations when the well was constructed.

10. REJECTION OF BIDS

The City reserves the right to reject any Bid, if the evidence submitted by the Bidder, or if the investigation of such Bidder, fails to satisfy the City that such Bidder is properly qualified to carry out the obligations and to complete the Work contemplated therein. Any or all Proposals will be rejected, if there is reason to believe that collusion exists among the Bidders.

Proposals will be considered irregular and may be rejected, if they show serious omissions, alterations in form, additions not called for, conditions or irregularities of any kind. The City reserves the right to reject any or all Proposals and to waive such technical errors as may be deemed best for the interest of the City.

11. WITHDRAWALS AND MODIFICATIONS

Any Bidder may, without prejudice to himself, withdraw or modify his Proposal at any time prior to Bid Opening, by physically delivering written notice of withdrawal or the written modification in writing to the Manager of Purchasing. All written requests for withdrawal and written modifications must be signed by a person duly authorized to make such withdrawal or modification; and, in case signed by a deputy or subordinate, the principal's proper written authority to such deputy or subordinate must accompany the request for withdrawal or modification.

12. CONTRACT AWARD

The Contract Awardee, if any, shall execute the Contract, furnish good and sufficient bonds as herein required, and provide a certificate of insurance as herein required, within ten (10) days after receiving the Contract for execution. If the Contract Awardee fails to execute the Contract or furnish the bonds within such time, the City may annul the award and award the Contract to another Bidder, or take any other actions as authorized under Chapter 2, Article VIII, Division 2, Section 2-351 of the Vero Beach Code, including the award of the Contract to another Bidder. The new Contract Awardee, if any, shall fulfill every stipulation embraced herein as if he were the original party to whom award was made.

If the Contract Awardee is a corporation, it shall furnish certificates as to its corporate existence and evidence that the officer signing the Contract is authorized to do so on behalf of the corporation, prior to the City's execution of the Contract.

13. SUBLETTING OR ASSIGNING OF CONTRACT

The Contractor shall not sublet, sell, transfer, assign, or otherwise dispose of the Contract or any portion thereof or the Work provided for therein or of any part or all of his right, title or interest therein without the express written consent of the City. Any such attempt without the prior written consent of the City shall be void ab initio and shall allow the City, at its option, to void the Contract.

14. PATENT FEES, ROYALTIES AND LICENSES

If the Contractor requires or desires to use any design, trademark, material or process covered by letters of patent or copyright, the Contractor and his Surety shall indemnify and save harmless the City from any and all claims for infringement by reason of the use of any such patented designs, trademark, material or process in connection with the Work

agreed to be performed under the Contract and shall indemnify the City from any costs, expense or damage which he may be obliged to pay by reason of any infringement at any time during the prosecution of, or after completion of, the Work.

15. PAYMENT AND PERFORMANCE BOND

The Contractor shall furnish the Payment and Performance Bonds required herein, within ten (10) days of the execution of the Contract and before commencement of the Work. The Payment and Performance Bond shall ensure the payment of all of the debts the Contractor incurs under the Contract, for any goods, materials, equipment, services, or labor (other than labor furnished from any employee of the Contractor) provided to or on behalf of the Contractor and shall ensure that the Contractor performs any and all contractual obligations, including with respect to any and all guarantees. The Bond shall continue in effect after completion and acceptance of the Work for the guarantee period provided in the Contract or by law, whichever is longer. Alternatively, the City in its sole discretion may allow the Contractor to terminate the initial Payment and Performance Bond and substitute it, before such termination, with a new Payment and Performance Bond for the guarantee period. In accordance with Florida Statute, Section 255.05(1)(a), when the City requires a Performance Bond, the City must ensure such Bond states:

1. The CONTRACTOR'S (a) NAME, (b) PRINCIPAL BUSINESS ADDRESS, and (c) PHONE NUMBER;
2. The SURETY;
3. The OWNER of the property being improved;
4. The CONTRACTING PUBLIC ENTITY;
5. The assigned CONTRACT NUMBER (by the Contracting Public Entity);
6. A DESCRIPTION OF THE PROJECT sufficient to identify it;
7. If applicable, (a) a PROPERTY DESCRIPTION and (b) STREET ADDRESS of the property being improved; and
8. A GENERAL DESCRIPTION of the IMPROVEMENT(S).

In addition, **prior to permitting work to commence**, the City must ensure:

1. The surety insurer is AUTHORIZED TO DO BUSINESS in the State of Florida;
2. The Contractor RECORDS (in the public records of the county where the improvement(s) is/are located) the Performance Bond; and
3. The Contractor (a) EXECUTES and (b) DELIVERS to the PUBLIC OWNER the Performance Bond to the City.

16. LIENS

Because the Work called for under the Contract is "public Work" under Chapter 255, Florida Statutes, the Contractor shall insert the following Article in all subcontracts hereunder:

"Notice: Claims for labor, materials and supplies cannot be asserted against the City of Vero Beach and are subject to proper prior notice to (Contractor's Name) and to (Contractor's Surety Company Name), Surety, pursuant to Chapter 255 of Florida Statutes. This Article shall be inserted in every sub-Contract hereunder."

17. FINANCIAL STATEMENT

If requested by the City, bidders may be required to provide a summary of their financial statement.

18. VARIANCES

Any variances to the specifications, terms, conditions, or any part of these documents shall be stated on the variance form of this document. No variances by the bidder shall be deemed to be part of the submitted bid unless such variance is listed, contained and referenced on the variance form.

19. PUBLIC ENTITY CRIMES

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

20. LOCAL PREFERENCE ORDINANCE

Section 2-352. Local Preference in Purchasing or Contracting.

A. Definitions.

(1) "Local business" shall mean a business that meets all of the following criteria:

(a) Has had a staffed and fixed office or distribution point, with a verifiable street address, located within Indian River, Martin, or St. Lucie Counties for at least one (1) full calendar year immediately prior to the issuance of the request for competitive bids or request for proposals by the City. Post office boxes shall not be used or considered for the purpose of establishing a physical address; and

(b) Has had, for at least 12 months immediately prior to the date of the advertisement for the particular good or service being solicited, a current "Local Business Tax Receipt" issued by the City of Vero Beach, Indian River, Martin, or St. Lucie Counties, if applicable; and

(c) Holds any license or competency card required by Indian River County, if applicable, and;

(d) If the contract is awarded, will be the person or entity in direct privity of contract with the City of Vero Beach and not as subcontractor, or any lower-tier subcontractor, materialman, or supplier.

(2) "Non-local business" means a bidder that is not a local business, as defined herein.

B. Certification.

Any person or entity claiming to be a local business, as defined herein, and desiring to receive local preference, shall complete and submit, together with all required attachments, a "Local Business Certification Form," in the form provided by the City and contained within the bid package accompanying a public notice/advertisement. Any bidder who fails to complete and submit the "Local Business Certification Form" together with all required attachments with the bid shall not be granted local preference consideration for the purposes of that specific contract award. The Purchasing Division shall determine if a person or entity meets the definition of a "local business."

C. Local preference in purchases by means of formal competitive bid. In connection with any solicitation to which this Ordinance applies, local preference may be given to local businesses in the following manner:

(1) When a qualified and responsive, non-local business submits the lowest price bid (herein, "Apparent Low Bidder"), and the bid submitted by one or more qualified and responsive local businesses is equal to or within five percent (5%) of the price submitted by the Apparent Low Bidder, then the local business with the apparent next-lowest qualified and responsive bid offer (herein, the "Lowest Local Bidder") shall have the opportunity to submit an offer to match the price(s) offered by the Apparent Low Bidder as follows:

(a) The Purchasing Division shall invite, in writing, by e-mail, fax, or certified mail, the Lowest Local Bidder to submit a written matching offer to the Purchasing Division (herein "Invitation");

(b) The Lowest Local Bidder may, but shall not be obligated to, submit a written, faxed or e-mailed matching offer to the Purchasing Department within five (5) business days after receipt of the Invitation;

(c) If the Lowest Local Bidder submits a written offer that matches the bid from the Apparent Low Bidder, such written offer shall be accepted and the Lowest Local Bidder shall be awarded the contract;

(d) If the Lowest Local Bidder submits a written offer that does not match the bid from the Apparent Low Bidder, such written offer shall be rejected; and

(e) Thereupon, the next successive lowest qualified and responsive local bidder, if and only if its bid is less than or within five percent (5%) of the Apparent Low Bidder, will receive the Invitation.

(f) This cycle shall be repeated until there are no remaining local bidders less than or within five percent (5%), then the award shall be made to the Apparent Low Bidder

(g) If the Lowest Local Bidder and successive next lowest local bidders do not respond, decline, or are unable to match the Apparent Low Bidder bid price(s), then the award will be made to the Apparent Low Bidder.

D. Notice.

All solicitations that are subject to this Ordinance shall include the substance of this local preference Ordinance and the "Local Business Certification Form".

E. Exclusions and limitations.

(1) Waiver of local preference.

The application of this Ordinance to a particular purchase or contract of the City of Vero Beach may be waived only prior to bid solicitation/advertisement and with the approval of the City Council.

(2) The provisions of this Ordinance shall not apply where prohibited by federal law or Florida law, or under the conditions of any grant or other funding source.

(3) The provisions of this Ordinance shall not apply to contracts under the Consultants Competitive Negotiation Act (CCNA), Florida Statutes Section 287.055, as CCNA allows consideration of location in the evaluative process.

(4) The provisions of this Ordinance shall not apply to any procurement where the local nature of a business has been addressed through scoring criteria.

(5) The Purchasing Division shall be responsible for developing, implementing, and maintaining administrative procedures in support of this policy.

CITY OF VERO BEACH, FLORIDA

GENERAL CONDITIONS

1. DEFINITION OF TERMS

Where the following terms, or their pronouns, occur herein or in any of the Contract Documents, they shall have the following meanings:

A. Addendum

A modification of the Contract Documents issued in writing by the City prior to the Bid Opening.

B. Bid Opening

The time and place for the opening of Bids, as described in the Invitation to Bid.

C. Change Order

A written order issued by the City to the Contractor directing certain changes, additions, or reduction in the Work.

D. City ("Owner")

City of Vero Beach, P.O. Box 1389, Vero Beach, Florida 32961-1389.

E. Commencement Date

The date on which the Contractor may start the Work, as described in the Notice to Proceed.

F. Completion Date

The date on which all Contract Work, other than guarantee and maintenance Work, is required to be completed.

G. Contract

The written agreement between the City and the Contractor covering the Work to be performed, including all Contract Documents.

H. Contract Documents

All forms and documents comprising the Contract, including Invitation to Bid, Addendum as Required, Instructions to Bidders, General Conditions, Supplementary General Conditions, Sworn Statement, Questionnaire, Drug-Free Workplace Compliance Form, Bid Proposal, Bid Bond, Form of Agreement, Performance and Payment Bond, Affidavit, Final Payment Request by Contractor, and Periodic Estimate for Partial Payment, Technical Specifications, Drawings, and Change Orders.

I. Contractor

The individual, partnership, or corporation who, by executing the Contract, agrees to perform the Work described therein.

J. Drawings

The Drawings and reproductions thereof, prepared by the City, describing the locations, character, dimensions and details of the Work to be done under this Contract, including record and supplemental Drawings and, in addition, all shop Drawings submitted by the Contractor and approved by the Project Manager.

K. Extra Work

Work not included as a unit of Work described in the Bid Schedule and not reasonably related to or incidental to such Work.

L. Notice to Proceed

A written notice issued by the City, designating the Commencement Date, the Time of Completion, and the Completion Date.

M. Site

The area upon or in which the Contractor is to perform the Work and such other areas adjacent thereto as may be designated as such by the City.

N. Specifications

All of the technical requirements and standards of performance applying to the Work as hereinafter detailed, designated by reference (e.g., on Drawings), or which may be stated in an Addendum.

O. Subcontractor

Any individual, partnership, or corporation, other than the Contractor's employees, who Contracts with the Contractor to furnish, or actually furnishes, labor, materials, or equipment, or any combination thereof, in connection with the Work performed under the Contract.

P. Surety

Any person, firm or corporation bound by the Contract bonds with and for the Contractor acceptable performance of the Work and for payment of all debts pertaining thereto.

Q. Time of Completion

The total number of calendar days from and including Commencement Date through the Completion Date.

R. Work

Everything expressly or implied required to be done by the Contractor under this Contract, including furnishing and installing materials, as well as any Extra Work properly authorized by the City.

2. SCHEDULE OF WORK

Prior to beginning Work, the Contractor shall provide the City with a Work schedule setting out in detail his plan for completing the Work by the Completion Date. This Work schedule shall be reviewed by the City, and once approved, shall serve as a guide to the progress of construction and the performance of the Contractor.

3. EXTENSION OF TIME

The Contractor shall not be entitled to any claim for damages for any hindrances or delay from any cause whatsoever, but such hindrance or delay may entitle him to an extension of Contract Time and a recalculation of the Completion Date. Said extension shall be, as determined by the City, sufficient to compensate for the delay, provided it shall have immediate notice from the Contractor, in writing, of the cause and the probable length of the delay.

4. CONTROL, SUPERVISION AND INSPECTION OF THE WORK

- A. The City shall have full control and direction of the Work in all respects. The City shall furnish all Drawings and Specifications necessary to carry out and complete the Work, unless otherwise specified herein, and shall have the right to supervise the Work as the City deems necessary.
- B. The City shall at all times have the right to inspect the Work and the Site. If requested by the City, the Contractor shall uncover any of the Work for inspection and replace same, all at the Contractor's expense. The Contractor shall furnish all reasonable means for obtaining such information as the City may desire, regarding the quality of the Work and materials and the manner of conducting the Work. The City shall not have the power to waive the Contractor's obligation to properly perform the Work as herein prescribed.
- C. The Contractor shall perform night Work only as directed or permitted by the City. The Contractor shall receive no extra payment for such Work.
- D. The City's right to inspect and supervise shall not relieve the Contractor from his responsibilities and obligations under the Contract. The City shall not be responsible for the safety of the Workmen, the safeguarding of the Work, or the proper performance of the Contractor.

5. SUPERINTENDENTS

When the Contractor is not present at the Site, any orders given by the City to the Contractor's foremen or superintendents shall be strictly obeyed and shall be treated in all respects as if given to the Contractor. Furthermore, the Contractor shall provide the City an emergency phone number to allow contact with him or his representative at times when he is not on the Site.

6. SUBCONTRACTORS

- A. The Contractor shall not sublet the whole or any part of the Work without the written consent and approval of the City. In all cases, the Contractor shall give his personal attention to the Work, the Subcontractors being considered as foremen employed by the Contractor and liable to be discharged by the City for neglect of duty or incompetency or misconduct.
- B. After acceptance of any Subcontractor by the City, the Contractor shall not replace the Subcontractor with a new Subcontractor without the written approval of the City.

7. EMPLOYEES

None but skilled foremen and Workmen shall be employed on Work requiring special qualifications. Any person employed on the Work who fails, refuses, or neglects to obey the instructions of the City in anything relating to this Work, or who appears to the City to be disorderly, insubordinate, unfaithful, or incompetent, shall, upon the order of the City, be at once discharged and not again employed on any part of the Work. Any interference with, or abusive or threatening conduct toward, any City employee by the Contractor or his employees or agents, shall be authority for the City to annul the Contract and relet the Work.

8. CHANGES IN SCOPE OF WORK; EXTRA WORK

While the City has tried to anticipate all Work required under and during the term of this Contract, the parties understand and agree that the Work required herein may require, without notice to the sureties, the performance of Extra Work or the omission of Work previously required. The City may, at any time and without notice to the sureties, require changes in the scope of Work under this Contract, as the City may find necessary or desirable. Such changes may include the omission of Work previously required.

- A. The City shall notify the Contractor of the change in scope via a Change Order, which shall become a part of the Contract Documents. If a Change Order directs Contractor to omit Work, the Contractor shall refrain from performing it.
- B. The Contractor shall perform Extra Work only pursuant to the issuance by the City of a Change Order. Records of any Extra Work performed by Contractor shall be reviewed daily by the Contractor and the City, duplicate copies of accepted records made and signed by both the Contractor or his representative and the City, and one (1) copy retained by each.
- C. Payment for Extra Work performed shall be calculated as described in General Conditions Article 9, as long as the Contractor submits a claim of payment upon certified statement supported by receipted bills. Such statements shall be submitted simultaneously with any materials submitted for progress payments as described in the Form of Agreement, for the preceding month's Extra Work.

9. PAYMENT FOR EXTRA WORK

If the City issues a Change Order for the performance of Extra Work as described in General Conditions Article 8, payment shall be based upon any mutually agreed upon lump sum or, if the parties cannot mutually agree upon sum, then by the following method, designed to provide the Contractor his direct costs plus a ten percent (10%) profit:

- A. The Contractor shall receive an amount for labor cost, based on the current local hourly wage rate, as agreed upon by the Contractor and the City prior to starting such Work, for all labor and foremen in direct charge of the authorized operations.
 - 1) The Contractor shall receive said amount for Contractor's or any Subcontractor's labor and foremen.
 - 2) The Contractor shall provide documentation satisfactory to the City as to the hours actually worked.
- B. The Contractor shall receive an amount equal to fifteen percent (15%) of the total labor cost, as computed in Sub-Article (A) above, for costs of general supervision and the furnishing and use of small tools and miscellaneous equipment, such as picks, shovels, hand pumps, and similar items.
- C. The Contractor shall receive an amount equal to the actual cost of materials delivered, except for any materials furnished by the City. Contractor shall document such costs to the City's reasonable satisfaction.
- D. The Contractor shall receive an amount equal to the rental price paid by Contractor, for any rented special equipment and machinery used by Contractor or any sub-Contractor, such as power driven pumps, concrete mixers, trucks, and tractors, or other equipment, as was required for the economical performance of the authorized Work.
- E. The Contractor shall receive a profit percentage of ten percent (10%) of the sum of Sub-Articles (A) through (D) of this Article.
- F. The Contractor's total reimbursement shall be the sum of Sub-Articles A through E of this Article.

10. OMITTED WORK

The City may, at any time by a written order and without notice to the Sureties, require the omission of such Work as the City may find necessary or desirable. All Work so ordered must be omitted by the Contractor. The amount by which the Contract price shall be reduced shall be determined as follows:

- A. By such applicable unit prices, if any, as are set forth in the Contract; or

- B. If there are no applicable unit prices, then by an appropriate lump sum price, if any, set forth in the Contract; or
- C. If there be no such lump sum price, then by the reasonable and fair estimated cost of such omitted Work as determined by the City.

11. TERMINATION OF CONTRACT

- A. The occurrence of any of the following shall constitute a default by the Contractor and shall provide the City with a right to terminate this Contract in accordance with this Article, in addition to the right to pursue any other remedies, which the City may have under this Contract or under law:
 - 1) If, in the City's opinion, the Contractor is improperly performing Work or violating any provision(s) of the Contract Documents;
 - 2) If the Contractor neglects or refuses to correct defective Work or replace defective parts or equipment, as directed by the City pursuant to an inspection;
 - 3) If, in the City's opinion, the Contractor's Work is being unnecessarily delayed and will not be finished within the prescribed time;
 - 4) If the Contractor assigns this Contract or any money accruing thereon or approved thereon; or
 - 5) If the Contractor abandons the Work, is adjudged bankrupt, or if he makes a general assignment for the benefit of his creditors, or if a trustee or receiver is appointed for the Contractor or for any of his property.
- B. The City shall, before terminating the Contract for any of the foregoing reasons, notify the Contractor in writing of the grounds for termination and provide the Contractor with ten (10) calendar days to cure the default to the reasonable satisfaction of the City.
- C. If the Contractor fails to correct or cure within the time provided in the preceding Sub-Article B, the City may terminate this Contract by notifying the Contractor in writing. Upon receiving such notification, the Contractor shall immediately cease all Work hereunder and shall forfeit any further right to possess or occupy the Site or any materials thereon; provided, however, that the City may authorize the Contractor to restore any Work Sites.
- D. The Contractor, and where applicable, the Contractor's sureties, shall be liable for:
 - 1) Any new cost incurred by the City in soliciting Bids for and letting a new Contract;

- 2) The difference between the cost of completing the new Contract and the cost of completing this Contract; and
- 3) Any court costs and attorneys' fees associated with any lawsuit undertaken by the City to enforce its rights herein.

12. SAFETY; MAINTAINING THE SITE

- A. The Contractor shall maintain safety at all times in cooperation with the City. The Contractor shall be responsible for any damage to existing utilities, property, or persons arising out of the Contractor's Work at the Work Site. The Contractor shall take precautions as are necessary to protect the public, the City and its employees, and the Contractor's employees from hazards associated with the Contractor's use and occupancy of the Work Site, in cooperation with the City.
- B. The Contractor shall maintain the Work Site in a safe and reasonable condition. For any period, including weekends and holidays, during which Work is halted, Contractor shall ensure that the Work Site on which Work has been halted is in a condition that is clean, orderly, and satisfactory to the City.

13. RISK OF LOSS

All costs due to delays in handling of materials and equipment, and loss, theft, or damage to all materials, equipment, and supplies sold and delivered to the City shall be the responsibility of the Contractor until the City provides final acceptance thereof.

14. SUSPENSION OF WORK

The City shall have the right to require the Contractor to suspend Work during inclement weather. The City may, at any time and without cause, suspend the Work or any portion thereof for a period of not more than thirty (30) days by notifying the Contractor to cease Work. The City's decision as to suspensions shall be final and binding. Whenever the Contractor is required to suspend Work for any reason, the Contractor shall secure the Site and protect the Work, so as to preserve the Site and the Work from damage, destruction, and loss.

15. CLEAN UP OF SITE

Before final acceptance of the Work by the City, Contractor shall restore and clean the Work Site, and make permanent or remove all temporary services in accordance with all applicable requirements identified elsewhere herein.

16. ROYALTIES AND PATENTS

All fees, royalties, and claims for any invention, or pretended invention, or patent of any articles, material, arrangement, appliance, or method that may be used upon or in any manner be connected with the construction of this Work or appurtenances, are hereby included in the prices stipulated in this Contract for said Work.

17. INDEMNIFICATION

- A. Contractor agrees to indemnify, hold harmless and defend (with counsel reasonably acceptable to City) City, its council members, directors, officers, employees, partners, principals, Contractors, agents, representatives, and each of them, against any and all administrative and judicial proceedings and orders, charges, claims, costs, damages, demands, expenses, fines, judgments, liabilities, losses, penalties, and remedial actions of any kind, including the costs of any hazardous materials remedial actions of any kind and all other related costs and expenses incurred in connection therewith, including, but not limited to, reasonable attorneys' fees and the costs of defense arising out of injury to persons, including, but not limited to death, or damage to property, caused by, directly or indirectly, in whole or in part, the negligence of Contractor in the performance of the Work set forth in the Contract Documents.
- B. The indemnification and hold harmless provisions set forth in paragraph 17A. above, shall be binding upon the successors, assigns, and sub-contractors of Contractor.

18. INSURANCE

Before starting the Work and until final acceptance of the Work by the City, the Contractor shall procure and maintain insurance of the types and to the limits specified in the Attachment Section of the document. Further, the Contractor shall require each of his Subcontractors to procure and maintain, until completion of that Subcontractor's Work, insurance of types and to the limits specified in Attachment Section of document. It shall be the responsibility of the Contractor to ensure that all of his Subcontractors comply with all of the insurance requirements contained herein relating to such Subcontractors.

Certificates of Insurance evidencing the insurance coverage specified herein shall be filed with the City before Work is begun. The required Certificates of Insurance not only shall name the types of policies provided, but also shall refer specifically to this Contract and the specific Contractual provisions thereof which require such insurance, and shall state that such insurance is as required by this Contract. If the initial insurance expires prior to the completion of the Work, renewal Certificates of Insurance and required copies of policies shall be furnished thirty (30) days prior to the date of their expiration.

19. INTERPRETATION OF SPECIFICATIONS

- A. The City shall decide all questions concerning the interpretation of all Contract Documents pertaining to the character, quality, amount and value of any Work done under or by reason of this Contract and the City's interpretations and decisions shall be final and conclusive.
- B. The Contractor shall keep one (1) record of all Contract Documents at the Site in good order and annotated to show all changes made during the construction process. The Contractor shall make these available to the City and shall deliver the record to the City upon completion of the Work.

20. DISPUTED WORK

If the Contractor is of the opinion that any Work required, necessitated, or ordered is not within the terms and provisions of this Contract, he must promptly notify the City, in writing, of his contentions with respect thereto and request a final determination thereon. If the City determines that the Work in question is not Extra Work, and that the order complained of is proper, the City will direct the Contractor to proceed and the Contractor shall promptly comply. Final determination and decisions, in case any question shall arise, shall constitute a condition precedent to the right of the Contractor to receive any money therefor, until the matter in question has been determined.

21. NO WAIVER OF LEGAL RIGHTS

- A. The City shall not waive any rights hereunder by making any payment of any kind, or accepting any Work, unless expressly stated otherwise. The consent by City to any act by Contractor shall not be deemed to imply consent or to constitute a waiver of a breach of any provision of the Contract or continuing waiver of any subsequent breach of the same or any other provision, nor shall any custom or practice which may arise between City and Contractor be construed to waive or lessen the right of City to insist upon the performance by Contractor in strict accordance with the provisions of the Contract.
- B. The City reserves the right to correct any error that may be discovered in any estimate that may have been paid and to adjust the same to meet requirements of the Contract. The City further reserves the right, should conclusive proof of defective Work on the part of the Contractor be discovered after the Final Payment has been made, to claim and recover, by process of law, such sums as may be sufficient to correct the error or make good the defects in the Work.

22. DEFECTIVE WORK

- A. If, at any time, before final acceptance of the Work, defects therein shall be found, the Contractor shall promptly correct such defects, remove and dispose of all defective or unsatisfactory Work or materials, and supply others in accordance with the Contract.

Previous construction of such Work will not relieve the Contractor of the responsibility for good Work or materials, although the defects may have been overlooked by the City, or may have been the result of damage from any cause.

- B. Should the Contractor fail or refuse to remove and renew any defective Work performed, or to make any necessary repairs in an acceptable manner, and in accordance with the requirements of the Contract within the time indicated in writing, the City shall have the authority to cause the unacceptable or defective Work to be removed or renewed, or such repairs as may be necessary to be made at the Contractor's expense. Continued failure or refusal on the part of the Contractor to make any or all necessary repairs, promptly, fully, and in an acceptable manner, shall be sufficient cause for the City to declare the Contract forfeited, in which case the City, at its option, may purchase materials, tools, and equipment and employ labor or may contract with any other individual, firm or corporation, or may proceed with its own forces to perform the Work.
- C. All costs and expenses incurred thereby shall be charged against the defaulting Contractor and the amount thereof deducted from any monies due, or which may become due him, or shall be charged against the Contract Bond.
- D. At the request of the City, the Contractor shall, at any time before final acceptance of the Work, remove or uncover such portions of the finished Work as may be directed. After examination, the Contractor shall restore said portions of the Work to the standard required by the Contract Documents. Should the Work thus exposed or examined prove acceptable, the uncovering or removing, and the replacing of the covering or making good of the parts removed, shall be paid for by Change Order; but should the Work so exposed or examined prove unacceptable, the uncovering or removing and replacing of the covering or making good of the parts removed shall be at the Contractor's expense.
- E. Failure to reject any defective Work or material shall not in any way prevent later rejection when such defect be discovered, or obligate the City to final acceptance.

23. TOOLS & EQUIPMENT

If, at any time before the commencement or during the progress of the Work, tools or equipment appear to the City to be insufficient, inefficient or inappropriate to secure the quality of Work required or the proper rate of progress, the City may order the Contractor to increase their efficiency, to improve character, to augment their number or substitute new tools or equipment, as the case may be, and the Contractor shall conform to such order. The failure of the City to demand such increase of efficiency shall not relieve the Contractor of his obligation to secure the quality of Work and the rate of progress necessary to complete the Work within the time required by the Contract and to the satisfaction of the City.

24. TESTING

The Contractor shall perform, or obtain the performance of, any testing required herein. The Contractor shall bear the cost of any testing required under the Contract, as well as any retesting required as a result of failures. The Contractor's Bid prices shall be construed as including the cost of any such testing or retesting.

25. PERMITS & FEES

The successful bidder (Contractor) shall be responsible for obtaining and paying the respective fees of all local government permits. Payment for the cost associated with this obligation will be reimbursed by the City upon presentation of paid receipt and/or copy of said permit (as determined by the City).

26. MISCELLANEOUS

A. Notice:

Any notice, request, instruction, demand, consent, or other communication required or permitted to be given under this Agreement shall be:

- 1) in writing;
- 2) delivered (to the addresses listed in this Article 26, below, or such other address as the Parties may provide to each other in writing) by one of the following means:
 - (a) by hand;
 - (b) by overnight mail service (such as Federal Express); or
 - (c) by certified mail, postage prepaid, and certified return receipt requested

to the following address, or such other address as the Parties may provide to each other in writing:

To Company:

With a copy to:

To: [Name of Division]
 Attn:
 Name of Company
 Street Address
 City / State / Zip Code
 Telephone: (xxx)xxx-xxxx
 Facsimile: (xxx)xxx-xxxx

With a copy to: [Name of Division]
 [Contact] [Title] Attn: [Contact] [Title]
 Name of Company
 Street Address
 City / State / Zip Code
 Telephone: (xxx)xxx-xxxx
 Facsimile: (xxx)xxx-xxxx

To CITY:

City of Vero Beach, Florida
Attn: Robert J. Bolton, Director
Water & Sewer Department
P. O. Box 1389
Vero Beach, FL 32961-1389
Telephone: (772) xxx-xxxx
Facsimile: (772) xxx-xxxx

With a copy to:

City of Vero Beach, Florida
Attn: Carol Shoaf, Contract Administrator
3455 Airport West Drive
P.O. Box 1389
Vero Beach, FL 32961-1389
Telephone: (772) 978-5470
Facsimile: (772) 770-6860

A copy of any notice, request, instruction, demand, consent, or other communication required or permitted to be given under this Agreement may also be sent via facsimile. However, delivery via facsimile shall not constitute an alternative or substitute means of delivery (i.e., notice must still be sent via hand delivery, over night mail, or certified mail return receipt requested as set forth, above).

B. The parties expressly recognize that the relationship between the City and the Contractor is that of independent Contractors, and that neither the Contractor nor any of his servants, agents or employees shall ever be considered to be an agent, servant or employee of the City.

C. Severability

In the event that any provision of this Agreement shall be held unconscionable, unenforceable, or void for any reason by any tribunal of competent jurisdiction, it is agreed that the provision in question shall be modified to eliminate the elements of concern to the tribunal and as modified shall be binding on the parties hereto. The remaining provisions shall not be affected by the action of any tribunal or modification of such provision, and shall remain in full force and effect.

D. Choice of Law; Venue

The validity, interpretation, and enforcement of this Agreement shall be governed by the laws of Florida without regard to conflict of law applications. Indian River County, Florida, shall be proper venue for any litigation involving this Agreement. Any legal proceedings of any nature brought by either Party to enforce any right or obligation arising out of this Agreement shall be submitted to trial without jury before any court of competent jurisdiction in Indian River County, Florida. The Parties consent and submit to the jurisdiction of any such court in Indian River County, Florida, and agree to accept service of process outside the state of Florida in any matter submitted to any court pursuant hereto.

E. Attorneys' Fees

The prevailing party in any litigation, arbitration or mediation relating to this Agreement shall be entitled to recover its reasonable attorneys' fees and costs from the other party for all matters, including, but not limited to, appeals.

F. Article Headings For Convenience Only

The Article headings, and underlined sub-article headings, hereof are inserted for convenience of reference only, are not a part hereof, and shall have no effect on the construction or interpretation of this Contract.

27. GRATUITIES

City may, by written notice to Contractor, cancel this Contract without liability to Contractor if it is determined by City that gratuities, in the form of entertainment, gifts, or otherwise, were offered or given by Contractor, or any agent or representative of Contractor, to any officer or employee of City with a view toward securing a Contract or securing favorable treatment with respect to the awarding or amending, or the making of any determinations with respect to the performing of such a Contract. In the event this Contract is canceled by City pursuant to this provision, City shall be entitled, in addition to any other rights and remedies, to recover or withhold the amount of the cost incurred by Contractor in providing such gratuities.

CITY OF VERO BEACH, FLORIDA

SUPPLEMENTARY GENERAL CONDITIONS

1. SHOP DRAWINGS

The Contractor shall submit shop Drawings of all equipment, apparatus, machinery, fixtures, piping, wiring, fabricated structures, and manufactured articles. The purpose of the shop Drawings is to show the suitability, efficiency, technique of manufacture, installation requirements, and details of the item and evidence of its compliance or non-compliance with the Drawings and Specifications.

2. CONFLICTS

The following principles shall apply in resolving any conflict among or ambiguity in the Contract Documents:

- A. The Supplementary General Conditions shall have priority over the General Conditions and Form of Agreement in case of conflict. The Technical Specifications shall take precedence over all other Contract provisions.
- B. Full size details shall take precedence over scale Drawings and large scale Drawings shall take precedence over small scale Drawings. Dimensions given in figures shall take precedence over scaled dimensions.
- C. When measurements are affected by conditions already established or where items are to be fitted into constructed conditions, it shall be the Contractor's responsibility to verify all such dimensions at the Site and the actual job dimensions shall take precedence over scaled or calculated dimensions on the Drawings.

3. COORDINATING WITH OTHER CITY PROJECTS

- A. The City reserves the right to let other Contracts in connection with this project. The Contractor shall afford other Contractors a reasonable opportunity for the introduction and storage of their materials and the execution of their Work and shall properly connect and coordinate his Work with theirs.
- B. If any part of the Contractor's Work depends for proper execution or result upon the Work of any other Contractor, the Contractor shall inspect and promptly report to the City of Vero Beach any defects in such Work that render it unsuitable for such proper execution and results. His failure to inspect and report shall constitute his acceptance, at his own risk, of the other Contractor's Work as fit and proper for the reception of this Work, except as to defects which may develop in the other Contractor's Work after the execution of the Work under this Contract.

4. UTILITIES AND STRUCTURES RELOCATED, EXISTING AND OTHERS:

- A. General: Existing utilities, structures, and facilities shown on the Drawings were located as accurately as possible from the City's records. Guarantee is not made that all existing utilities and structures are shown or that those shown are entirely accurate.

In order to assure himself of the actual location of such facilities, the Contractor shall notify each utility company involved at least ten (10) days prior to the start of construction and during construction to arrange for positive underground location. The Contractor is required by State law to notify the SUNSHINE STATE ONE CALL CENTER at 1-800-432-4770 a minimum of forty-eight (48) hours prior to any excavation.

Contractor shall notify and coordinate with the utility companies where their facilities may be in conflict with or endangered by the proposed construction. Relocation for the convenience of the Contractor shall be paid for by the Contractor. Temporary support of adjacent utilities, if required, shall be the responsibility of the Contractor. The Contractor shall schedule his work in such a manner that he is not delayed by the utility companies relocating or supporting their utilities. No compensation will be paid to the Contractor for any loss of time or delay. The Contractor shall coordinate his activities with City of Vero Beach (Utility Department), AT&T Broadband (cable TV), AT&T, BellSouth, City Gas and other utility companies as may be appropriate in order to maintain utility service and minimize the amount of interference and interruption.

All overhead, surface or underground facilities and utilities encountered that are to remain in place shall be carefully protected from injury or displacement. All damage to such structures is to be completely repaired, at no expense to the City, within a reasonable time; needless delay will not be tolerated. If not repaired within a reasonable time, the City reserves the right to remedy such damage by ordering outside parties to make such repairs at the expense of the Contractor. All such repairs made by the Contractor are to be made to the satisfaction of the utility owner and City. All damaged utilities, structures, etc. must be replaced or prevented from leaking or malfunctioning and are to be inspected by the utility owner and City prior to backfilling. No additional cost shall be paid for this work.

- B. Cooperation with Utility Owners: The Contractor shall cooperate with the owners of other underground or overhead utility lines in their removal and rearrangement operations in order that these operations may progress in a reasonable manner, that duplication or rearrangement work may be reduced to a minimum, and that services rendered by the utility owners will not be unnecessarily interrupted.

In the event of interruption of other utility services as a result of accidental breakage or as a result of their being exposed or unsupported, the Contractor shall promptly notify the proper authority and shall cooperate with the authority in the prompt restoration of service. If service is interrupted, repair work shall be continuous until the service is restored. No work shall be undertaken around fire hydrants until provisions for continued service have been approved by the local fire authority.

5. APPLICABLE STANDARDS

All standards referred to herein shall mean the latest revision under the same specification number or for those provisions in the new or revised Specifications which are clearly inapplicable. The following abbreviations have been used in referring to other standards:

NEC	National Electrical Code
NEMA	National Electrical Manufacturer's Associates
IEEE	Institute of Electrical and Electronic Engineers
OSHA	Occupational Safety and Health Administration
ASME	American Standard of Mechanical Engineers
ANSI	American National Standards Institute
NFPA	National Fire Protection Association
AISC	American Institute of Steel Construction
AWS	American Welding Society
EPA	Environmental Protection Agency
ASTM	American Society of Testing Materials
FDEP	Florida Department of Environmental Protection
FAA	Federal Aviation Administration

Whenever a conflict exists between these standards and the Contract Documents, the Contract Documents shall govern. In the event of a conflict among any of the above codes and standards, the one having the most stringent requirements shall take precedence unless otherwise approved in writing by the City.

6. SECURITY OF WORK AREA

Work area must be maintained to allow access to all operating equipment in the construction area.

7. QUALITY OF ITEMS AND WORKMANSHIP

All materials and equipment furnished for this project shall be new and unused. Any materials or equipment which, in the opinion of the City, have become excessively weathered or damaged since manufacture, shall not be considered as new. Workmanship shall be first class and the finished product equal to the best accepted standards of the trade for the category of Work performed. All Work shall be performed by experienced, skilled tradesmen.

8. MATERIALS DISPOSAL AND CLEANUP

The Contractor shall comply with all pertinent local, state and federal and any other regulatory agency. The Contractor shall be responsible for the disposal of all hazardous and non-hazardous materials in accordance with EPA, FDEP, and OSHA requirements. Additionally, the Contractor shall comply with all regulatory requirements for the clean-up of all spills as a result of the Work performed.

9. CONTRACTOR SAFETY

- A. The Contractor shall ensure that all personnel meet OSHA and ANSI requirements for the Work being done.
- B. Any Contractor personnel not wearing required safety equipment or complying with all safety standards and requirements will be removed from the Work Site until such time as appropriate safety equipment is worn or standards observed.

10. MISCELLANEOUS

The City reserves the right to correct any error that may be discovered in any estimate that may have been paid and to adjust the same to meet requirements of the Contract. The City further reserves the right, should conclusive proof of defective Work on the part of the Contractor be discovered after payment has been made, to claim and recover by process of law such sums as may be sufficient to correct the error or make good the defects in the Work.

11. TERMINATION FOR CONVENIENCE

Owner may at any time and for any reason terminate Contractor's services and work for Owner's convenience. Upon receipt of notice of such termination, Contractor shall, unless the notice directs otherwise, immediately discontinue the work and immediately cease ordering of any materials, labor, equipment, facilities, or supplies in connection with the performance of this Agreement. Upon such termination, Contractor shall be entitled to payment only as follows: (1) the actual cost of the work completed in conformity with this Agreement and the specifications; plus, (2) such other costs actually incurred by Contractor as are permitted by the prime contract and approved by Owner. Contractor shall not be entitled to any other claim for compensation or damages against Owner in the event of such termination.

12. FORCE MAJEURE

Except as otherwise expressly provided herein, City shall not be liable for any failure or delay in the performance of its obligations under this Agreement due to causes not reasonably within its control, including, but not limited to, acts of civil or military authority, including courts and regulatory agencies, superior governmental authority, God, war, riot or insurrection, inability to obtain required construction permits, blockages, embargoes, sabotages, epidemics, fires, floods, strikes, lockouts or other labor difficulties, provided such labor difficulties do not arise from inequitable labor practices. In the event of any failure or delay resulting from such causes upon notice to the other party within five (5) business days of occurrence of the event giving rise to the delay the time for performance hereunder shall be extended for a period of time reasonably necessary to overcome the effects of such delays. In the event any such failure or delay shall last for a period of more than ten (10) calendar days, then either Party may terminate this Agreement forthwith, in whole or in part, by notice in writing to the other.

13. QUALIFICATION OF BIDDER

The contract will be awarded only to a responsible contractor qualified by experience to do the Work specified. The bidder shall submit, prior to award of contract, satisfactory evidence of his experience in like Work and that he is fully prepared with the necessary organization, capital, equipment and machinery to complete the Work to the satisfaction of the Owner within the time limit stated. The Contractor shall take note of the rig height limitations set forth in the FAA permit included in this document and assume full compliance with same. In addition to the above, the Contractor shall satisfy the following criteria:

- A. Be properly licensed to perform work as a Water Well Contractor in the State of Florida, Indian River County, and the City of Vero Beach.
- B. The Contractor shall have performed a minimum of three (3) mechanical integrity tests on Class I injection wells. The Contractor or his proposed subcontractor shall also have performed a minimum of three (3) radioactive tracer survey tests and be properly licensed by the appropriate agencies to handle radioactive material.
- C. References from a minimum of three (3) other project owners for comparable projects.

Bidders are advised that the Owner reserves the sole right to award the project to the bidder which, in the Owner's sole opinion, best serves the interest of the Owner.

14. EXISTING PLANS

Copies of available Owner's records of existing facilities which may impact the proposed construction are available for review at the offices of ARCADIS, Inc. and the City of Vero Beach Water Treatment Facility. No guaranty as to the completeness or accuracy of this information is made, or implied, by the Owner or the Engineer.

15. SITE USAGE AND SECURITY

Security at the construction site is given a very high priority by the Owner. The Contractor shall recognize that this project is sensitive in nature as a result of homeland security concerns and the security criteria stipulated herein constitutes a material inducement of the Owner to enter into this contract with the Contractor. It is acknowledged that the project will require activities at multiple locations on the project site. However, in recognition of the Owner's security focus and the fact that this is an active and functioning facility, the Contractor shall take reasonable scheduling steps to minimize the degree to which the entire facility is simultaneously impacted by this project. The Owner reserves the right to require timing adjustment of certain activities where the impact is judged to have a comparatively minor, or no, effect on efficiency. The Contractor shall restrict all parking, office placement and equipment trailers, stored material storage, lay-down areas, pre-fabrication work areas and other related items strictly to the area immediately adjacent to the injection well.

The existing site is fully secured. The integrity of the perimeter wall or fence must be maintained at all times. Accordingly, the Contractor shall provide temporary fencing of equal or greater security value to the existing as required.

It is further noted that the Owner has implemented site security measures which restrict and control entrance to and exit from the site. The Contractor shall anticipate and work within the requirements of the Owner's security measures. The Owner reserves the right to require the Contractor to perform a background check on all agents, licensees, invitees, employees, subcontractors, material-men, workers and suppliers entering the site and supply the results to the Owner. Should this occur, the Contractor shall secure appropriate releases and authorizations from the affected parties prior to performing the background checks. All background checks shall be performed prior to allowing the workers on to the project site. The Owner reserves the right but not the obligation to disallow entrance to the work site of any persons or entities as a result of the background check or other relevant information, regardless of the result of such background check or other relevant information. Background checks shall be in such form and fashion as is acceptable to the Owner but at a minimum shall be performed through the Indian River County Sheriff's Department and the Florida Department of Law Enforcement or such other entity, firm or individual acceptable to the Owner, in its' sole discretion. The Contractor shall allow for the time to perform the necessary background checks within the project schedule.

Nothing herein shall confer liability upon the Owner as a result of the security steps and provisions set forth in this contract. Each party who has had a background check performed shall be required to carry identification and a clearance tag. Such identification and clearance tag shall be required to enter the site and shall be maintained with the person at all times while on site. The Contractor shall provide to the Owner a complete roster of all parties to enter the work site pursuant to this construction and to keep said roster updated and current on at least a monthly basis.

16. OSHA COMPLIANCE

By submitting a bid, bidders agree that the products furnished and construction methods used will comply with the Williams-Steger Occupational Safety and Health Act of 1970 and/or the Florida Division of Safety, whichever is applicable.

17. MATERIAL SAFETY DATA SHEETS

The selected bidder shall provide a copy to the Owner through the Engineer of the Material Safety Data Sheets (MSDS) for all chemicals used in the execution of their work in compliance with Chapter 442, Florida Statutes.

18. DRAWING SCALES

The Contractor is cautioned that scales indicated on the drawings are based on full size (24" X 36") plans. Reduce size plans do not have the indicated scales adjusted to reflect the actual plan size.

DRUG-FREE WORKPLACE COMPLIANCE FORM

IDENTICAL TIE BIDS

Preference shall be given to business 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 work place program shall be given preference in the award process. Established procedures for processing tie Bids will be followed if none of the tied vendors has a drug-free Workplace program. In order to have a drug-free workplace program, a business shall:

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

VENDOR'S SIGNATURE

**CITY OF VERO BEACH, FLORIDA
BID PROPOSAL**

**BID NO. 060-15/JO - WATER TREATMENT PLANT
INJECTION WELL MECHANICAL INTEGRITY TEST**

To: The City Manager
City of Vero Beach
P.O. Box 1389
Vero Beach, Florida 32961

The Undersigned Bidder has carefully examined the Contract Documents and any and all Work Sites. The undersigned is familiar with the nature and extent of the Work and any local conditions that may in any manner affect the Work to be done, and the equipment, materials and labor required.

The undersigned agrees to do all the Work in accordance with the Contract Documents and according to the standards of quality and performance established by the City, for the unit prices as provided in the attached Bid Schedule, for each of the items or combination of items stipulated. It is understood that certain quantities shown in the Bid Schedule are approximate only, subject to increases and decreases, and for the purpose of Bid comparisons for determination of low Bidder. It is further understood that payment will be in accordance with actual quantities placed in the construction as more specifically provided in the Contract Documents. The undersigned further agrees as follows:

1. To do any Work, not covered by the Bid Schedule, which may be ordered by the City upon authorization by the City Council, and to accept as full compensation therefore such prices as may be agreed upon, in writing, by the City and the Contractor in accordance with Articles 8-9, of the General Conditions.
2. To begin and complete Work as required in the Notice to Proceed.
3. To reimburse the City of Vero Beach liquidated damages in the amount and under the conditions specified in the Contract Documents.
4. To insert in all Contracts at every tier the notice stated in Article 16 of the Instructions to Bidders.

Dated this _____ day of _____, 20__.

Respectfully submitted:

Bidder

Address

City, State and Zip Code

**CITY OF VERO BEACH
 BID SCHEDULE
 BID NO. 060-15/JO WATER TREATMENT PLANT
 INJECTION WELL MECHCANICAL INTEGRITY TEST**

Furnish all equipment, labor, supervision, materials, transportation and services to perform all Work set forth in the Contact documents, subject to adjustments provided below, for the prices Bidder provides on the Schedule of Values per specifications provided.

Item	Description	Quantity	Unit	Unit Price	Total Amount
1.	Video survey of complete well and open hole	N/A	LUMP SUM	N/A	\$
2.	MIT (Pressure Test) of Annular Space	N/A	LUMP SUM	N/A	\$
3.	Temperature and Background Gamma-ray Logging and Radioactive Tracer Survey Testing	N/A	LUMP SUM	N/A	\$
4.	Standby Time when Ordered by the Engineer	24	HOUR	\$	\$

TOTAL BID AMOUNT (Items 1-4) \$ _____

ADDITIVE ALTERNATES

5.	Non-Abrasive Tubing Brushing and additional video survey (if necessary)	N/A	LUMP SUM	N/A	\$
6.	MIT (Pressure Test) of Injection Well using an Inflatable Packer (if necessary)	N/A	LUMP SUM	N/A	\$

TIME OF COMPLETION:

By submitting a bid, the Contractor acknowledges that according to regulatory permit requirements the official injection well hydrostatic pressure test must be completed no later than April 22, 2015 to satisfy regulatory requirements.

**CITY OF VERO BEACH
BID SCHEDULE (continued)
BID NO. 060-15/JO WATER TREATMENT PLANT
INJECTION WELL MECHCANICAL INTEGRITY TEST**

Firm Name _____

Address: _____

City _____ & State: _____

Telephone: _____ Fax: _____ E-Mail: _____

Name, Typed or Printed: _____

Signature: _____

Title: _____

Note:

Time is of the essence for this project and the Owner may consider the ability of the bidder to complete the project within the prescribed time frame in the determination of the best bid. Owner may consider the qualifications and experience of subcontractors, suppliers and other persons and organizations proposed for those portions of the Work. Owner also may consider operating costs, maintenance requirements, performance data, and guarantees of major items of materials and equipment proposed for incorporation in the Work. Owner may conduct such investigations as Owner deems necessary to assist in the evaluation of any bid and to establish responsibility, qualifications and financial ability of bidders, proposed subcontractors, suppliers, and other persons and organizations to perform and furnish the Work in accordance with the Contract Documents to Owner's satisfaction. In no case will the award be made until all necessary investigations have been made into the responsibility of the low bidders and subcontractors and the Owner is satisfied that the bidders and subcontractors are qualified to do the Work and have the necessary organization, capital, experience and equipment to carry out the provisions of the contract to the satisfaction of the Owner within the time specified. The Owner reserves the right, at Owner's discretion, to reject any or all bids with or without cause, to waive technical errors and informalities, to negotiate contract terms with the successful bidder, and to accept the bid which in his judgment best serves the Owner.

QUESTIONNAIRE

The undersigned guarantees the truth and accuracy of all statements and answers herein contained.

1. How many years has your organization been in business as a supplier of these materials/services?

2. What is the last project of this nature that you have completed?

3. Have you ever failed to complete Work awarded to you; if so, where and why?

4. Name three (3) individuals or corporations for which you have performed Work of this size and nature to which you refer:

_____ Phone _____ Email _____

_____ Phone _____ Email _____

_____ Phone _____ Email _____

5. Have you personally inspected the proposed Work and have you a complete plan for its performance?

6. Will you sublet any part of this Work? If so, give details and provide list of all subcontractors and the work they will perform?:

7. What equipment do you own that is available for the Work?

8. What equipment will you purchase for the proposed Work?

9. What equipment will you rent for the proposed Work?

10. Minority Business Statement:

Is your firm a certified minority business enterprise as defined by the Florida Small and Minority Business Assistance Act of 1985? YES or NO

11. State the true, exact, correct, and complete name of the partnership, corporation, limited liability company, or trade name under which you do business, and the address of the place of business. (If a partnership, state the name of all partners. If a corporation, state the name of the President and Secretary. If a Limited Liability Company, state the names of all members. If a trade name, state the names of the individuals who do business under the trade name.)

(Correct Name of Bidder)

a. The business is a Sole Proprietorship, Partnership, Corporation, or Limited Liability Company.

b. The address and phone number of principal place of business is

c. The names of the partners, corporate officers, members, or individuals doing business under a trade name, are as follows:

(Bidder)

BID BOND

KNOW ALL MEN BY THESE PRESENTS, that we _____
_____ (hereinafter called Principal)

and _____ (hereinafter called the Surety), with its principal offices in the City of _____ and authorized to do business in the State of Florida, are held and firmly bound unto _____ as Obligee, hereinafter called the Obligee, in the sum of _____ Dollars (\$ _____) for the payment of which sum will and truly to be made, the said Principal and the said Surety, bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal is about to submit or has submitted a Bid for:

_____ and,

WHEREAS, the Principal desires to file this Bond in accordance with law, in lieu of a Certified or Cashier's Check otherwise required to accompany this Bid,

NOW, THEREFORE, if the Obligee shall accept the Bid of the Principal and the Principal shall enter into a Contract with the Obligee in accordance with the terms of such Bid, and give such Bond or Bonds as may be specified in the Bidding or Contract Documents with good and sufficient Surety for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof, or in the event of the failure of the Principal to enter such Contract and give such Bond or Bonds, if the Principal shall pay to the Obligee the difference not to exceed the penalty hereof between the amount specified in said Bid and such larger amount for which the Obligee may in good faith Contract with another party to perform the Work covered by said Bid, then this obligation shall be null and void, otherwise to remain in full force and effect.

SIGNED AND SEALED this _____ day of _____, 20____.

Principal Seal

Witness

Title

Surety Seal

Witness

Title

FORM OF AGREEMENT

**BID NO. 060-15/JO WATER TREATMENT PLANT INJECTION
WELL MECHCANICAL INTEGRITY TEST**

THIS AGREEMENT made and entered into as of the _____ day of _____, 20__, by and between

NAME OF CONTRACTOR: _____

ADDRESS OF CONTRACTOR: _____

CITY, STATE, ZIP CODE: _____

hereinafter called the Contractor, and the CITY OF VERO BEACH, a municipal corporation organized and existing under the Laws of the State of Florida and located in Indian River County, Florida, hereinafter called the City.

WITNESSETH:

That the Contractor and the City, for the consideration hereinafter named, agree as follows:

Article 1. SCOPE OF WORK - The Contractor shall perform all the Work as described in the Documents entitled "**BID NO. 060-15/JO WATER TREATMENT PLANT INJECTION WELL MECHCANICAL INTEGRITY TEST**" for the City of Vero Beach, Florida, and shall do everything required by this Form of Agreement and any other Contract Documents.

Article 2. COMMENCEMENT AND COMPLETION - The Contractor shall commence Work under this Contract within _____ () calendar days after the Commencement Date, as described in the Notice to Proceed, and shall complete the Work within _____, unless the City grants Contractor an extension of time, as described herein.

Article 3. THE CONTRACT SUM - The City shall pay Contractor for performance of the Contract, subject to additions and deductions provided therein, in current funds as follows:

Written Amount _____

Numerical Amount \$ _____

Article 4. PROGRESS PAYMENTS - The City will make progress payments, based on a calculated percentage of Work which the Contractor has completed. The City shall make such progress payments on or about the 10th of each month for the previous month's Work, so long as Contractor has submitted an Estimate for Progress Payment.

Ten (10%) percent of the amount due and payable to the Contractor will be retained from each progress payment, to ensure that the Contractor completes all Work under this Contract and complies with all obligations hereunder.

The City will certify all requests for progress payments before presenting them to the City Finance Department for payment. If the Contract is in a sum less than \$25,000, a single final payment will be made upon the City's acceptance of all Work.

Article 5. FINAL PAYMENT - Before final payment, the Contractor shall submit evidence satisfactory to the City that all payrolls, material bills, and other indebtedness connected with the Work have been paid. The City shall have the right to demand and receive from the Contractor before making final payment, an affidavit stating that the Contractor has made payment in full for all labor, services and materials incorporated into the Work corresponding to the progress or final payment to be made. The City shall rely on said affidavit at face value.

The making and acceptance of the final payment shall constitute a waiver of all claims by the Contractor and the City, other than any claims the City may have arising from unsettled liens or from faulty Work appearing after final payment. The City may withhold from final payment such amounts as may be described elsewhere herein.

Article 6. INDEMNIFICATION AND INSURANCE - The Contractor shall indemnify City, as provided in Article 17, General Conditions, and procure and maintain insurance provided in Article 18, General Conditions, and Attachment "Insurance Requirements" and, to the extent required in said Articles or Attachment, require any and all Subcontractors to do the same.

Article 7. GUARANTEES - The Contractor shall guarantee via performance bond as described herein, the equipment, articles, devices, and materials furnished or installed, against any and all failure in proper use and operation for a period of one (1) year from the date of final acceptance of the Work completed under this Contract. The Contractor shall also obtain and guarantee by Performance Bond, as described herein, warranties from manufacturers for each article and piece of equipment furnished or installed, so that the manufacturer's warranty fully covers the equipment from date of shipment to the Contractor through the period of one (1) year after date of final acceptance of the Work completed under this Contract.

Article 8. LIQUIDATED DAMAGES - The parties, recognizing that time is of the essence and that it would be impossible to determine the City's damages in the event that the Contractor fails to complete the Contract by the Completion Date, hereby agree that the Contractor shall pay, as liquidated damages, the sum of Three Hundred and no/100 (\$300.00) Dollars for each calendar day beyond the Completion Date that Contractor fails to complete the Work. The parties further agree that the City may withhold such liquidated damages from any payment due the Contractor.

Article 9. CONTRACTOR'S REPRESENTATIONS - In order to induce the City to enter into this Contract, the Contractor makes the following representations:

- A. The Contractor has familiarized himself with the nature and extent of his obligations under this Contract. Contractor has familiarized himself with the Work Site, locality, and all local conditions and laws and regulations that in any manner may effect his costs, progress, or performance.
- B. The Contractor has carefully studied, or will carefully study, all reports of explorations and tests of subsurface conditions and Drawings of physical conditions which are identified or provided in this Contract or prior to any Work Order and accepts or shall accept the accuracy of any technical data contained in such reports and Drawings, upon which Contractor is entitled to rely.
- C. The Contractor has obtained and carefully studied (or assumes responsibility for obtaining and carefully studying) all such examinations, investigations, explorations, tests, reports, and studies (in addition to those referred to in Sub-Article B, above) pertaining to the subsurface or physical conditions at or contiguous to the Site or otherwise affecting his performance, as the Contractor considers necessary for the performance at the Contract Price and in accordance with the other terms and conditions of this Contract.
- D. The Contractor has correlated the results of all such observations, examinations, investigations, explorations, tests, reports, and studies with the terms and conditions of the Contract Documents.
- E. The Contractor has reviewed and checked all information and data shown or indicated on the Contract Documents with respect to existing underground facilities at or contiguous to the Site and assumes responsibility for the accurate location of said underground facilities. No additional examinations, investigations, explorations, tests, reports, studies or similar information or data in respect of said underground facilities are or will be required by Contractor in order to perform and furnish the Work at the Contract Price, within the Contract Time and in accordance with the other terms and conditions of the Contract Documents, including other revisions specified elsewhere herein.
- F. At the time of entering into the Contract, the Contractor has given the City written notice of all conflicts, errors, and discrepancies that the Contractor had discovered in the Contract Documents and the written resolution thereof by the City is acceptable to the Contractor.

Article 10. CONTRACT UNIT PRICES - The unit prices contained in the Bid Schedule are incorporated herein, with changes as noted, and made a part of this Contract.

**TITLE: BID NO. 060-15/JO WATER TREATMENT PLANT
INJECTION WELL MECHCANICAL INTEGRITY TEST**

WITNESSED BY:

(NAME OF CONTRACTOR/COMPANY)

Sign: _____
Print: _____

Sign: _____
Print: _____
Title: _____

Sign: _____
Print: _____

Sign: _____
Print: _____
Title: _____

(CORPORATE SEAL)

STATE OF _____
COUNTY OF _____

The foregoing instrument was acknowledged before me this _____ day of _____, 2015, by _____ as _____, and _____ as _____, on behalf of the corporation. They are personally known to me or have produced _____ as identification and did (did not) take an oath.

NOTARY PUBLIC

Sign: _____
Print: _____
State of _____ at Large (seal)
Commission No.: _____
My Commission Expires: _____

**TITLE: BID NO. 060-15/JO WATER TREATMENT PLANT
INJECTION WELL MECHCANICAL INTEGRITY TEST**

ATTEST:

CITY OF VERO BEACH:

Sign: _____
Print: TAMMY K. VOCK
Title: City Clerk

Sign: _____
Print: RICHARD WINGER
Title: Mayor

STATE OF FLORIDA
COUNTY OF INDIAN RIVER

The foregoing instrument was acknowledged before me this _____ day of _____, 2015, by Richard Winger, Mayor of the City of Vero Beach, and attested by Tammy K. Vock, as City Clerk of the City of Vero Beach, Florida. They are both known to me and did not take an oath.

NOTARY PUBLIC

Sign: _____
Print: _____
State of Florida at Large (seal)
Commission No.: _____
My Commission Expires: _____

Approved as to technical requirements:
policy:

Approved as conforming to municipal

Robert J. Bolton, Director of Water & Sewer

James R. O'Connor, City Manager

Approved as to form and legal sufficiency:

Approved as to budget sufficiency:

Wayne Coment, City Attorney

Cynthia D. Lawson, Director of Finance

Bond No. _____

Contract No. _____

PAYMENT AND PERFORMANCE BOND

BY THIS BOND, We, _____ (hereinafter "Contractor"), of
(contractor legal name)

_____, _____, _____,
(address) (city, state, zip) (telephone number)

as principal, and _____ (hereinafter "Surety"), of
(surety legal name)

_____, _____, _____,
(address) (city, state, zip) (telephone number)

as surety, are held and bound unto the CITY OF VERO BEACH (hereinafter "City"), of
1053 20th Place, P.O. Box 1389, Vero Beach, Florida 32961-1389, 772- _____, as obligee,
(telephone number)

in the sum of _____ Dollars \$ _____),
(125% of contract price)

for payment of which we bind ourselves, our heirs, personal representatives, successors, assigns, trustees and receivers, jointly and severally, firmly by this presents.

Contractor has by written agreement dated the ____ day of _____ 20__, entered into a
contract with City for _____
(general description of the improvement or work)

located and identified as _____
(legal description or street address of property being improved)

which contract and its terms, conditions, specifications and any amendments or change orders thereunder (hereinafter collectively the "Contract") are by reference made a part of this bond.

THEREFORE, THE CONDITION OF THIS OBLIGATION is such that, if the Contractor:

- (1) Promptly and faithfully performs the Contract at the times and in the manner prescribed in the Contract; and
- (2) Promptly makes payments to all claimants supplying the Contractor with labor, services, materials, or supplies, used directly or indirectly by Contractor, or otherwise, in or for the prosecution of the work provided for in the Contract; and

- (3) Pays the City all losses, damages, expenses, costs, and attorney's fees, including appellate proceedings, that City sustains because of a default by the Contractor under the Contract, and that the City sustains in enforcement of this Bond; and
- (4) Performs all guarantees and warranties of all work and materials furnished under the Contract for the time specified in the Contract or as provided by law or otherwise, which ever period is longer;

then this obligation shall be null and void; otherwise it shall remain in full force and effect.

Any changes in or under the Contract documents and compliance or noncompliance with any formalities connected with the contract or such changes shall not affect Surety's obligation under this bond. The Surety waives notice of any alteration or extension of time made or permitted by the City. In addition, the penal sum of this bond shall automatically be increased by the total cost of all approved change orders.

This bond shall inure to the benefit of all persons, companies and corporations entitled to make a claim for payment pursuant to the applicable provisions of F.S. § 255.05, or their assigns, provided such claimants observe the notice and time limitation provisions of that section. No final settlement between the City and the Contractor or the Surety, or both, shall abridge the right of any beneficiary hereunder whose claim may be unsatisfied.

Whenever the Contractor shall be and is declared by the City to be in default under the Contract, the City having performed its obligations thereunder, the Surety shall, upon reasonable notice of such default, promptly remedy the default, or shall promptly:

- (1) Complete the Contract in accordance with its terms, conditions, and specifications together with any change orders approved by the City prior to the default; or
- (2) Obtain a bid or bids, in the manner provided by law, for completing the Contract in accordance with its terms, conditions, specifications, amendments and change orders, and upon determination by the Surety of the lowest qualified and responsible bidder, or, if the City so elects at its sole option, upon determination by the City and the Surety jointly of the lowest qualified and responsible bidder, arrange for a contract between such bidder and the 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 plus all other costs and damages for which the Surety may be liable, minus the balance of the Contract price, but not exceeding the amount set forth in the first paragraph above plus all automatic increases provided hereunder. The term "balance of the Contract price," as used in this bond, shall mean the total amount payable by the City to the Contractor under the Contract and any amendments and change orders approved by the City prior to the default, less all payments made by the City to the Contractor.

Should the Surety fail to promptly remedy the Contractor's default in one of the manners provided herein, the City may remedy the default or complete or arrange for completion of the Contract, whereupon the Surety shall pay to the City all costs and damages for which the Surety may be liable hereunder plus the excess of the cost of completion that exceeds the balance of the Contract price, together with all expenses and costs incurred by the City as a result of the Surety's failure to remedy the Contractor's default as provided herein. This provision shall be cumulative to any other remedy available at law or equity. In any action on this bond, the prevailing party shall recover its costs, including, but not limited to, reasonable attorney's fees and costs. The aggregate liability of the Surety under this paragraph shall not exceed the amount of this bond plus all automatic increases provided hereunder and all additional expenses and costs provided in this paragraph for which the Surety may be liable.

SIGNED AND SEALED THIS _____ day of _____, 20__.

Witnesses as to Contractor:

ATTEST:

CONTRACTOR (Principal):

Print Name:

Full Legal Name of Contractor (SEAL)

Print Name:

Signature: _____
Print Name: _____

As its: _____
Title

STATE OF _____
COUNTY OF _____

The foregoing instrument was acknowledged before me this _____ day of _____, 20__,
by _____ as _____ for
(Name) (Title)

(Full Legal Name of Contractor)

NOTARY PUBLIC
Print Name: _____
My Commission Expires:

Witnesses as to Surety:

SURETY:

Print Name:

Full Legal Name of Surety (SEAL)

Print Name:

Signature: _____
Print Name: _____
As its Attorney-in-Fact

STATE OF _____
COUNTY OF _____

The foregoing instrument was acknowledged before me this _____ day of _____, 20____,
by _____ as Attorney-in-Fact for
(Name) (Title)

(Full Legal Name of Surety)

NOTARY PUBLIC
Print Name: _____
My Commission Expires: _____

Witnesses as to Agent:

COUNTERSIGNATURE: (Agent)

Print Name:

Signature _____
Print Name: _____

Print Name:

As: _____
Title

STATE OF _____
COUNTY OF _____

The foregoing instrument was acknowledged before me this _____ day of _____, 20____,
by _____ as _____ for
(Name) (Title)

(Full Legal Name of Surety)

NOTARY PUBLIC
Print Name: _____
My Commission Expires: _____

INSTRUCTIONS FOR PAYMENT AND PERFORMANCE BOND

- (1) Bond must be a Payment and Performance bond and shall be on the form provided by the City. No other format will be accepted.
- (2) Bond must not be dated earlier than date of the Contract for which this Bond is given.
- (3) The form of bond shall be used for each contract. The form contemplates one corporate surety only. In case multiple sureties or non-corporate sureties will be furnished, proper forms must be obtained.
- (4) If the principal (contractor) is a corporation, insert the full legal name and address of the corporation. Verify that the corporation is active and authorized to do business in Florida. Execution by the corporate president or vice-president is required with attestation by the corporate secretary. If executed by other than the appropriate corporate officer, a corporate resolution by the corporation's board of directors authorizing execution by the individual on behalf of the corporation is required and shall be attached. The corporate seal must be impressed or stamped. If the corporation has no seal, a scroll or adhesive seal shall appear following the corporate name.
- (5) If the principal (contractor) is an individual, the individual's full name and address shall be inserted, and the principal shall sign the bond with that person's usual signature on the line opposite the seal.
- (6) If the principals (contractor) are partners, (but not a legally formed partnership) their individual names and addresses shall be inserted, with the recital that they are partners. And if they compose a firm, name it. All such partners must sign. For legally formed and registered partnerships, insert the full legal name and address of the partnership, indicating whether general or limited. Verify that the partnership is active and authorized to do business in Florida. The general partners in a general partnership shall sign, the managing and general partner(s) of a limited partnership shall sign.
- (7) If the principal (contractor) is a limited liability company, insert the full legal name and address of the company. Verify that the company is active and authorized to do business in Florida. The managing member(s) of the company shall sign.
- (8) The above rules for execution also apply to the Surety executing the bond.
- (9) The Surety must meet the requirements of F.S. 287.0935 (and execute under seal if a corporation):
 - (a) the surety company is licensed to do business in Florida (verify the company is active and authorized); and
 - (b) the surety company holds a certificate of authority authorizing it to write surety bonds in Florida; and

- (c) the surety company has twice the minimum surplus and capital required by the Florida Insurance Code at the time the invitation to bid is issued; and
 - (d) the surety company is otherwise in compliance with the provisions of the Florida Insurance Code; and
 - (e) the surety company holds a currently valid certificate of authority issued by the United States Department of the Treasury under 31 U.S.C. ss. 9304-9308.
- (10) Original current and valid power-of-attorney authorizing execution of the bond by the surety's attorney-in-fact must be attached to the executed counterpart of the bond. (Under seal if a corporation).
- (11) If the bond is executed by an out-of-state agent, the executed counterpart of the bond must be countersigned by a Florida licensed resident agent.

AFFIDAVIT

STATE OF _____

COUNTY OF _____

Before me personally appeared the undersigned who, by me being first duly sworn, deposes and says:

The undersigned is a sub-Contractor under the prime Contractor under a Contract entered into by and

Between the _____, and _____ for the

performance of the following described Work:

The undersigned further deposes and says that said labor, materials, and/or services were of a total value of \$ _____ of which there remains due owing and unpaid the sum of \$ _____ to the undersigned.

Corporate Seal

Sub-Contractor

WITNESS:

_____ By: _____

_____ Title: _____

Sworn to and subscribed before
me this _____ day of _____, 20__.

Notary Seal

Notary Public State of Florida
at Large

CITY OF VERO BEACH WATER & SEWER DEPARTMENT

WAIVER AND RELEASE OF CLAIMS UPON PROGRESS PAYMENT

Project: _____ Project No. _____
Date of Contract: _____ Contract No. _____

The undersigned contractor for the above-referenced contract, in consideration of the sum of \$ _____, the receipt and sufficiency of which is acknowledged, hereby waives and releases its claims and right to make any claim for all labor, services, materials, and equipment furnished through _____ to the City of Vero Beach ("City") and arising under or by virtue of the above-referenced contract and changes thereto and hereby agrees to indemnify and hold harmless the City from any and all claims of any subcontractor having an interest in the contract. The term "subcontractor," as used herein, shall include any and all persons and firms furnishing labor, materials, services, or equipment incorporated into or supplied for the work under the contract, stockpiled for the project, or arising under any equipment-rental agreements, through the referenced date.

This waiver and release of claims is executed by the contractor for itself and its representatives, assigns and successors and covers all past and existing claims for work under the contract through the referenced date, but does not cover retention, if any, pursuant to the contract. In executing this waiver and release of claims, I represent and certify to the City that I possess the authority and capacity to execute this waiver and release of claims for the contractor, its representatives, assigns and successors, and to thereby bind them, and I agree to personally indemnify and hold harmless the City from any and all liabilities and costs, including attorney's fees, as may be imposed upon or incurred by the City because of any defect in or lack of my authority or legal capacity to execute this waiver and release of claims for the contractor, its representatives, assigns and successors.

Contractor

By: _____
Print Name: _____
Title: _____

STATE OF FLORIDA
COUNTY OF _____

Sworn to and subscribed before me this _____ day of _____, 2015, by _____, who _____ is personally known to me OR _____ produced _____ as identification.

Notary Public
Print Name:
My Commission Expires:

CITY OF VERO BEACH WATER & SEWER DEPARTMENT
WAIVER AND RELEASE OF ALL CLAIMS UPON FINAL PAYMENT

Project: _____
Date of Contract: _____

Project No. _____
Contract No. _____

The undersigned contractor for the above-referenced contract, in consideration of final payment in the sum of \$ _____, the receipt and sufficiency of which is acknowledged, hereby waives and releases any and all claims and right to make any claim for any and all labor, services, materials, and equipment furnished to the City of Vero Beach ("City") and arising under or by virtue of the above-referenced contract and changes thereto and hereby agrees to indemnify and hold harmless the City from any and all claims of any subcontractor having an interest in the contract. The term "subcontractor," as used herein, shall include any and all persons and firms furnishing labor, materials, services, or equipment incorporated into or supplied for the work under the contract, stockpiled for the project, or arising under any equipment-rental agreements.

This waiver and release of all claims is executed by the contractor for itself and its representatives, assigns and successors and covers all past and existing claims for work under the contract. In executing this waiver and release of all claims, I represent and certify to the City that I possess the authority and capacity to execute this waiver and release of all claims for the contractor, its representatives, assigns and successors, and to thereby bind them, and I agree to personally indemnify and hold harmless the City from any and all liabilities and costs, including attorney's fees, as may be imposed upon or incurred by the City because of any defect in or lack of my authority or legal capacity to execute this waiver and release of all claims for the contractor, its representatives, assigns and successors.

Contractor

By: _____
Print Name: _____
Title: _____

STATE OF FLORIDA
COUNTY OF _____

Sworn to and subscribed before me this _____ day of _____, 2015, by _____, who _____ is personally known to me OR _____ produced _____ as identification.

Notary Public
Print Name:
My Commission Expires:

LOCAL BUSINESS CERTIFICATION FORM

1. "Local business" shall mean a business that meets all of the following criteria:
- (a) Has had a staffed and fixed office or distribution point, with a verifiable street address, located within Indian River; Martin; or St. Lucie County for at least one (1) full calendar year immediately prior to the issuance of the request for competitive bids or request for proposals by the County. Post office boxes shall not be used or considered for the purpose of establishing a physical address; and
 - (b) Has had, for at least 12 months prior to the date of the advertisement for the particular good or service being solicited, a current "Local Business Tax Receipt" issued by; Indian River; Martin; or St. Lucie County, if applicable; and
 - (c) Holds any license or competency card required by Indian River County; if applicable; and
 - (d) If the contract is awarded, will be the person or entity in direct privity of contract with City of Vero Beach and not as subcontractor, or any lower-tier subcontractor, materialman, or supplier.

1. Company Name: _____

2. Address: _____

3. If applicable, Contractor License or Competency Card #: _____

4. PLEASE ATTACH COPY OF CONTRACTOR LICENSE OR COMPETENCY CARD.

5. If applicable, Business Tax Receipt #: _____

6. PLEASE ATTACH COPY OF BUSINESS TAX RECEIPT.

7. Phone Number: _____ .Fax Number: _____

8. I hereby certify that, If the contract is awarded, the entity set forth in item 1 above will be the person or entity in direct privity of contract with Indian River County and not as subcontractor, or any lower-tier subcontractor, materialman, or supplier.

Signature: _____

Name and Title: _____

VENDOR PLEASE DO NOT COMPLETE BELOW

To be completed by an authorized representative from City of Vero Beach:

Meets definition of Local Business ___ YES ___ NO

If NO, provide reason:

Date: _____

(Authorized Signature)

To receive Local Bid preference, this certification and copies of all required documents must be submitted with your Bid package.

INSURANCE REQUIRED

INSURANCE REQUIRED

(Construct. 5k – 300k Revised 05/16/2013)

A. General

Before starting and until acceptance of the work by the City, the Contractor shall procure and maintain insurance of the types and to the limits specified below.

The contractor shall require each of his subcontractors to procure and maintain, until completion of that subcontractor's work, insurance of types and to the limits specified below. It shall be the responsibility of the contractor to ensure that all his subcontractors comply with all of the insurance requirements contained herein relating to such subcontractors. The City reserves the right to request proof of subcontractor's insurance from the contractor.

B. Coverage

Except as otherwise stated, the amounts and types of insurance shall conform to the following minimum requirements:

1. **Workers' Compensation**

\$500,000 each accident
\$500,000 bodily injury by disease each employee
\$500,000 bodily injury by disease policy limit

Workers' Compensation insurance must meet mandatory statutory limits for employers with three or more employees.

If any operations are to be undertaken on or about navigable waters, coverage must be included for the U.S. Longshoremen & Harbor Workers Act and Jones Act.

2. **Commercial General Liability** - Coverage must be afforded on a form no more restrictive than the latest edition of the Commercial General Liability Policy filed by the Insurance Services Office and must include:

\$1,000,000 per occurrence/\$2,000,000 aggregate

3. **Business Auto Policy** - Coverage must be afforded on a form no more restrictive than the latest edition of the Business Auto Policy filed by the Insurance Services Office and must include:

\$1,000,000 /combined single limit (CSL)

4. **Umbrella** - \$1,000,000 per occurrence. Otherwise, \$2,000,000 per occurrence, if the contract exceeds 180 days or \$300,000.

5. **Certificates of Insurance** - Certificates of all insurance required from the contractor shall be filed with the City and shall be subject to its approval for adequacy and protection. Certificates from the insurance carrier, stating the types of coverage provided, limits of liability and expiration dates, shall be filed with the City before operations are commenced. The City of Vero Beach shall be identified as an additional insured for general and automobile liability coverage's required above. A copy of the additional insured endorsement must be attached and contain language no less restrictive than ISO Form CG20100704 or ISO Form CG20330704. The required certificates of insurance shall not only name the types of policies provided, but shall also refer specifically to this contract and section and the above paragraphs in accordance with which such insurance is being furnished, and shall state that such insurance is as required by such paragraphs of this contract. If the initial insurance expires prior to the completion of the work, renewal certificates shall be furnished thirty (30) days prior to the date of expiration.

6. **Notice of Cancellation and/or Restriction** - Each policy must be endorsed to provide the City with a minimum of thirty (30) days notice of cancellation and/or restriction, ten days (10) days notification for non-payment.

SECTION 01019

GENERAL REQUIRMENTS

PART 1 - GENERAL

1.01 PROJECT LOCATION: This project is located within the Vero Beach Water Treatment Plant (WTP) located at 2515 Airport Drive, Indian River County.

1.02 SCOPE OF WORK: The Work to be performed by the Contractor includes furnishing all materials, labor, tools, equipment, water, light, power, transportation, superintendence, temporary construction of every nature, and all other services and facilities of every nature whatsoever to perform the Mechanical Integrity Testing (MIT) on the Vero Beach WTP Injection Well (IW1) as shown on the Drawings and/or as herein described as specified. All Work shall be in accordance with the Contract Documents. The performance of the MIT shall incorporate the following criteria.

A. IW1 shall not be out of service or use to the Owner for more than 36 contiguous hours. After this time has elapsed, the well shall be returned to service, regardless of the status of the test. If additional out of service time for the injection well is required, it shall be re-scheduled but assumed not to occur until the well has been back in regular service at least 12 hours. The Contractor shall receive no additional compensation for failure to complete the work within the 36 hour period and the associated re-scheduling, exclusive of the Additive Alternate items. If any or all of the Additive Alternate items are performed, as determined by the Engineer, the Contractor shall submit a detailed schedule to perform the Additive alternate work. The schedule shall incorporate shutdown periods of no more than 36 contiguous hours and subsequent online periods of at least 12 hours.

B. Upon receipt of 2-hour written notification from the Engineer, the Contractor shall terminate test activities and return the injection well to normal service. The Owner does not intend for this to occur, but this option will be implemented if system flow events dictate need. This means any temporary wellhead modifications need to incorporate this requirement. The Contractor is responsible for coordinating his work schedule with the Engineer.

C. The Contract shall provide 72 hours advance notice to the Engineer of intent to remove the well from service and commence testing work. The Owner will make reasonable efforts to accommodate the shut-down request but reserves the right to delay testing as required to react to system flow events and/or facility performance. Refer to Section 11561 for additional information and considerations relative to work schedule and sequence.

1.03 INTERPRETATION OF CONTRACT DOCUMENTS:

A. Specifications and Drawings included in this Contract establish the performance quality requirements, location and general arrangement of materials and equipment, and establish the minimum standards for quality of workmanship and appearance

B. A part of the Work that is necessary or required to make each installation satisfactory and operable for its intended purpose, even though it is not specifically included in the Specifications or on the Drawings, shall be performed as incidental work as if it were described in the Specifications and shown on the Drawings.

1.04 COORDINATION OF WORK WITH OTHER CONTRACTORS AND PLANT OPERATORS: Contractor will be required to coordinate work efforts with other plant contractors who may be actively working on the project site. It is noted that the work site is on

an operating water treatment plant. The Contractor shall coordinate activities to minimize impact on plant operation.

1.05 GRADES, DIMENSIONS AND ELEVATIONS: Grades shown are finished grades. Written dimensions have preference over scaled dimensions.

1.06 EXISTING UTILITIES AND STRUCTURES: The existing utilities and facilities shown on the drawings were located from the Owner's and other records. Guaranty is not made that all existing facilities are shown or that those shown are entirely accurate. The Contractor shall assure himself of any utilities, structures or facilities prior to performing any Work. Prior to the start of Work, the Contractor shall request each utility agency to advise him of the location of their facilities in the vicinity. The Owner and the Engineer will assume no liability for damages sustained or costs incurred because of the Contractor's operations in the vicinity of existing utilities or structures. The Contractor shall notify the Engineer of any deviation between existing conditions and the drawings.

When structures and utilities have been properly shown or marked and are disturbed or damaged in the execution of the Work, they must be repaired immediately in conformance with best standard practice and the approval of the Owner of the damaged utility or structure. In the case of structures and utilities which have not been properly shown or located as outlined above and are disturbed or damaged in the prosecution of the Work, take whatever steps are necessary for safety and notify the affected utility Owner and avoid any actions which might cause further damage to the structure or utility. Should the Work require repairs, changes, or modifications of the Owner's utilities as well as other utilities, it is the responsibility of the Contractor to provide for the maintenance of continuous water, sewage, electric, telephone and other utility services to all present customers of such utilities, unless approval in writing is secured from the applicable utility company or Owner for interpretation of such service.

1.07 PRESERVING WATER QUALITY: The Contractor shall exercise extreme care to minimize degradation of water quality at the site. All necessary provisions shall be taken to insure compliance with the water quality standards of the State of Florida. Refer to Section 11561 for additional information and considerations relative to water quality preservation.

1.08 LIST OF FIGURES:

The figures included with the Contract Documents are actually the record construction drawings for the well and are included for reference only.

1.09 SUBSTITUTIONS:

A. Substitutions will not be permitted on any items specified herein or identified on the drawings where two or more manufacturers have been named unless they are followed by the words "or equal". Substitutions will also not be considered on any specified items whenever they are followed by the words "no substitutions". All substitution requests must be made in writing to the Engineer within five days of the Notice To Proceed.

B. Submit five copies of request for substitution. Include in request:

1. Complete Data substantiating compliance of proposed substitution with Contract Documents.

2. For Products:

- a. Product identification, including manufacturer's name and address.
- b. Manufacturer's literature:
 - (1) Product description.

- (2) Performance and test data.
- (3) Reference standards.
- c. Samples.
- d. Name and address of similar projects on which product was used, and date of installation.

3. For construction methods:

- a. Detailed description of proposed method.
- b. Drawings illustrating methods.

4. Itemized comparison of proposed substitute with product or method specified.

5. Data relating to changes in construction schedule.

6. Relation to separate contracts.

7. Accurate cost data on proposed substitution in comparison with product or method specified.

1.10 SANITARY FACILITIES: The Contractor shall provide temporary restroom facilities for field crews. Existing Owner facilities are not available for use by the Contractor.

1.11 WORKING HOURS: All work on this contract, shall be conducted during normal working hours (7 A.M. to 7 P.M.) on weekdays unless prior written approval is given by the Engineer. No work shall be permitted on weekends and Engineer observed holidays without approval from the Engineer. All work requiring FDEP attendance must be performed during regular FDEP working hours. Work also shall be in accordance with Part 1.02 of this specification.

1.12 ACCESS TO THE WORK SITE: The Contractor may use only the roads designated by the Owner for access to the work locations. The Contractor shall be responsible for maintaining, protecting and restoring the routes to the satisfaction of the Owner and Engineer.

1.13 VIDEO TAPING: The Contractor, to the satisfaction of the Engineer, shall video tape or digitally photograph all areas of the construction, staging, etc. A copy of the video tapes in DVD format or copies of the photographs shall be delivered to the Engineer and approved as acceptable before any work or site mobilization occurs.

1.14 FAMILIARITY WITH LAWS: The Contractor is assumed to be in compliance with and familiar with all federal, state and local laws, ordinances, rules, codes and regulations that may in any manner affect the work. Failure to familiarize themselves with applicable laws, etc., shall in no way relieve the Contractor from responsibility.

1.15 RESTORATION OF DAMAGED SURFACES, STRUCTURES AND PROPERTY: Where pavement, fences or other property or surface structures not designated as pay items, have been damaged, removed or disturbed by the Contractor, whether deliberately or through failure to carry out the requirements of the Contract Documents, State laws, municipal ordinances or the specific direction of the Engineer, or through failure to employ usual and reasonable safeguards, such property and surface structures shall be replaced or repaired at the expense of the Contractor to a condition equal to that before Work began within a time frame approved by the Engineer.

1.16 WATER SUPPLY: Potable water is available at the project site and will be provided to the Contractor at no additional cost. Supply is available from an existing hydrant located approximately 100 feet southeast of the injection well pump station. When the Contractor

utilizes the existing potable water supply at the plant, he shall provide all temporary piping with an in-line meter to quantify the flow rate and total amount of water utilized for this operation. The Contractor shall also install a pressure reducing backflow prevention device between the injection well and water source. The meter and backflow-preventer assembly shall be acceptable to the Owner.

It is anticipated, but not guaranteed, that treated reclaim water will be available for purposes of flushing IW1 prior to and during radioactive tracer survey testing. The Contractor shall coordinate the use of reclaim water with the Owner and Engineer. No standby time will be granted waiting for the Owner to supply reclaim water to the Contractor.

The water needed for testing is further discussed in Specification Section 11561. The costs for the supplemental equipment and installation to connect the water supply shall be included in the lump-sum price for testing the injection well.

1.17 ELECTRICITY: All necessary temporary electrical lines shall be furnished, installed, connected and maintained at the Contractor's expense in a manner satisfactory to the Owner and Engineer and removed at the completion of the work. The Contractor shall perform all work, including utility installations, in accordance with all Federal, State, County and, if applicable, municipal codes and regulations.

1.18 EQUIPMENT REQUIREMENTS: Equipment in first-class working order shall be provided. The Contractor shall provide personnel and equipment having the minimum capabilities necessary to do the described work. No unnecessary delays or work stoppages shall be tolerated because of equipment failure.

1.19 WORK SCHEDULE: Prior to starting the work, the Contractor shall confer with the Engineer to develop an approved work schedule which will permit the project to proceed as normally as practical. The Contractor shall prepare and submit to the Engineer for approval, the detailed testing schedule containing anticipated start and completion dates for each of the testing steps outlined herein.

1.20 FDEP PLAN: The work performed under the specification shall fully comply with the requirements set forth in these documents and the approved FDEP plan for this Mechanical Integrity Test. A copy of the approved plan is included as Appendix A.

1.21 SITE SECURITY: Security at the construction site is given a very high priority by the Owner. The Contractor shall recognize that this project is sensitive in nature as a result of homeland security concerns and the security criteria stipulated herein constitutes a material inducement of the Owner to enter into this contract with the Contractor.

It is noted that the Owner has implemented site security measures which restrict and control entrance to and exit from the site. The Contractor shall anticipate and work within the requirements of the Owner's security measures. The Owner reserves the right to require the Contractor to perform a background check on all agents, licensees, invitees, employees, subcontractors, material-men, workers and suppliers entering the site and supply the results to the Owner. Should this occur, the Contractor shall secure appropriate releases and authorizations from the affected parties prior to performing the background checks. All background checks shall be performed prior to allowing the workers on to the project site. The Owner reserves the right but not the obligation to disallow entrance to the work site of any persons or entities as a result of the background check or other relevant information, regardless of the result of such background check or other relevant information. Background checks shall be in such form and fashion as is acceptable to the Owner but at a minimum shall be performed through the Indian River County Sheriff's Department and the Florida Department of Law Enforcement or such other entity, firm or individual acceptable to the

Owner, in its' sole discretion. The Contractor shall allow for the time to perform the necessary background checks within the project schedule.

Nothing herein shall confer liability upon the Owner as a result of the security steps and provisions set forth in this contract. Each party who has had a background check performed shall be required to carry a photo identification and clearance tag shall be required to enter the site and shall be maintained with the person at all times while on site. The Contractor shall provide to the Owner a complete roster of all parties to enter the work site pursuant to this construction and keep said roster updated and current on at least a monthly basis.

1.22 HEALTH AND SAFETY: The Contractor shall have the total responsibility to maintain the site in a safe condition in full compliance with applicable laws and rules. Safe access for the Engineer, Owner and regulatory personnel shall be maintained at all times.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

END OF SECTION

SECTION 01150

MEASUREMENT AND PAYMENT

PART 1 - GENERAL

1.01 GENERAL: Measurement and payment will be based upon Work completed and accepted in accordance with the Contract Documents. No separate payment will be made for excavation, trenching, backfilling, leakage tests, surveying, density tests or other incidental items of Work not shown in the Agreement.

1.02 MEASUREMENT: The Contractor will be paid for work performed under this contract according to Engineer approved percentage of completion for each lump sum item on the schedule of values and adjusted per the unit prices set forth in these documents to the extent the actual placed quantities differ from the quantities shown on the schedule of values, all as further described and set forth below and in other sections of this document.

Item	Description
1. Video survey of complete well and open hole	Payment for all work, materials and equipment will be made at the unit price for each video survey performed. The description for this item is provided in Section 11561.
2. MIT (Pressure Test) of Annular Space	Payment for all work, materials and equipment will be made at the lump sum price for this item. The description for this item is provided in Section 11561 ("Annular Hydrostatic Pressure Testing"). This item includes performing additional testing prior to the official test witnessed by FDEP, and may include multiple tests thereafter if the tests are deemed unsuccessful.
3. Temperature and Background Gamma-ray Logging and Radioactive Tracer Survey Testing	Payment for all work, materials and equipment will be made at the lump sum price for this item. The description for this item is provided in Section 11561 ("Radioactive Tracer Survey").
4. Standby Time when ordered by the Engineer	The Owner and/or Engineer may order the Contractor to stop operations. The Owner and Engineer will schedule the request so it causes a minimum of disruption. The Contractor shall be reimbursed at rates listed in the Schedule of Values. This shall be applied only if the injection well must be used by the Owner during testing. This item shall also cover additional time and expense of the Contractor to return the wellhead piping to its original configuration for use by the Owner if required prior to the completion of the testing.
5. Non-Abrasive Tubing Brushing (if necessary)	Payment for all work, materials and equipment will be made at the lump sum price for this item. The description for this item is provided in Section 11561 ("Mechanical Cleaning of the Injection Tubing"). The Engineer will determine if this item shall be performed after the completion of the initial video survey. This additive alternate item includes the cost of performing cleaning on the entire length of the injection tubing. This item also includes performing one (1) additional video survey and providing 5 DVD copies of the post-cleaning video.
6. MIT (Pressure Test) of Injection Well using an Inflatable Packer (if necessary)	Payment for all work, materials and equipment will be made at the lump sum price for this item. The description for this item is provided in Section 11561 ("Mechanical Packer Test"). The Engineer will determine if this item shall be performed after the completion of the annular space pressure tests. This item includes performing additional testing prior to the official test witnessed by FDEP, and may include multiple tests thereafter if the tests are deemed unsuccessful.

1.03 PAYMENT: Payment will be made at the lump sum price for each lump sum item shown in the Proposal (adjusted per the unit prices set forth in the additive/ deductive table), stored and/or

installed and accepted, which price and payment shall constitute full compensation for furnishing all materials and performing all Work in connection therewith and incidental thereto.

1.04 PAYMENT SCHEDULE: The following schedule shall be adhered to:

- A. 10th of the Month - Cutoff date
- B. 13th of the Month - Pay estimate to the Inspector
- C. 15th of the Month - Pay estimate to the Engineer
- D. 20th of the Month - Pay estimate to the Owner.
- E. 10th the following Month - Payment by the Owner

When the cutoff date occurs on a holiday or weekend, the date shall be the last work day preceding the 10th.

1.05 PAY ESTIMATE FORMS: The Engineer will supply a pay estimate form for the Contractor to use for submittal. The Contractor shall make copies to be used for submittal of the following pay estimates. Failure of the Contractor to sign the pay estimate or attach appropriate documentation shall be grounds for returning the pay estimate with no action by the Owner or Engineer. The Contractor shall provide an updated schedule with each pay application. The schedule must include the original estimated start and finish dates as provided in the schedule submitted prior to starting construction. The updated schedule also shall provide actual start and finish dates as construction progresses.

1.06 MOBILIZATION

- A. Consists of the preparatory Work and operations in mobilizing for beginning Work on the Project, including, but not limited to, those operations necessary for the movement of personnel, equipment, supplies and incidentals to the Project site, and for the establishment of temporary offices, buildings, safety equipment and first aid supplies, sanitary and other facilities, as required by these Specifications, and State and local laws and regulations.
- B. When the Bid Form does not include a separate item for Mobilization, all Work and incidental costs specified as being covered under Mobilization is to be included for payment under the several scheduled items on the Bid Form, and no separate payment will be made therefore. The costs of bonds, insurance and any other pre-construction expenses necessary for the start of the Work, excluding the cost of construction materials, are to be included in Mobilization.

1.07 ADDITIVE ALTERNATES: No payment for work noted in items 5 and 6 in the table above and noted on the Bid form as Additive Alternates will not be made unless such work is directed to be performed, in writing, by the Engineer.

SECTION 01300

SUBMITTALS

PART 1 - GENERAL

1.01 DESCRIPTION OF REQUIREMENTS: The types of submittals controlled by these general requirements include shop drawings, operation and maintenance manuals, instruction manuals, samples, and miscellaneous work-related submittals. The individual submittal requirements are specified herein and in applicable sections for each unit of work. Other submittals as specified in other sections shall follow the requirements of those sections.

1.02 GENERAL SUBMITTAL REQUIREMENTS: Coordination and Sequencing: The Contractor shall coordinate preparation and processing of submittals with performance of the work so that the work will not be delayed by submittals. The Contractor shall allow for adequate review time by the Engineer for the submittals. The Contractor shall coordinate and sequence different categories of submittals for the same work, and for interfacing units of work, so that one will not be delayed for coordination with another. No extension of time will be allowed because of failure to properly coordinate and sequence submittals.

Preparation of Submittals: Provide permanent marking on each submittal to identify project, date, Contractor, subcontractor, submittal name and similar information to distinguish it from other submittals. The marking system used shall be as required by the Engineer. Each submittal shall clearly state where the item is to be installed. Package each submittal appropriately for transmittal and handling. Submittals which are received from sources other than through Contractor's office will be returned without action. All results of testing by independent labs or agencies shall be submitted to the Engineer. This shall include both passing and failing tests.

1.03 SPECIFIC CATEGORY SUBMITTAL REQUIREMENTS: General: Except as otherwise indicated in individual work sections, comply with general requirements specified herein for each indicated category of submittal.

1.04 GENERAL SHOP DRAWING REQUIREMENTS: As soon as practicable and within ten (10) days after the Notice to Proceed, the Contractor, in conformance with the conditions of the contract, shall submit to the Engineer for approval, four (4) copies (in addition to those copies necessary for his own requirements to a maximum of three (3) copies) of all required shop drawings. The Contractor shall submit newly prepared information: do not reproduce contract documents or copy standard printed information as basis of shop drawings. Prepare on reproducible sheets, not less than 8-1/2 in. x 11 in. and not larger than 24 in. x 36 in., except for actual pattern or template type drawings. Prepare shop drawings to accurate scale, except where other form is indicated as acceptable. Show dimensions and note which are based on field measurements, identify materials and products in the work shown. Indicate name of firm which has prepared each shop drawing, and provide appropriate project identification.

Shop drawings submitted to the Engineer for his approval shall first be checked and approved by the Contractor, as indicated by a stamp marked "Checked and Approved" on each copy of the shop drawing. Shop drawings received without the Contractor's "Checked and Approved" stamp will be returned without further action. The Contractor will receive only one marked up return copy of any drawings stamped "Not Approved" or "Revise and Resubmit".

Shop drawings shall be submitted for the following:

1. Project Schedule
2. Shutdown/Testing Plan
3. Drawing showing specification of tool assembly used in the RTS
4. Any other items requested by the Engineer

Product Data: Collect required data into one submittal for each unit of work or system; and mark each copy to show which choices and options are applicable to the project. Include manufacturer's standard printed recommendations for application and use, compliance with standards, application of labels and seals, notation of field measurements which have been checked, and special coordination requirements. Maintain one set of product data for each submittal at the project site, available for reference by the Engineer. For purposes of this submittal, manufacturer's fabrication drawings shall be synonymous with shop drawings.

The Contractor shall not submit product data or allow its use on the project, until compliance with requirements of the contract documents has been confirmed. Submittal is for information and record, unless otherwise indicated.

1.05 DOCUMENTS: Maintain at the job-site one copy of all drawings, specifications; addenda; approved shop drawings; change orders; field orders; other contract modifications; and other approved documents submitted by the Contractor in compliance with various sections of the specifications. Each of these Project Record Documents shall be clearly marked "Project Record Copy" and maintained in good condition; available at all times for review by the Engineer and not used for construction purposes.

PART 2 AND 3 - PRODUCTS AND EXECUTION (not applicable)

SECTION 01400

GENERAL QUALITY CONTROL

PART 1 - GENERAL

1.01 DESCRIPTION OF REQUIREMENTS: Definitions: Specific quality control requirements for the work are indicated throughout the contract documents and are not repeated herein. The requirements for this section are primarily to performances of the work beyond furnishing of manufactured products. The term "Quality Control" includes, but is not necessarily limited to, inspection and testing and associated requirements. This section does not specify or modify Engineer's duties relating to quality control and Contract enforcement.

1.02 RESPONSIBILITY FOR INSPECTIONS AND TESTS: Unless otherwise noted, all testing and inspections required by these specifications shall be performed by a properly certified entity. All costs associated with the testing and inspections shall be the Contractor's responsibility. The Contractor shall also be responsible for all tests or inspections required by any entity having jurisdictional control over the work.

The costs for those required services by independent testing laboratories are recognized to be included in the contract sum.

No failure of test agencies, whether engaged by Owner or Contractor, to perform adequate inspections or tests or to properly analyze or report results, shall relieve the Contractor of responsibility for fulfillment of the requirements of the contract documents.

1.03 QUALITY ASSURANCE: General Workmanship Standards: Except as more definitively specified, the Contractor shall comply with recognized workmanship quality standards within the industry as applicable to each unit of work, including ANSI standards where applicable. It is a requirement that each category of trades person or installer performing the work be prequalified, to the extent of being familiar with applicable and recognized quality standards for that category of work, and of being capable of workmanship complying with those standards. The Engineer shall be the sole judge of what constitutes industry workmanship standards.

1.04 PRODUCT DELIVERY-STORAGE-HANDLING: General: Handle, store and protect materials and products, including fabricated components, by methods and means which will prevent damages, deterioration and losses including theft (and resulting delays), thereby insuring highest quality results as the performance of the work progresses. Control delivery schedules so as to minimize unnecessary long-term storage at the project site prior to installation. Contractor shall provide covered, inside storage for all new equipment on the site which is not intended for outside installation. Electrical, hydraulic and pneumatic connections on all equipment shall be protected from the elements. Contractor shall store all material on the project site unless specifically authorized otherwise by the Owner.

1.05 WATER TIGHTNESS: Equipment containing liquids that are not subject to leakage testing, as may be specified elsewhere, shall be free of all leakage when filled to the maximum pressure or static head that could be applied during operation of the facilities. The duration of all leakage testing shall be 48 hours. Any damp areas resulting from the tests shall be considered leaks and shall be repaired. All testing shall be completed prior to the application of coating systems, if any.

PART 2 - PRODUCTS (not applicable)

PART 3 - EXECUTION

3.01 PREPARATION FOR INSTALLATION: Installer's Inspection of Conditions: The Contractor shall require the fabricator and installer of each major unit of work to inspect substrate to receive the work, and conditions under which the work will be performed, and to report (in writing to the Contractor and the Engineer) unsatisfactory conditions. Do not proceed with the work until unsatisfactory conditions have been corrected in a manner acceptable to the fabricator and installer.

3.02 INSTALLATION QUALITY CONTROL: Manufacturer's Instructions: Where installations include manufactured products, comply with manufacturer's applicable instructions and recommendations for installation, to whatever extent these are more explicit or more stringent than applicable requirements indicated in the contract documents.

The Contractor shall inspect each item of materials or equipment immediately prior to installation, and reject damaged and defective items.

Provide attachment and connection devices and methods for securing work as it is installed; true to line and level, and within recognized industry tolerances if not otherwise indicated.

The Contractor shall recheck measurements and dimensions of the work, as an integral step of starting each installation.

Install work during conditions of temperature, humidity, exposure, forecasted weather, and status of project completion which will ensure best possible results for each unit of work, in coordination with entire work. Isolate each unit of work from non-compatible work, as required to prevent deterioration.

Mounting Heights: Except as otherwise noted, mount individual units of work at industry-recognized standard mounting heights, for applications indicated. Refer questionable mounting height choices to the Engineer for final decision.

Adjust, clean, lubricate, restore marred finishes, and protect newly installed work, to ensure that it will remain without damage or deterioration during the remainder of the construction period.

SECTION 11561
MECHANICAL INTEGRITY TEST

PART 1 - GENERAL

1.01 SCOPE: The work described in these specifications is for the 5-year Mechanical Integrity Test (MIT) of Injection Well No. 1 (IW1) at the City of Vero Beach Water Treatment Plant (WTP) in Indian River County, Florida. A location map is included in Appendix B, Sheet 1 of 6. A site plan is included in Appendix B, Sheet 2A of 6. Construction details for IW1 are included in Appendix B, Sheet 5 of 6. The concrete pad, aboveground piping and wellhead configuration details are provided in Appendix B, Sheet 3 of 6. All work described shall be performed by the Contractor unless otherwise stated.

The Contractor shall assure himself of the suitability of the well pad to accommodate any equipment to be used, and shall, as a part of this contract, perform whatever modifications will be necessary to accommodate his equipment. The Contractor shall satisfy himself regarding all local conditions affecting his work by personal investigation.

Time is of the essence in completing this program. No unreasonable or avoidable delays will be tolerated in beginning or completing this program. Failure to substantially complete the work outlined in these specifications within the allotted time period, except as a result of an "Act of God" or some other reason or reasons which can reasonably be asserted to be outside of the ability of the Contractor to influence, may result in the assessment of liquidated damages against the Contractor by the Owner.

Unless specifically stated otherwise, the Contractor shall provide all labor, equipment, materials, tools, equipment and utility necessary to complete all work contained within these Specifications. The Contractor shall perform all work, including utility installations, in accordance with all Federal, State, County and, if applicable, municipal codes and regulations. At the completion of testing, the Contractor shall remove all equipment and leave the site in good condition acceptable to the Owner. All depths and material requirements are approximate.

1.02 OUTLINE SPECIFICATION OF WORK

- A. MOBILIZATION
 - 1. Equipment Setup
 - 2. Coordination with Operator and Engineer concerning well operations

- B. MECHANICAL INTEGRITY TESTING
 - 1. Conduct a television survey
 - 2. Conduct a hydrostatic pressure test
 - 3. Conduct temperature, background gamma-ray and radioactive tracer survey logs

- C. DEMOBILIZATION

1.03 SITE ACCESS: The injection well is accessible at the site. An access road is available for mobilization of equipment to the well. The Contractor shall satisfy himself with regard to site access

prior to beginning any work and shall, as part of this contract, make any modifications necessary (subject to the Owner's prior approval) to make the site accessible. Any modifications shall be temporary and must be removed unless determined differently, in advance, by the Owner. The Contractor is responsible for examining site conditions and satisfying himself that it is clear and accessible for his equipment, allowing him to perform the work described in these Specifications.

1.04 DRILLING PAD AND WELLHEAD: An existing reinforced concrete pad exists at the wellhead. The Contractor shall satisfy himself as to its suitability for his equipment and the work contemplated. The Contractor shall repair any damages to the pad caused by performing the specified work to original conditions.

The Contractor shall maintain the well and wellhead so that fluids are not allowed to escape from the well. If fluids should overflow, leak or escape from the pad during an unforeseen emergency, the Contractor shall be responsible to take whatever immediate steps are necessary to stop the flow and clean up the fluids. Within 3 days of any such occurrence, if cleanup is not complete, the Contractor shall provide a written plan to the Engineer to continue cleanup and monitor its effectiveness. Upon approval, the Contractor shall implement the remedial plan. The Contractor shall cooperate with the regulatory agencies with authority over the cleanup and shall secure whatever permits/approvals are necessary to accomplish the cleanup. The Contractor shall be responsible for all remedial activities necessary to the satisfaction of the Owner, the Engineer and the cognizant regulatory agencies.

1.05 DAILY LOG: A detailed daily log shall be maintained by the Contractor during the testing of the injection well. The log shall give a *complete* description of the depth of the testing, operations, and other such pertinent data, including the sizes and lengths of material installed in the well for testing. The daily log shall be maintained on site and available for inspection by any authorized regulatory agency representative, the Engineer, and Owner at all times. A copy of the Daily Log shall be submitted to the Engineer upon completion of the work.

1.06 REMEDIAL WORK: If remedial work proves to be necessary because of accident, loss of tools, defective material, or for any other cause, the Contractor shall propose a method of correcting the problem, in writing. Suggested methods shall be reviewed and approved by the Engineer, the Owner, the Florida Department of Environmental Protection (FDEP) and the Underground Injection Control-Technical Advisory Committee (UIC-TAC) before work proceeds.

1.07 WARRANTY: The work and service shall be warranted under the Contract. All workmanship, materials, and equipment furnished, used, or installed in the work shall be free from defects and flaws, and furnished in accordance with these Specifications. The strength of all parts of all manufactured equipment shall be adequate and as specified. The Contractor shall repair, correct, or replace all damage to the well resulting from failures covered by the warranty. The warranty shall remain in effect for one year from the date of the testing.

PART 2 - PRODUCTS – NOT APPLICABLE

PART 3 - EXECUTION

3.01 GENERAL: It is essential that salty or brackish water produced from any source during operations is prevented from contaminating the shallow aquifer which contains fresh water. The well testing shall be accomplished without any overflow. The Contractor shall be required to take all necessary steps to prevent accidental spillage from occurring. If fluids should overflow, leak or escape from the pad during an unforeseen emergency, the Contractor shall be responsible to take whatever immediate steps are necessary stop the flow and clean up the fluids to the satisfaction of

the Engineer and regulatory agencies with jurisdiction. Within 3 days of any such occurrence, if cleanup is not complete, the Contractor shall provide a written plan to the Engineer to continue cleanup and monitor its effectiveness. Upon approval, the Contractor shall implement the plan. The Contractor may be required to install and/or monitor up to 4 shallow monitor wells to measure water quality around the pad. The Contractor shall cooperate with the regulatory agencies with authority over the cleanup and shall secure whatever permits/approvals are necessary to accomplish the cleanup. If an overflow or leak does occur, the Contractor shall be responsible for all remedial activities necessary to the satisfaction of the Owner, the Engineer and regulatory agencies with jurisdiction.

If a "Hurricane Watch" is issued by the National Weather Service, the Contractor shall make certain preparations to include, but not limited to the following:

1. Secure all on-site salt, chemicals, and other additive materials to prevent surface and/or groundwater contamination;
2. Properly secure drilling equipment and rig(s) to prevent damage to the injection well and on-site treatment process equipment.

3.02 OPERATION OF PLANT EQUIPMENT: All existing pumps and valving at the water treatment plant which must be operated for the testing shall be operated by Owner personnel only unless directed otherwise by the Engineer.

3.03 FAILURE DUE TO EXISTING CONDITIONS: In the event that the Contractor exhausts all reasonable efforts and is unable to complete one or more of the described tests to the satisfaction of the Owner and the Engineer, due to existing well conditions, the Contractor shall notify the Owner and the Engineer immediately.

3.04 TELEVISION SURVEY: A color Television (TV) Survey shall be performed in the presence of the Engineer for the entire well, from the top of the 16.6-inch inside diameter (I.D.) injection tubing to the bottom of the open hole. The Contractor shall have the survey performed by a qualified service company using equipment capable of surveying and recording to the bottom of the open hole. The Contractor may use his own equipment if it is capable of surveying as required. The contractor shall furnish proof of the capability of the selected equipment and gain approval from the engineer prior to mobilization to site. It is the Contractor's responsibility to make all arrangements and scheduling for the television survey.

Prior to and during performance of the TV survey, the Contractor shall pump clear, fresh water into IW1 as necessary in order to ensure that the survey is of sufficient clarity to perform an adequate TV survey (as determined by the Engineer). The Contractor should anticipate the need to pump up to 3 tubing volumes (or 89,000 gallons) of freshwater. It is the Contractor's responsibility to insure that the borehole fluid is of sufficient clarity (as determined by the Engineer) to allow a television survey to be conducted.

The television camera (radial with rotating side-view lens) shall be centralized within the casing and borehole and lowered at a rate specified by the Engineer. It is anticipated that a logging rate of between 20 and 25 feet per minute will meet this requirement. The depth recording is to be accurately and continuously presented on the video copies. Any features of the injection tubing, as requested by the Engineer, shall be inspected using a rotating side-view camera to obtain a close-up of the feature.

While pumping the fresh water into the well and during the TV survey, the well will be under artesian pressure and may flow. The Contractor shall be required to provide and use a stripper-head assembly and other equipment necessary to keep the well under control at all times. The Contractor shall be required to contain any fluids that might be released at the wellhead, due to his activities.

Five (5) DVD copies of the survey shall be provided to the Engineer. The costs for these services shall be included in the lump-sum price for the TV survey.

3.05 MECHANICAL CLEANING OF THE INJECTION TUBING (IF NECESSARY):

The necessity to perform mechanical cleaning of the FRP injection in order to obtain an acceptable TV survey is not anticipated. If the TV survey shows that cleaning is necessary, as determined by the Engineer, the tubing shall be cleaned in a manner so as to not damage the interior wall of the tubing. After cleaning procedures (if necessary), additional TV survey(s) shall be performed. The cost for the cleaning, including mobilization of any and all necessary additional equipment or supplies, shall be included in the lump-sum price for non-abrasive tubing brushing. The costs for an additional TV survey also shall be included in the lump-sum price for video surveying.

3.06 ANNULAR HYDROSTATIC PRESSURE TESTING: The Contractor shall coordinate the date and time of the pressure test so that the FDEP has at least 72 hours' notice prior to the implementation of MIT procedures. The MIT shall be initiated during regular working hours for the FDEP, Monday through Thursday between the hours of 9:00 a.m. and 4:00 p.m.

The Contractor shall install a header assembly with a calibrated pressure gauge to monitor the annular space pressure between the injection tubing and the final casing. The pressure gauge shall be mounted on the wellhead at or near eye level, to make any change in pressure easily discernible. The pressure gauge shall be calibrated within 3 months prior to testing, shall be capable of indicating pressure in increments of 1 pound per square inch (psi) and shall have a range from 0 to 200 psi with an accuracy of +/- 0.25%. Five copies of the pressure-gauge calibration certification shall be provided to the Engineer prior to the initiation of the pressure test and must indicate the date and place of the pressure-gauge calibration.

The annular space shall be placed under a pressure of approximately 150 psi. Preliminary pressure testing witnessed by the Engineer shall be conducted prior to performing the official pressure test with FDEP representatives on site.

The official pressure test shall be witnessed and certified in writing by the Engineer. A maximum pressure change of 5% is allowed over a 60-minute test period. If a pressure change greater than 5% occurs, the test shall be repeated under controlled conditions to the satisfaction of the Engineer and the FDEP. The test will be considered successful if the pressure does not change (increase or decrease) by more than 5%. The Contractor shall relieve the pressure on the injection casing and measure the volume of water discharged from the casing.

The costs for equipment and supplies to accomplish this task shall be included in the lump-sum price for hydrostatic pressure testing.

3.07 MECHANICAL PACKER TEST (IF NECESSARY): If, after multiple attempts, the annular hydrostatic pressure test is unsuccessful, i.e. the pressure change exceeds 5% (increases or decreases) within a one-hour period, additional testing will be necessary. This may involve installing an inflatable packer inside the injection tubing. If necessary, the following procedures shall be performed.

1. An inflatable packer that is capable of sealing against the interior wall of the injection tubing, shall be set in the last tubing section as near as possible to the base of the tubing. The actual packer-setting depth shall be confirmed, based on the results of the TV survey. The packer shall pressurize through the tubing or work pipe used to install the device (the use of external inflation tubing is not acceptable, except between the bottom section of tubing and the packer device).
2. The tubing shall be filled with potable water and placed under a pressure of approximately 150 psi. A maximum pressure change of 5% is allowed over a 60- minute test period.
3. If a significant pressure change (>5%) occurs, the test shall be repeated under controlled conditions to the satisfaction of the Engineer and the FDEP.
4. The Contractor shall relieve the pressure on the injection casing and measure the volume of water discharged from the casing.
5. Pressure testing shall be witnessed and certified in writing by the Engineer.

The costs for equipment and supplies and the mobilization of same to accomplish this task shall be included in the lump-sum price for mechanical pressure testing. **All FAA regulations shall be met (crane height, when installing inflatable packer and tubing, shall not exceed FAA requirements).**

3.08 RADIOACTIVE TRACER SURVEY: Upon completion of the television survey and hydrostatic pressure test, a temperature, background gamma-ray and radioactive tracer survey (or "RTS") log shall be performed in the injection well. The Contractor shall employ the services of a company specializing in furnishing and operating the equipment used in collecting this information. The costs for these services shall be included in the lump-sum price for the radioactive tracer survey.

The geophysical tool used for the RTS must be capable of ejecting the radioactive tracer and simultaneously monitoring with "scintillation"-type gamma-ray detectors. A casing collar locator shall be positioned below the tool to precisely locate the bottom of the casing. The tool shall be configured such that one gamma-ray detector will be located above the ejector and two detectors will be located below the ejector. The radioactive material used for the testing shall be *medical grade* Iodine 131. The RTS tool shall be loaded with 5 millicuries (MCI) of Iodine 131. The Contractor shall be required to demonstrate that the Iodine 131 tracer utilized for the RTS is not more than 6 days old on the day that the RTS is performed and the Contractor shall provide a copy of the Iodine 131 certification to the Engineer.

The flowmeter utilized for the test shall be certified as calibrated within the previous 3-month period from date of the pressure test and shall be capable of measuring the flow rate with an accuracy of 5%. Five copies of the calibration certification shall be provided *prior* to the initiation of the MIT procedures and shall indicate the date and place of the flowmeter calibration. Verification of the flowmeter calibration shall be submitted to the FDEP representative prior to commencement of the test.

The RTS shall be witnessed by a Florida-certified Professional Geologist or Professional Engineer. The RTS tests shall be initiated during regular working hours for the FDEP, Monday through Friday and shall be conducted according to the following procedure:

1. For casing flushes, fresh water should be used. Prior to initiation of RTS testing, approximately 89,400 gallons (approximately 3 well volumes) of freshwater shall be injected to establish a freshwater "bubble" below the final casing seat. The flush volume may include the water injected to perform the TV survey.
2. A combination gamma-ray/high-resolution temperature tool shall be used to initially log the injection well, recording temperature from land surface to the total (accessible) well depth. The high-resolution temperature log shall include a differential temperature log on the same plot. The well shall be "shut-in" for a minimum of 8 hours prior to performing temperature logging.
3. A background gamma-ray log shall be conducted in the interval from the total accessible depth to land surface. A casing-collar locator log shall be used during this survey to locate the base of the final casing. The temperature log and background gamma-ray log shall be performed prior to loading Medical Grade Iodine 131 into the RTS tool.
4. The combination logging tool shall be positioned with the ejector located approximately 5 feet above the bottom of the casing, with one gamma-ray detector above the ejector (GRT), and two gamma-ray detectors below the ejector (one inside the casing above the casing seat [GRM] and one outside the casing below the casing seat [GRB]).
5. A low-rate dynamic test shall be performed. A low injection rate shall be established using fresh water. The velocity for this test shall be between 3 and 5 feet per minute (equating to a flow rate between 34 and 56 gallons per minute [gpm]). A flowmeter with totalizer and an instantaneous flow-rate indicator shall be installed to monitor the flow rate into the well.
6. Time-drive monitoring shall begin and a 1-MCI slug of tracer material shall be ejected. This release will be confirmed by the middle detector (GRM) and the bottom detector (GRB).
7. Gamma-ray levels shall be monitored for one hour while the tool is held stationary. In the event that the tracer slug is detected by the upper gamma-ray detector (GRT) during the one-hour monitoring period, the operator of the logging tool shall log out of position to a new position approximately 20 feet above the previous position of the RTS tool and logging shall resume for the remainder of the one-hour monitoring period.
8. Following the end of the time-drive monitoring, the RTS tool shall log "out of position" (moving) to at least 200 feet above the highest point where the tracer was detected.
9. Following the out-of-position gamma-ray log, the injection tubing shall be flushed by injecting freshwater equivalent to approximately one injection well volume (approximately 29,700 gallons).
10. Following flushing, the combination logging tool shall be repositioned with the ejector located approximately 5 feet above the bottom of the casing and another gamma-ray log shall be run out of position to at least 200 feet above the highest point where tracer was detected.

11. If tracer movement continues to be detected, multiple out-of-position logs shall be conducted to identify the extent of tracer movement. The out-of-position logs shall be conducted at least 200 above the highest point where tracer was detected.

12. The combination logging tool shall then be repositioned with the ejector located approximately 5 feet above the bottom of the casing. This is the same depth as that used for the first low-rate dynamic test. A low injection rate shall be established using potable water. The flow rate of the second low-rate dynamic test shall be the same as the first low-rate dynamic test. Time-drive monitoring shall begin, a 2.0- MCI slug of tracer material shall be ejected, and the release of the tracer material will be confirmed by detectors GRM and GRB.

13. Step No. 7 (above) shall be repeated with the exception that the logging duration shall be 30 minutes (and not 1 hour).

14. Step No. 8 (above) shall be repeated.

15. Step No. 9 (above) shall be repeated.

16. Step No. 10 (above) shall be repeated.

17. Step No. 11 (above) shall be repeated if necessary.

18. Following completion of the RTS runs, the RTS tool shall be lowered to approximately 5 feet above the uppermost transmissive injection interval in the open hole (anticipated to be at approximately 2,750 feet below bpl). The remaining tracer material shall be ejected while flushing with at least one casing volume of freshwater. The RTS tool then shall be lowered to the total depth of the well and a final gamma-ray log shall be performed from the total depth to land surface.

19. Following the final gamma-ray log, the casing shall be flushed by injecting up to 3 well volumes of freshwater as directed by the Engineer.

3.09 DEMOBILIZATION: Upon completion of the work, the Contractor shall disassemble all temporary piping and equipment modifications from the site and demobilize. The injection wellhead shall be reassembled into its original configuration and reconditioned by the Contractor. A rust-inhibitive primer shall be applied to any exposed surface to the satisfaction of the Engineer. All exposed wellhead valves, flanges, flange bolts and appurtenances exposed to view shall be repainted as part of this work and shall be left in a condition acceptable to the Engineer and the Owner. The Contractor shall remove all equipment which is not part of the well and leave the site in a condition acceptable to the Owner.

APPENDIX A

MECHANICAL INTEGRITY TEST PLAN
(Approved by FDEP)



ARCADIS U.S., Inc.
2081 Vista Parkway
Suite 305
West Palm Beach
Florida 33411
Tel 561 697 7000
Fax 561 697 7751
www.arcadis-us.com

Joseph Haberfeld, P.G.
Administrator, Aquifer Protection Program
Florida Department of Environmental Protection
2600 Blair Stone Road, M.S. 3530
Tallahassee, Florida 32399

WATER RESOURCES

Subject:
City of Vero Beach
Water Treatment Plant Injection Well System
Proposed Mechanical Integrity Testing Plan
UIC Permit No. 31-0288155-003-UO

Date:
October 22, 2014

Dear Mr. Haberfeld:

Contact:
Rodney Miller

According to our records, Mechanical Integrity Testing (MIT) of the Vero Beach Water Treatment Plant (WTP) Class I Injection Well No. 1 (IW1) at the above-referenced facility is required prior to April 22, 2015. Please find attached the 5-Year MIT Plan, submitted on behalf of the City, for a demonstration of mechanical integrity as required by Chapter 62-528, Florida Administrative Code.

Phone:
561-697-7044

Email:
rodney.miller@arcadis-us.com

The 5-year MIT program includes 3 main elements: 1) an updated television survey of the injection tubing and the (accessible) open-hole section of the well, 2) a hydrostatic pressure test of the injection casing 3) a radioactive tracer survey log (with background temperature and gamma-ray log plots).

Our ref:
WF900265.0000

In addition to the MIT work, operational and water-quality data from the past 5 years of operation will be compiled and presented, both in tabular and graphical form, in a report of MIT results. The MIT report will describe the testing methods that were performed, discuss the results of the testing, and provide an interpretation of the operational and groundwater data collected and the data collected during the MIT.

Florida License Numbers

Engineering
7917

Geology
GB564

Surveying
LB7062

The report will be signed and sealed by a Florida-registered Professional Engineer or Florida-licensed Professional Geologist. Florida Department of Environmental Protection Underground Injection Control - Technical Advisory Committee will receive at least 72 hours' notice prior to initiating the MIT work.

Imagine the result

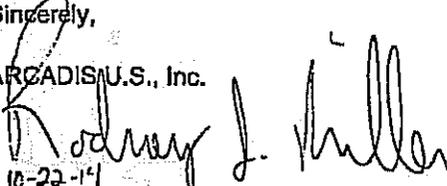
ARCADIS

Joseph Haberfeld, P.G.
October 22, 2014

If you have any questions or comments, please feel free to call.

Sincerely,

ARCADIS U.S., Inc.


10-22-14
Rodney J. Miller, P.G.
Senior Hydrogeologist

Copies:

R. Bolton

Enclosures:

Proposed Mechanical Integrity Testing Plan
Figures 1, 2 & 3
Owner Certification

PROPOSED MECHANICAL INTEGRITY TESTING PLAN
INJECTION WELL ROIW-1
CITY OF VERO BEACH
WATER TREATMENT PLANT

Proposed MIT Procedures

In accordance with Chapter 62-528, Florida Administrative Code (FAC) requirements, this Mechanical Integrity Testing (MIT) Plan for the Vero Beach Water Treatment Plant (WTP) Class I Injection Well System has been prepared and is provided herein for review by the Florida Department of Environmental Protection (FDEP) and the members of the Underground Injection Control (UIC)-Technical Advisory Committee (TAC). The 5-year MIT program includes 3 main elements: 1) an updated television survey of the injection tubing and the (accessible) open-hole section of the well, 2) an annular hydrostatic pressure test and 3) a radioactive tracer survey (RTS) log (with background temperature and gamma-ray log plots). A Site Location Map is presented as **Figure 1**. A Site Layout Map is presented as **Figure 2**. Construction details for Injection Well No. 1 (IW1) and Deep Monitor Well (MW1) are provided in **Figure 3**. ARCADIS will provide the FDEP and TAC members at least 72 hours' notice prior to all MIT procedures.

Television Survey

A color Television (TV) Survey will be performed in the presence of the Engineer on the entire well, from the top of the 16.6-inch inside diameter (I.D.) injection tubing to the bottom of the open hole. The Contractor shall have the survey performed by a qualified service company using equipment capable of surveying and recording to the bottom of the open hole. The Contractor may use his own equipment if it is capable of surveying as required and if the Contractor furnishes proof of the capability of the selected equipment.

Prior to and during the TV survey, the Contractor will pump clear fresh water into the injection well as necessary in order to ensure that the survey is of sufficient clarity. Any observed features of the injection tubing which may negatively affect the integrity/performance of the well, in the opinion of the Engineer, will be inspected using a rotating side-view camera to obtain a close-up of the feature. The TV survey will be conducted at a logging rate that is consistent with providing an acceptable quality video record of conditions encountered within the well. It is anticipated that a logging rate of between 20 and 25 feet per minute will meet this requirement. Mechanical cleaning of the fiberglass reinforced plastic (FRP) tubing should not be necessary due to the coating on the tubing interior wall. If the TV survey shows that cleaning is necessary, the tubing will be cleaned in a manner so as to not damage the interior wall of the tubing. After cleaning procedures (if necessary), another TV survey will be performed.

While pumping the fresh water into the well and during the TV survey, the well will be under artesian pressure and may flow. The Contractor will be required to provide and use a stripper-head assembly and other equipment necessary to keep the well under control at all times. The Contractor will be required to contain any fluids that might be released at the wellhead, due to his activities. DVD copies of the survey will be made and submitted to FDEP as part of the MIT report.

Hydrostatic Pressure Testing

The Contractor will install a header assembly with a calibrated pressure gauge to monitor the annular space between the FRP injection tubing and the final casing. The pressure gauge will be calibrated within 3 months prior to testing, will be capable of indicating pressure in increments of 1 pound per square inch (psi) and will have a range from 0 to 200 psi with an accuracy of +/- 0.25%. The Contractor will submit certification of the pressure-gauge calibration to the FDEP and ARCADIS representatives onsite prior to commencement of the pressure test. The certification will indicate the date and place of the pressure-gauge calibration. The pressure gauge will be mounted on the wellhead at or near eye level, to make any change in pressure easily discernible.

The annular space will be topped off with potable water and placed under a pressure of approximately 150 psi. Preliminary pressure testing will be conducted prior to performing the official pressure test. The official pressure test shall be witnessed and certified in writing by ARCADIS. If a significant pressure change (greater than 5%) occurs, the test shall be repeated under controlled conditions to the satisfaction of ARCADIS and the FDEP representatives onsite. The test will be considered successful if the pressure does not change (increase or decrease) by more than 5%.

If, after multiple attempts, the pressure change exceeds 5% (increases or decreases) within a one-hour period, additional testing will be necessary. This may involve installing an inflatable packer inside the injection tubing. The packer inside the injection tubing will be set and inflated as close as practicable to the base of the tubing. The actual packer-setting depth will be confirmed, based on the results of the TV survey (conducted as part of the MIT procedures). The pressure in the annulus will be released and the tubing will be pressurized to approximately 150 psi. A pressure test of the tubing then will be performed.

If, after multiple attempts, the pressure change inside the tubing exceeds 5% within a one-hour period, this supports a conclusion that the injection tubing lacks mechanical integrity. If the pressure change does not exceed 5%, this supports a conclusion that the packer seat and/or final casing lack mechanical integrity.

Radioactive Tracer Survey and Temperature Log

An RTS test will be performed on the injection well and witnessed by a Florida-certified Professional Geologist or Professional Engineer. The RTS tool will be equipped with crystal "scintillation" type detectors. The RTS tool will be loaded with 5 millicuries (mCi) of Iodine 131 (the selected radioactive-tracer material for this RTS testing). The Contractor will provide a copy of the Iodine 131 certification to the Engineer.

A casing collar locator (CCL) will be positioned below the tool to precisely locate the bottom of the casing. The tool will be configured so that one gamma-ray detector will be located above the ejector chamber and two detectors will be located below the ejector. The RTS testing will be conducted according to the following procedure:

1. For casing flushes, fresh water will be used. Prior to initiation of RTS testing, up to approximately 89,000 gallons (up to approximately 3 well volumes) of freshwater will be injected to establish a freshwater "bubble" below the final casing seat.
2. A combination gamma-ray/temperature tool will be used to initially log the injection well, recording temperature from land surface to the total (accessible) well depth. The high-resolution temperature log will include a differential temperature log on the same plot. The well will be "shut-in" for a minimum of 8 hours prior to performing temperature logging.
3. A background gamma-ray log will be conducted in the interval from the total accessible depth to land surface. A casing-collar locator log will be used during this survey to locate the base of the final casing. The temperature log and background gamma-ray log will be performed prior to loading Iodine 131 into the RTS tool.
4. The combination logging tool will be positioned with the ejector located approximately 5 feet above the bottom of the casing, with one gamma-ray detector above the ejector (GRT), and two gamma-ray detectors below the ejector (one inside the casing above the casing seat [GRM] and one outside the casing below the casing seat [GRB]).
5. A low-rate dynamic test will be performed. A low injection rate will be established using fresh water. The velocity for this test will be between 3 and 5 feet per minute (equating to a flow rate between 34 and 56 gpm). A flowmeter with totalizer and an instantaneous flow-rate indicator will be installed to monitor the flow rate into the well. The flowmeter will be calibrated within 6 months of the test and will be capable of measuring the flow rate with an accuracy of 5%.
6. Time-drive monitoring will begin and a 1 MCl slug of tracer material will be ejected. This release will be confirmed by GRM and the bottom detector GRB.
7. Gamma-ray levels will be monitored for one hour while the tool is held stationary. In the event that the tracer slug is detected by GRT during the one-hour monitoring period, the logging tool may log out of position to a new position approximately 20 feet above the previous position of the RTS tool and logging will resume for the remainder of the one-hour monitoring period.
8. Following the end of the time-drive monitoring, the RTS tool will log "out of position" (moving) to at least 200 feet above the highest point where the tracer was detected.
9. Following the out-of-position gamma-ray log, the injection tubing will be flushed by injecting freshwater up to one injection well volume (approximately 29,700 gallons).

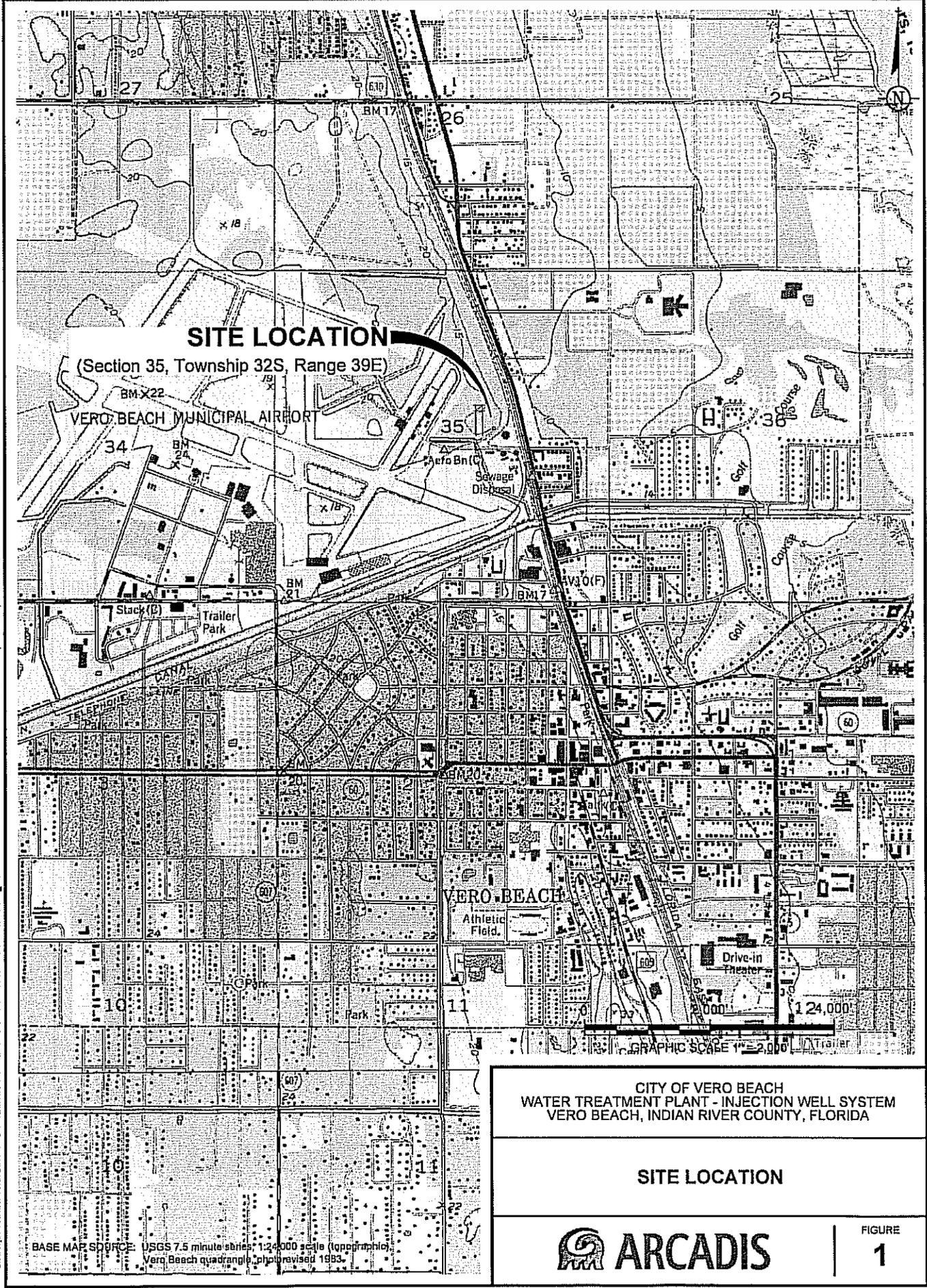
10. Following flushing, the combination logging tool will be repositioned with the ejector located approximately 5 feet above the bottom of the casing. If tracer material was detected during the "out of position" log (prior to flushing), another gamma-ray log will be run out of position to at least 200 feet above the highest point where tracer was detected.
11. If tracer movement continues to be detected, multiple out-of-position logs will be conducted to identify the extent of tracer movement. The out-of-position logs will be conducted at least 200 feet above the highest point where tracer was detected.
12. The combination logging tool then will be repositioned with the ejector located approximately 5 feet above the bottom of the casing. This is the same depth as that used for the first low-rate dynamic test. A low injection rate will be established using potable water. The flow rate of the second low-rate dynamic test will be the same as the first low-rate dynamic test. Time-drive monitoring will begin, a 2.0-MCl slug of tracer material will be ejected, and the release of the tracer material will be confirmed by detectors GRM and GRB.
13. Step No. 7 (above) will be repeated with the exception that the logging duration will be 30 minutes (and not 1 hour).
14. Step No. 8 (above) will be repeated.
15. Step No. 9 (above) will be repeated.
16. Step No. 10 (above) will be repeated.
17. Step No. 11 (above) will be repeated if necessary.
18. Following completion of the RTS runs, the RTS tool will be lowered to approximately 5 feet above the uppermost transmissive injection interval in the open borehole. The remaining tracer material will be ejected while flushing with at least one casing volume of fresh water. The RTS tool then will be lowered to the total depth of the well and a final gamma-ray log will be performed from the total depth to land surface to confirm that tracer has dispersed from the well casing and has not migrated above the confining interval.
19. Following the final gamma-ray log, the casing will be flushed by injecting up to 3 well volumes of fresh water.

Report

A final MIT report will be prepared for submittal to the FDEP, and to the UIC-TAC members. The report will include descriptions of the MIT test procedures and results. They also will include interpretations of the available water-quality data and the injection well MIT test results. All available water-quality data from the upper and lower monitor zones of the Deep Monitor Well will be summarized (for the previous 5 years of operation) both in graphical and tabular form. A copy of the

television survey (including a narrative description of the survey), the background temperature and gamma-ray logs, RTS log plots, and hydrostatic pressure testing results will be included with the report.

CITY: WPB, FL; DWGNO: WPB-DB3-01VA; LDB: 01VA; PICW: REESE; PWD: SMITH; TMR: MILLER; LVR: (ON) - OFF - REP; G:\Projects\WPB\PROJECTS\DB3\01VA\DWG\TOWN\01VA\DWG\01VA_SITELOCATION.DWG; LAYOUT: CITY-PL-SITELOCATION; SAVED: 10/20/14 1:23 PM; ACADVER: 18.28; (LMS TECH); PAGESETUP: - PLOTSTYLETABLE: ACS-MCH04-IMP-ERIAL-CTB; CTB; PLOTTED: 10/14/2014 11:40 AM; BY: STEFFER, TONY

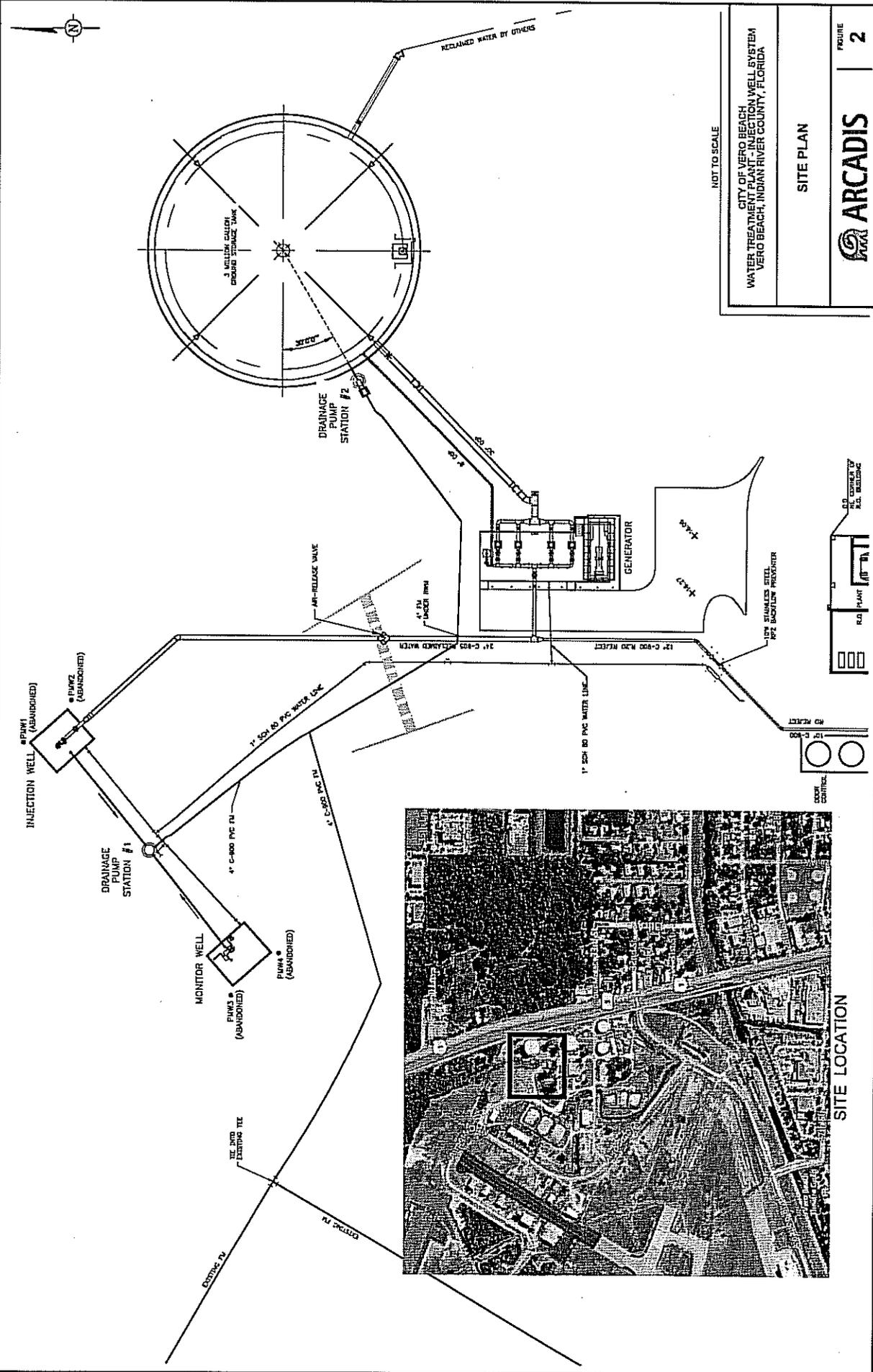


CITY OF VERO BEACH
 WATER TREATMENT PLANT - INJECTION WELL SYSTEM
 VERO BEACH, INDIAN RIVER COUNTY, FLORIDA

SITE LOCATION

 **ARCADIS** | **FIGURE 1**

DATE: 08/14/2013 10:58 AM
 PROJECT: WATER TREATMENT PLANT INJECTION WELL SYSTEM
 DRAWN BY: J. B. BROWN
 CHECKED BY: J. B. BROWN
 APPROVED BY: J. B. BROWN



NOT TO SCALE

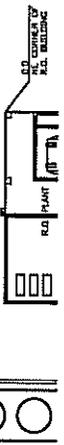
CITY OF VERO BEACH
 WATER TREATMENT PLANT INJECTION WELL SYSTEM
 VERO BEACH, INDIAN RIVER COUNTY, FLORIDA

SITE PLAN

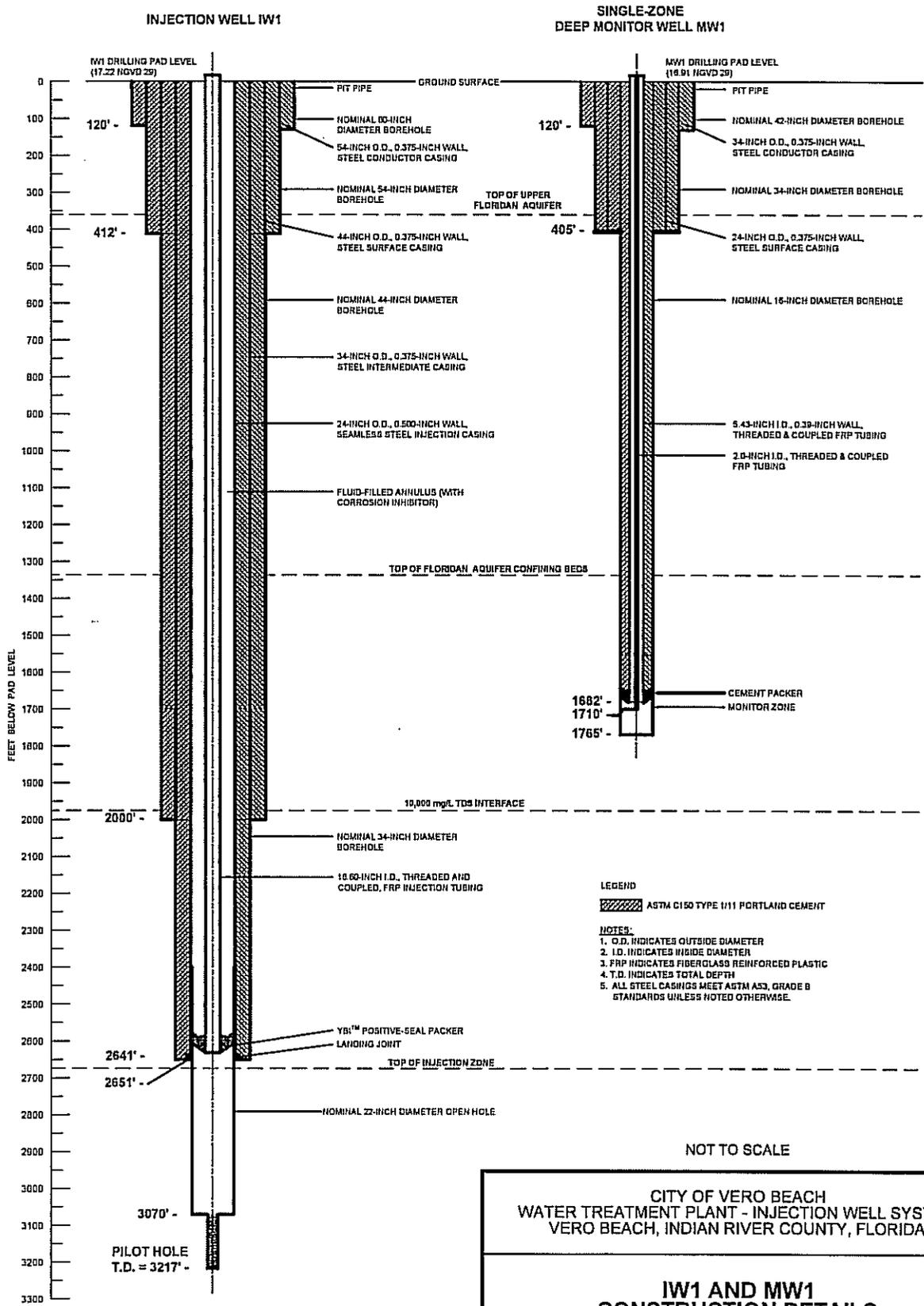
FIGURE 2



SITE LOCATION



CITY (Rev'd) DIVISION (Rev'd) DATE (Rev'd) LD (Rev'd) PIC (Rev'd) PH (Rev'd) TIA (Rev'd) LYR (Rev'd) CH (Rev'd) OF (Rev'd) PLOT (Rev'd) PLOT DATE: 10/14/2014 11:47 AM BY: STEFFER, TONY
 C:\Projects\WVWF\PROJECTS\IBD025_VBCH\WVWF\CAD\DWG\3 DWG.dwg LAYOUT: 05/11/18 PM ACADVER: 18.25 (LMS TECH) PAGES: 1 OF 1



NOT TO SCALE

CITY OF VERO BEACH
 WATER TREATMENT PLANT - INJECTION WELL SYSTEM
 VERO BEACH, INDIAN RIVER COUNTY, FLORIDA

**IW1 AND MW1
 CONSTRUCTION DETAILS**



OWNER'S CERTIFICATION
MECHANICAL INTEGRITY TESTING
VERO BEACH WATER TREATMENT PLANT
INJECTION WELL SYSTEM

OCTOBER 2014

CITY OF VERO BEACH
INDIAN RIVER COUNTY, FLORIDA

The language below provides certification for the mechanical integrity testing plan and all subsequent correspondence related to the plan for the deep injection well system at the Vero Beach Water Treatment Plant.

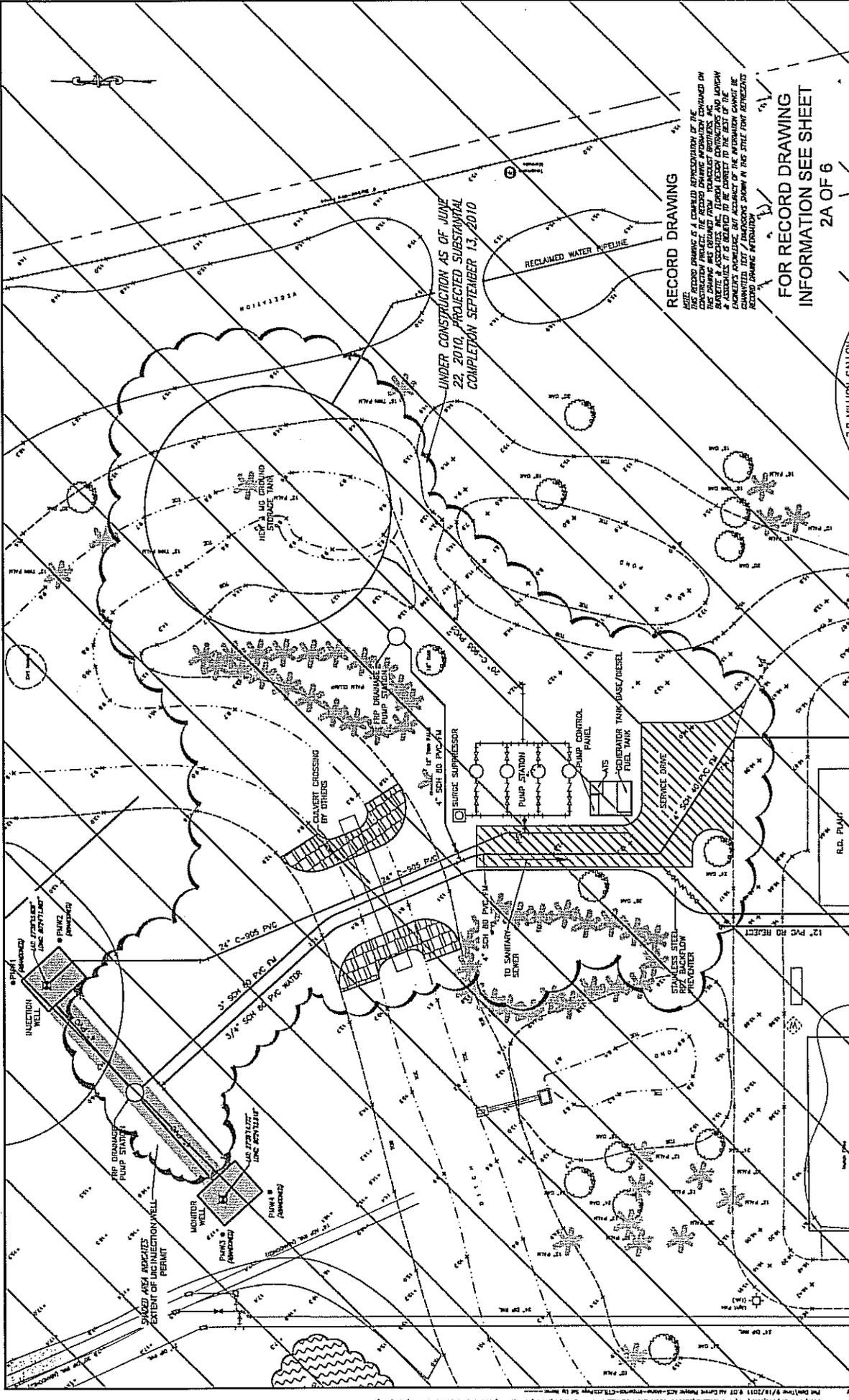
"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."



Robert J. Bolton, P.E.
Water and Sewer Director
City of Vero Beach

Date: 10/22/14

APPENDIX B
INJECTION WELL RECORD DRAWINGS
(Reduced Size)



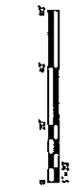
UNDER CONSTRUCTION AS OF JUNE 22, 2010, PROJECTED SUBSTANTIAL COMPLETION SEPTEMBER 13, 2010

RECORD DRAWING

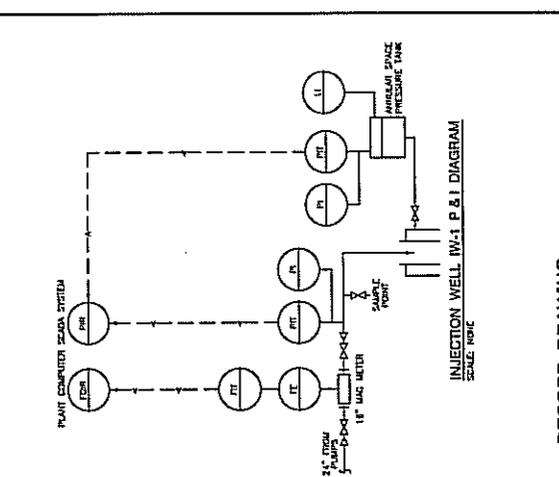
THIS RECORD DRAWING IS A CORRECTED REPRESENTATION OF THE CONSTRUCTION PROJECT. THE RECORD DRAWING INFORMATION CONTAINED BY THIS DRAWING WAS OBTAINED FROM VARIOUS SOURCES, INCLUDING BUT NOT LIMITED TO, THE ARCHITECT, ENGINEER, CONTRACTOR, AND OTHERS. THE ARCHITECT AND ENGINEER HAVE CONDUCTED VISUAL VERIFICATION OF THE INFORMATION CONTAINED HEREIN, BUT NO TESTS OR MEASUREMENTS WERE MADE TO VERIFY THE ACCURACY OF THE INFORMATION. THE ARCHITECT AND ENGINEER MAKE NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY OF THE INFORMATION CONTAINED HEREIN.

FOR RECORD DRAWING INFORMATION SEE SHEET 2A OF 6

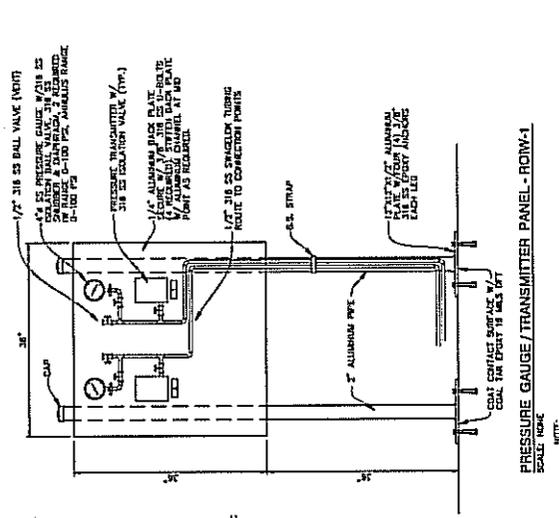
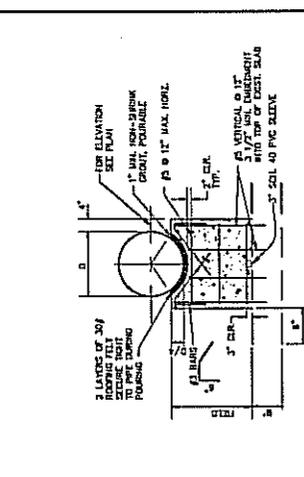
<p>ARCADIS 1000 N. W. 10th Ave., Suite 1000 Fort Lauderdale, FL 33304 Phone: (954) 333-7000 Fax: (954) 333-7001 Website: www.arcadis-usa.com</p>	<p>CITY OF VERO BEACH WATER TREATMENT PLANT R.O. EXPANSION 1W 1</p>		<p>DATE: 09/13/10 DRAWN BY: T. STOTER CHECKED BY: T. STOTER PROJECT NUMBER: WF083000</p>
	<p>3.0 MILLION GALLONS</p>		<p>DATE: 09/13/10 DRAWN BY: T. STOTER CHECKED BY: T. STOTER PROJECT NUMBER: WF083000</p>
<p>11/20/09 ASSET RECORD DRAWING #12 04/23/10 ASSET RECORD DRAWING #13 ALL OTHERS OBTAINED FROM THE ARCHITECT AND ENGINEER FOR THE PROJECT. ALL INFORMATION IS SUBJECT TO THE TERMS AND CONDITIONS OF THE CONTRACT AGREEMENT DATED 07/15/09.</p>		<p>DATE: 09/13/10 DRAWN BY: T. STOTER CHECKED BY: T. STOTER PROJECT NUMBER: WF083000</p>	



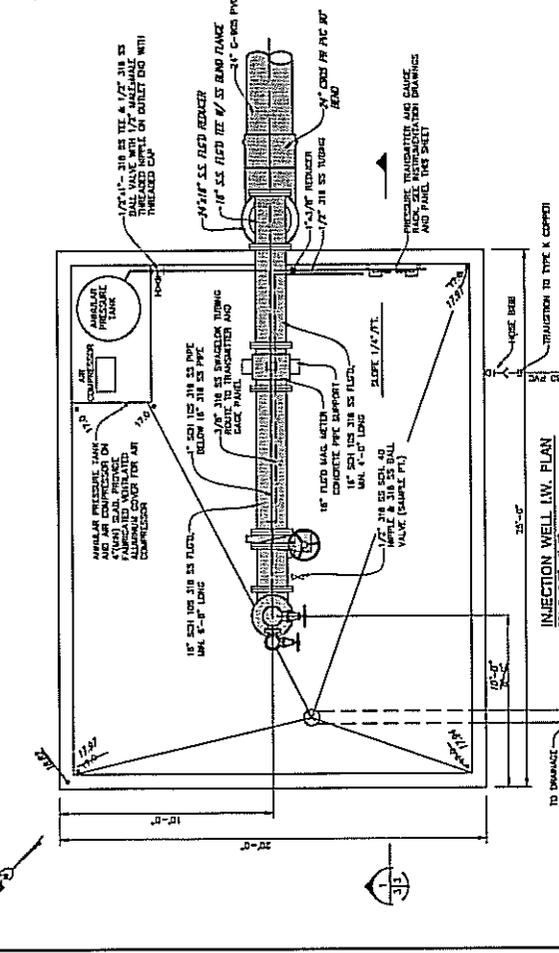
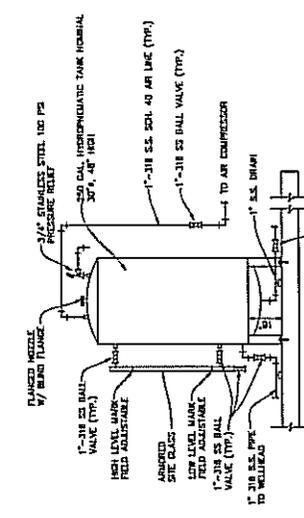
© 2010 ARCADIS U.S., INC.



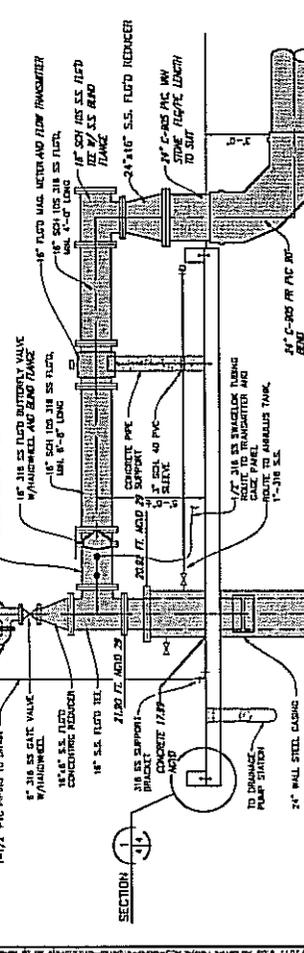
RECORD DRAWING
 THIS RECORD DRAWING IS A COMPLETED REPRESENTATION OF THE DESIGN AND SHALL BE USED FOR CONSTRUCTION. THE DESIGNER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES.

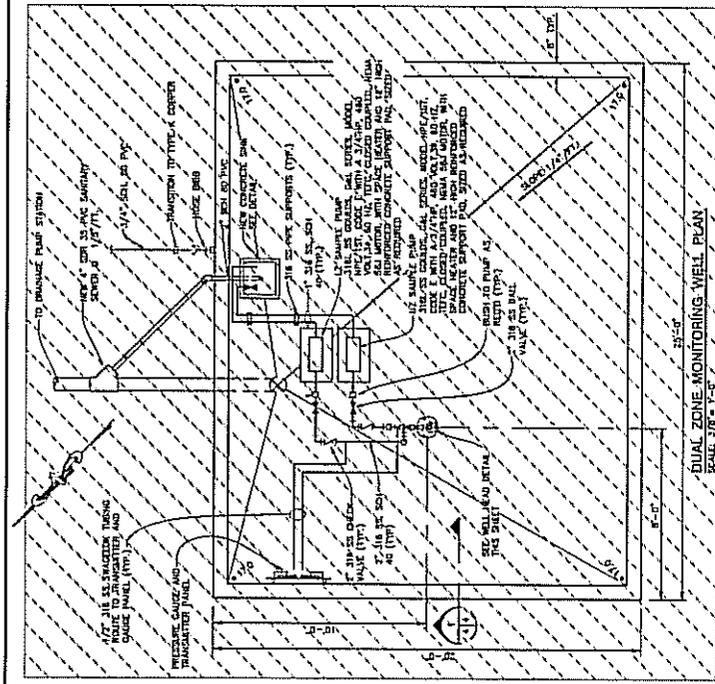


WELL ANNULAR PRESSURE TANK DETAIL
 SCALE: NONE

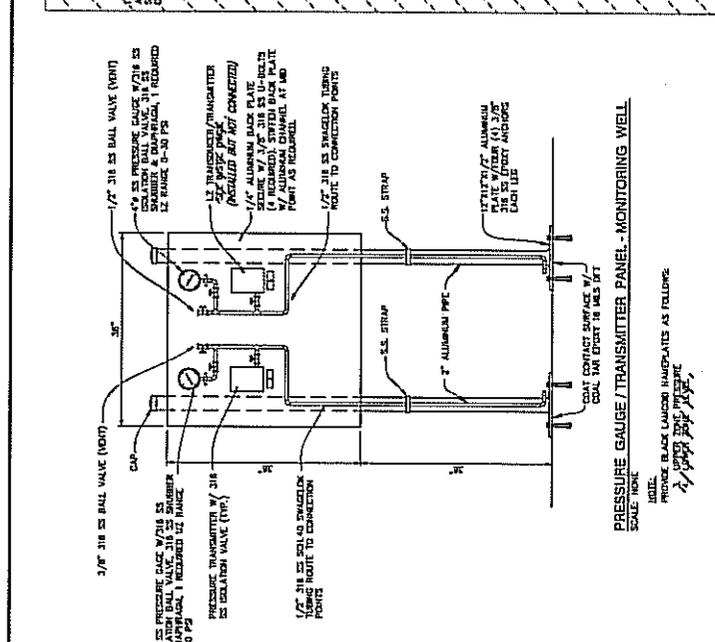


SECTION
 SCALE: 3/8" = 1'-0"

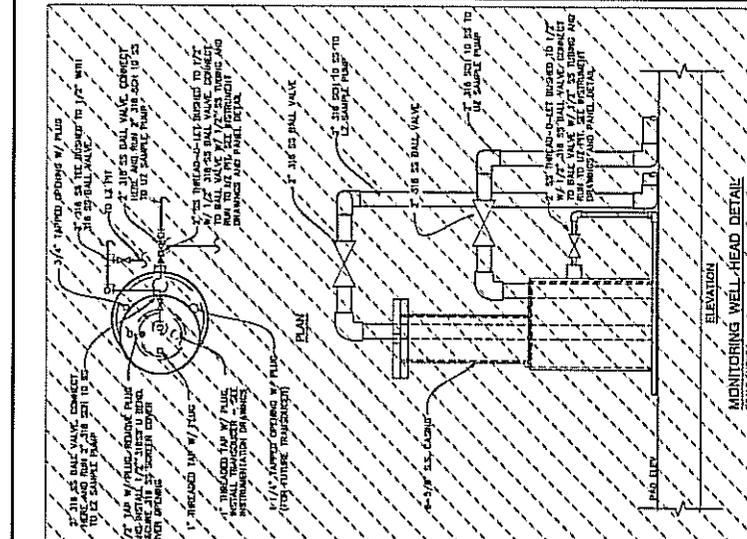




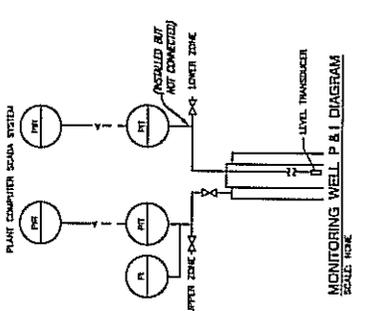
DUAL ZONE MONITORING WELL PLAN
 SCALE: 3/8" = 1'-0"
 SEE SHEET 4A OF 6 - THIS DETAIL WAS
 MODIFIED FROM ORIGINAL DESIGN FROM A
 DUAL ZONE TO A SINGLE ZONE



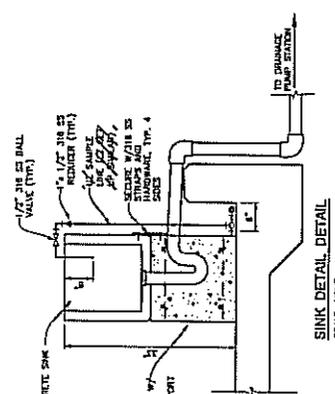
PRESSURE GAUGE / TRANSMITTER PANEL - MONITORING WELL
 SCALE: 1/8" = 1'-0"
 PROVIDE BLACK LAQUER INK MARKINGS AS FOLLOWS:
 1. UPPER ZONE PRESSURE
 2. LOWER ZONE PRESSURE



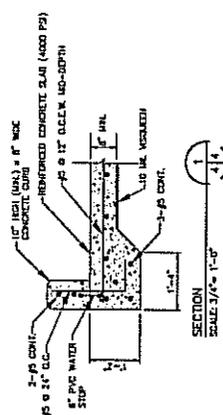
MONITORING WELL-HEAD DETAIL
 SCALE: 1/8" = 1'-0"
 SEE SHEET 4A OF 6 - THIS DETAIL WAS
 MODIFIED FROM ORIGINAL DESIGN FROM A
 DUAL ZONE TO A SINGLE ZONE



MONITORING WELL P&I DIAGRAM
 SCALE: 1/8" = 1'-0"



SINK DETAIL DETAIL
 SCALE: 1/8" = 1'-0"

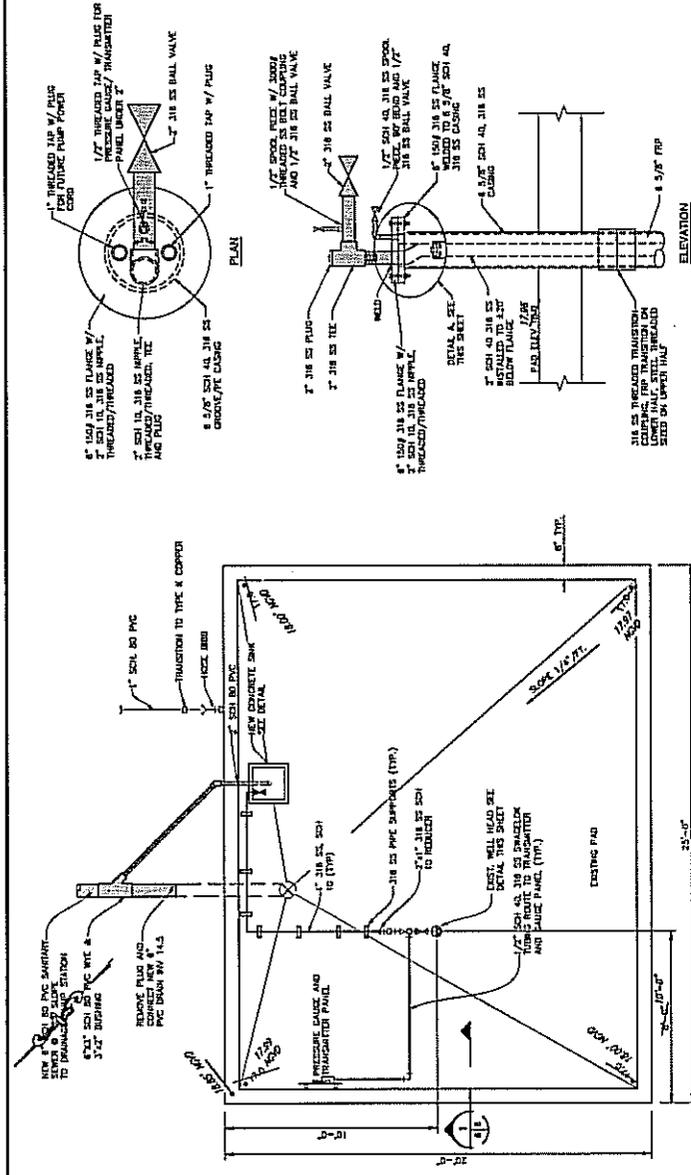


SECTION
 SCALE: 3/4" = 1'-0"

RECORD DRAWING

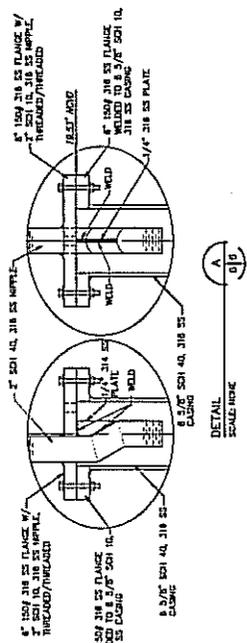
THIS RECORD DRAWING IS A CORRECTED REPRESENTATION OF THE ORIGINAL RECORD DRAWING. THE RECORD DRAWING INFORMATION CONTAINED ON THIS DRAWING WAS OBTAINED FROM THE RECORD DRAWING INFORMATION CONTAINED ON THE ORIGINAL RECORD DRAWING. THE RECORD DRAWING INFORMATION CONTAINED ON THIS DRAWING IS SUBJECT TO THE TERMS AND CONDITIONS OF THE ORIGINAL RECORD DRAWING. THE RECORD DRAWING INFORMATION CONTAINED ON THIS DRAWING IS SUBJECT TO THE TERMS AND CONDITIONS OF THE ORIGINAL RECORD DRAWING. THE RECORD DRAWING INFORMATION CONTAINED ON THIS DRAWING IS SUBJECT TO THE TERMS AND CONDITIONS OF THE ORIGINAL RECORD DRAWING.

		CITY OF VERO BEACH WATER TREATMENT PLANT R.O. EXPANSION IW 1		DRAWN BY T. SUTHER	CHECKED BY S. KISHI
PROJECT NUMBER WTR033000	SHEET NUMBER 4 OF 6	PROJECT NUMBER WTR033000	SHEET NUMBER 4 OF 6	DRAWN BY T. SUTHER	CHECKED BY S. KISHI
PROJECT NUMBER WTR033000		SHEET NUMBER 4 OF 6		DRAWN BY T. SUTHER	CHECKED BY S. KISHI



MONITORING WELL HEAD DETAIL
SCALE: NONE

SINGLE ZONE MONITORING WELL PLAN
SCALE: 3/8" = 1'-0"



WELL HEAD DETAIL
SCALE: NONE

RECORD DRAWING

NOTE: THE RECORD DRAWING IS A CORRECTED REPRESENTATION OF THE ORIGINAL DRAWING. THE RECORD DRAWING IS THE PROPERTY OF THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ACCURACY OF THE RECORD DRAWING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ACCURACY OF THE RECORD DRAWING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ACCURACY OF THE RECORD DRAWING.

	CITY OF VERO BEACH WATER TREATMENT PLANT R.O. EXPANSION IW 1		PROJECT NUMBER W. REC.	CONTRACT NUMBER T. REC.	ILLUSTRATION NO. D. REC.	DESIGNED BY T. FOSTER
	REVISED MONITORING WELL HEAD PLAN AND SECTION		SHEET NO. WFO03000	PROJECT NUMBER WFO03000	DRAWN BY T. FOSTER	DRAWING NUMBER 4A of 6



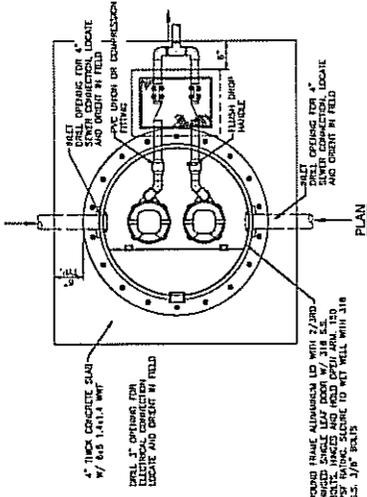
DATE: 11/27/03
 DRAWN BY: JERRY GIBSON
 CHECKED BY: JERRY GIBSON
 SCALE: 3/8" = 1'-0"

SCALE: NONE

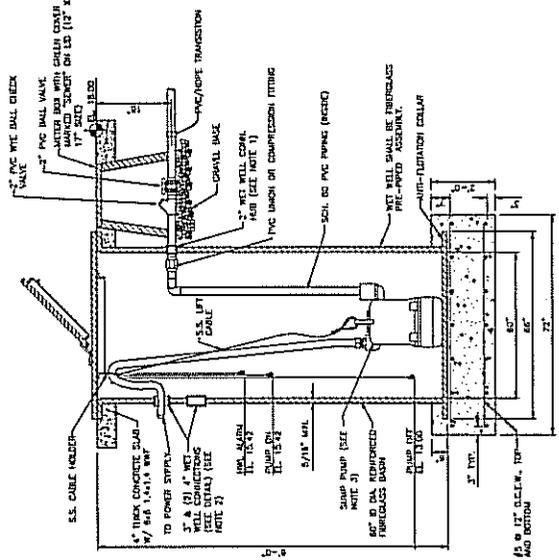
SCALE: NONE

SCALE: NONE

SCALE: NONE

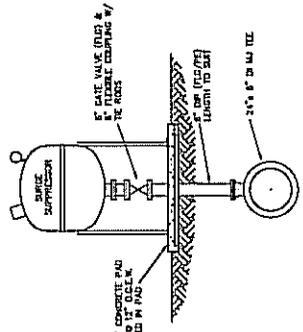
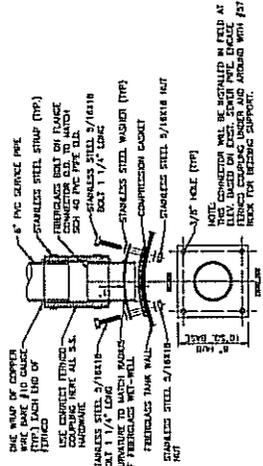


TYPICAL WET WELL GRAVITY CONNECTOR HUB
SCALE: NONE



ELEVATION
DUPLIX DRAINAGE PUMP STATION
SCALE: NONE

- NOTES:
1. WET WELL HUBS FOR WET-CELL FORCE MAIN CONNECTION ARE FACTORY INSTALLED. USE 2" PVC SCH 80.
 2. CONNECTION TO WET-CELL FOR ELECTRICAL AND SERVICE DRAINAGE SHALL BE INSTALLED BY CONTRACTOR WITH 3" x 4" RUBBER GROMMET.
 3. PUMP INSULATIONS.
 4. TOP OF LEFT TANK TO WHICH PROPOSED ROUGHEN AND ELEVATION.



SURGE SUPPRESSOR DETAIL
SCALE: NONE

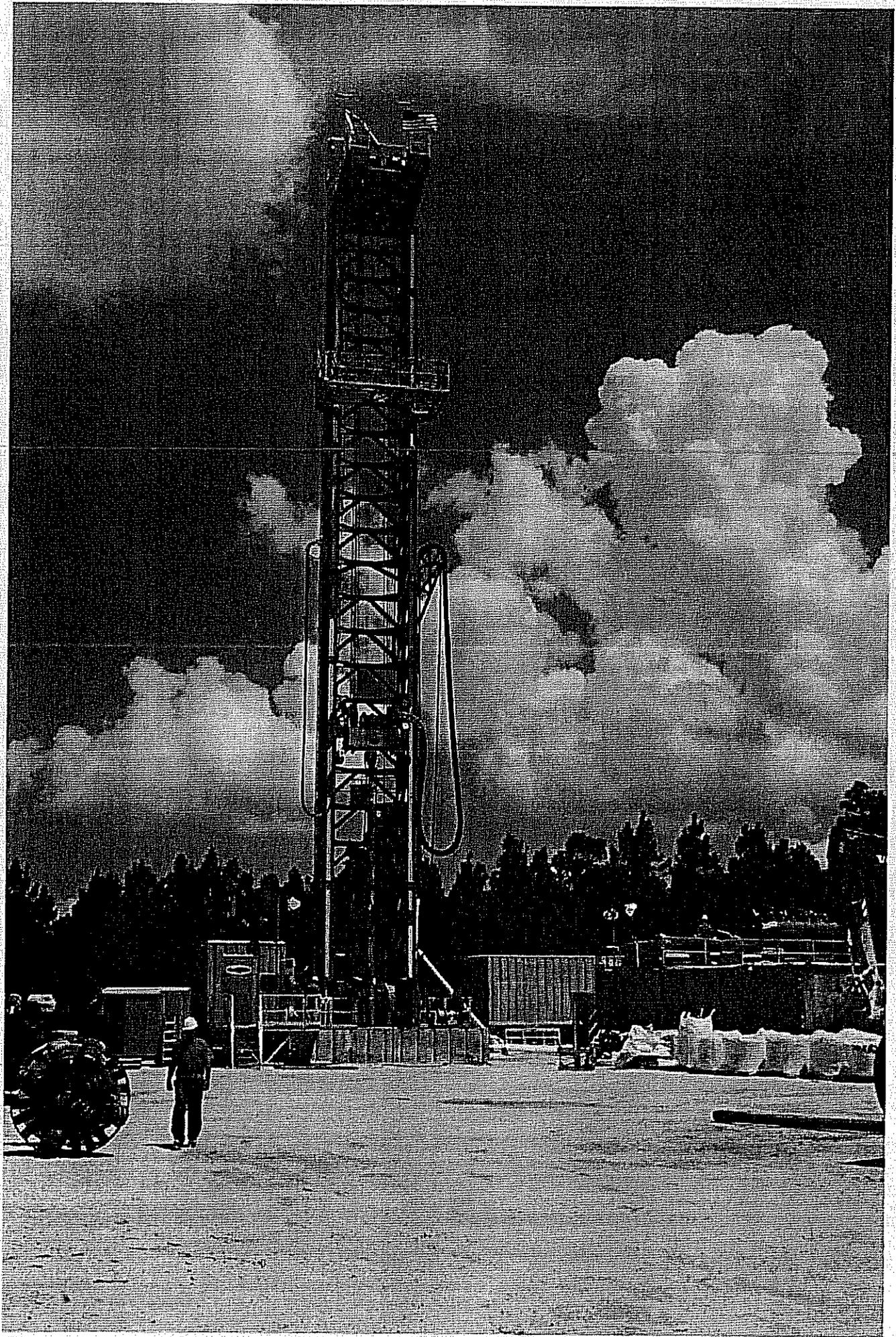
RECORD DRAWING

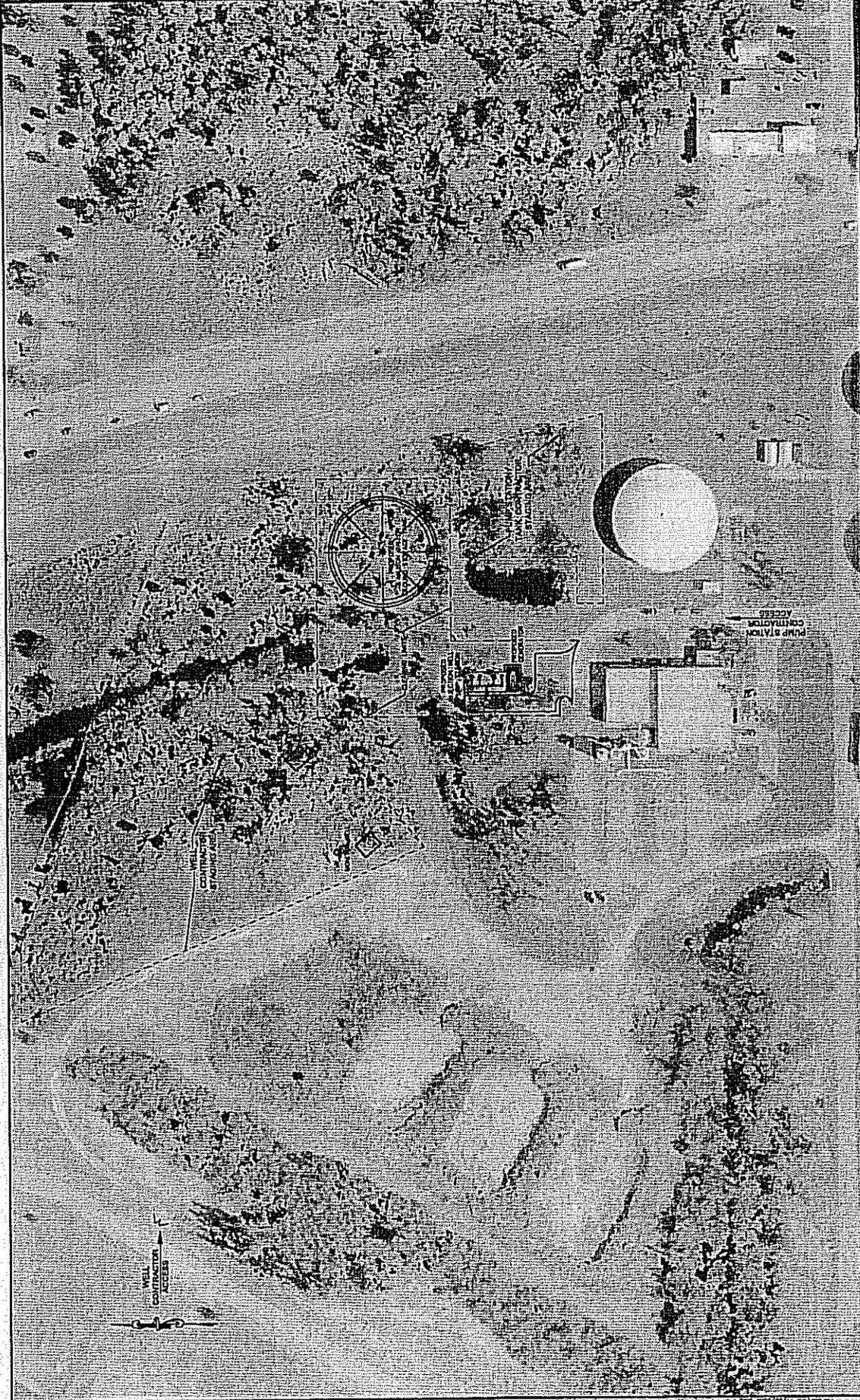
NOTES:
 1. THIS DRAWING IS A PART OF THE RECORD DRAWING SET FOR THE PROJECT AND SHALL BE USED IN CONJUNCTION WITH THE RECORD DRAWING SET FOR THE PROJECT.
 2. THIS DRAWING IS A PART OF THE RECORD DRAWING SET FOR THE PROJECT AND SHALL BE USED IN CONJUNCTION WITH THE RECORD DRAWING SET FOR THE PROJECT.
 3. THIS DRAWING IS A PART OF THE RECORD DRAWING SET FOR THE PROJECT AND SHALL BE USED IN CONJUNCTION WITH THE RECORD DRAWING SET FOR THE PROJECT.
 4. THIS DRAWING IS A PART OF THE RECORD DRAWING SET FOR THE PROJECT AND SHALL BE USED IN CONJUNCTION WITH THE RECORD DRAWING SET FOR THE PROJECT.

 ARCADIS U.S. INC. 200 West Parkway Suite 100 The Woodlands, Texas 77380-1111 Telephone: 281-360-7311 Facsimile: 281-360-7312	CITY OF VERO BEACH WATER TREATMENT PLANT R.O. EXPANSION IW 1		SHEET NUMBER W. BEACH SHEET NO.	PROJECT NUMBER WFO83000	DRAWN BY T. CUTLER
	DRAINAGE PUMP STATION & SURGE TANK DETAILS		SCALE AS SHOWN	PROJECT NUMBER WFO83000	DRAWING NUMBER 6 of 6

APPENDIX C

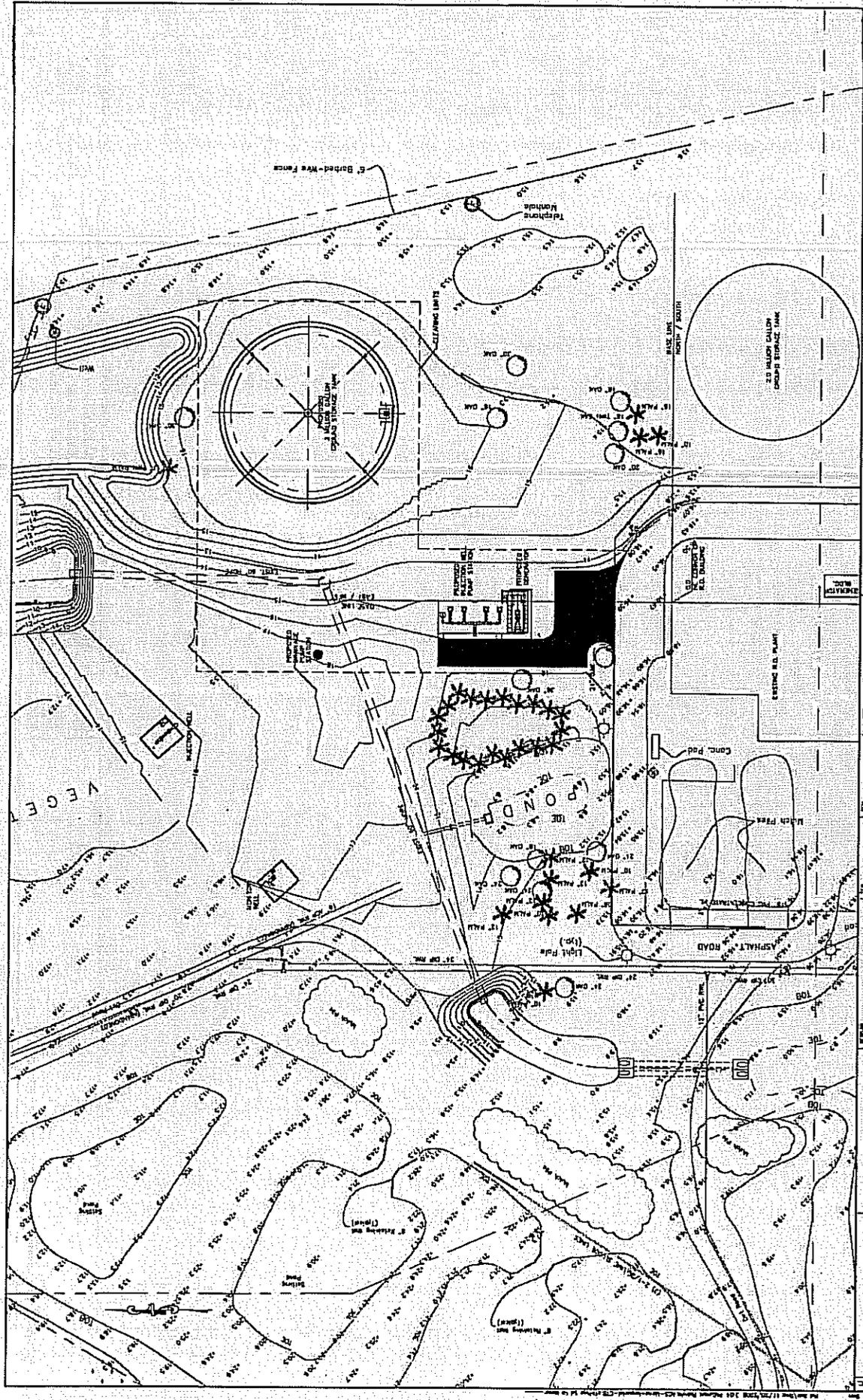
FAA DOCUMENTATION
(Informational Purposes Only)





				1" = 200' HORIZONTAL 1" = 20' VERTICAL	
ARCADIS ARCADIS U.S., INC. 2001 New York Avenue, Suite 200 Alexandria, Virginia 22304 Tel: 703-998-7744 Fax: 703-998-7744 Email: info@arcadis-us.com Website: www.arcadis-us.com		CITY OF VERO BEACH STORAGE RESERVOIR AND INJECTION WELL PUMP STATION		CONTRACTOR STAGING / ACCESS PLAN	
PROJECT NUMBER W-1000	SHEET NUMBER 1-001	DATE 11/20/2013	DRAWN BY T. JONES	CHECKED BY B. JONES	SCALE AS SHOWN
PROJECT NAME STORAGE RESERVOIR AND INJECTION WELL PUMP STATION			PROJECT NUMBER W-1000		

11/20/2013 11:29:23 AM PROJECT: W-1000 - STORAGE RESERVOIR AND INJECTION WELL PUMP STATION
 11/20/2013 11:29:23 AM PROJECT: W-1000 - STORAGE RESERVOIR AND INJECTION WELL PUMP STATION
 11/20/2013 11:29:23 AM PROJECT: W-1000 - STORAGE RESERVOIR AND INJECTION WELL PUMP STATION



 ARCADIS <small>ARCADIS U.S.A., INC. 2000 West 12th Street, Suite 1201 Denver, Colorado 80202 Telephone: 303-733-7100 Fax: 303-733-7101 Website: www.arcadis-usa.com</small>	CITY OF VERO BEACH STORAGE RESERVOIR AND INJECTION WELL PUMP STATION	PROJECT NUMBER W0183000	SHEET NO. 5 of 24
		PROPOSED SITE PLAN	DRAWN BY T. JERRY

1" = 100' SCALE
 NORTH ARROW



U.S. Department
of Transportation
Federal Aviation
Administration

Orlando Airports District Office
5950 Hazeltine National Dr., Suite 400
Orlando, FL 32822-5003

Phone: (407) 812-6331

Fax: (407) 812-6978

June 11, 2009

Mr. Eric W. Menger
Airport Director
City of Vero Beach
P.O. Box 1389
Vero Beach, FL 32961

Dear Mr. Menger:

**RE: Vero Beach Municipal Airport; Vero Beach, Florida
Aeronautical Study 2009-ASO-728-NRA
Temporary Drill Rig**

The proposed change to your currently approved Airport Layout Plan (ALP) submitted by your **January 23, 2009** letter has been reviewed under the authority of Federal Aviation Regulation (FAR) Part 77 and under the requirements of the Terms and Conditions of Accepting Airport Improvement Program Grants dated March 29, 2005. This review has considered the safety and utility of aircraft operations and planned navigational aids as related to this proposal.

The proposal exceeds FAR Part 77, paragraph FAR 77.25 (e) by 42 feet, but has no effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, we **have no objections** to this proposal provided the following conditions are met.

- VRB Departure R/W 11L 40:1 Departure Surface Penetration:
 - Change current Departure procedure from (NONE) to 300-1 or STD with minimum climb gradient of 766'/NM (Excessive) to 100'. The not to exceed height (NEH) is 54' MSL. This can be mitigated with a low close in note in accordance with FAA Order 8260.46 Table 1. As an alternative, and as VRB's shortest runway with no IFR approaches, this impact could also be mitigated by temporarily making IFR departures from this runway N/A.
- Air Traffic Manager or ATCT representative is coordinated with, invited to all meetings and any/all concerns are addressed / resolved.
- Airport manager issues all necessary NOTAMS.
- The temporary equipment is no closer to the runway than the coordinates studied.

- The temporary equipment is marked/lighted/flagged in accordance with FAA AC 70/7460-1.
- The temporary equipment is used during daylight hours and VFR conditions only, and is lowered when not in use, during the hours between sunset and sunrise, and/or during IFR weather conditions.
- The local ATCT and Airport Management are notified when the equipment is raised or lowered.

This determination shall remain in effect until the next regular update of your ALP, or the next request for FAA approval of your ALP, whichever comes first. At that time, the facilities should be shown on the ALP either as "constructed" or "planned", whichever is appropriate. This determination is based, in part, on the foregoing description, which includes specific coordinates, heights, frequencies and power. Any change in coordinates, heights, frequencies or use of greater power will void this determination. Any future construction or alteration, including increases in heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This is a determination with respect to the safe and efficient use of navigable airspace by aircraft and with respect to the safety of persons and property on the ground. In making this determination, the FAA has considered matters such as the effect the proposal would have on the existing airspace structure and projected programs of the FAA, the effects it would have on the safety of persons and property on the ground, and the effects that existing or proposed manmade objects (on file with the FAA) and natural objects within the affected area would have on the airport proposal.

The proposal included construction equipment including erecting a temporary crane. The crane use is approved provided the following:

- a. You comply with the requirements set forth in FAA Advisory Circular 150/5370-2E, "Operational Safety on Airports During Construction."
- b. You comply with Chapters 3, 4, 5 and 12 of Advisory Circular 70/7460-1K, Obstruction Marking and Lighting (see enclosed table)
- c. You must contact the FAA Atlanta Airports Division Office at (404) 305-7410 at least three business days prior to raising the crane(s) to allow sufficient time for the FAA to issue NOTAMS that will adjust aircraft operating minimums at the airport to a safe level. Please provide the aeronautical study number given on the subject line of this letter.

Further, you should contact the Airport Traffic Control Tower (ATCT) Watch Supervisor at the airport prior to the crane(s) being raised for purposes of establishing a procedure to have the crane(s) immediately lowered upon request of the ATCT. When the crane(s) is no longer needed and has been permanently lowered, you should contact the ATCT and Airport District Office (ADO) to provide notification that the

NOTAM can be cancelled. The ADO will need the aeronautical study given on the subject line of this letter in order to cancel the NOTAM.

This determination does not include any environmental analysis or environmental approval for this proposal. All local and state requirements and/or permits must be obtained prior to construction of this proposal.

This determination does not constitute FAA approval or disapproval of the physical development involved in the proposal. It does not include approval of any lease, does not release any surplus or grant agreement acquired airport property, nor does it relieve the airport owner or the proponent of compliance with FAR, Part 155, or any other law, ordinance, or regulation of federal, state, or local government body or organization. Furthermore, the design and location of any stormwater retention/detention facilities on or near the airport must comply with FAA Advisory Circular 150/5200-33 "Hazardous Wildlife Attractants on or Near Airports", and must be approved on the ALP prior to construction, if the proposed ponds, were not included and approved in the subject Aeronautical Study.

Sincerely,

"Original Signed By"

Pedro J. Blanco
Program Manager

cc:
Land-Use Manager, FDOT/Central Office

