

**THE GOVERNING BOARD OF THE
ST. JOHNS RIVER WATER MANAGEMENT DISTRICT
UNDERWATER STRUCTURE REPAIRS - USJRB
INVITATION FOR BID 37505**

The Governing Board of the St. Johns River Water Management District (the “District”), requests that interested parties respond to the solicitation below by 2:00 p.m., January 11, 2022. Further information is available through DemandStar at *Demandstar.com* [(800) 711-1712], Vendor Registry at *Vendorregistry.com*, or the District’s website at *sjrwmd.com*. Solicitation packages may be obtained from DemandStar, Vendor Registry, or the District by calling or emailing Amy Lucey, Senior Procurement Specialist, at 321-409-2156 or ALucey@sjrwmd.com. Responses will be opened at the Palm Bay Service Center, 525 Community College Parkway SE, Palm Bay, FL 32909.

The scope of work includes repairs of identified deficiencies at five structures across the District. The Contractor shall provide a construction team including qualified divers and alligator trapping services to perform the repairs, which are primarily below water. The construction team shall include individuals qualified by experience and training in the inspection, design, construction and understanding of the operation of flood control structures. All dive operations shall meet the requirements and qualifications of 29 CFR 1910 Subpart T Commercial Dive Operations. The Contractor shall provide all necessary equipment to perform the tasks in this statement of work at no additional charge to the District.

The engineer's construction estimate for the project is \$100,000.00.

Special accommodations for disabilities may be requested through Amy Lucey, Senior Procurement Specialist, at 321-409-2156 or by calling (800) 955-8771 (TTY), at least five business days before the date needed.

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INSTRUCTIONS TO RESPONDENTS

1. DEFINITIONS

The definitions of capitalized terms used in this solicitation that are not otherwise defined herein can be found in the sample contract document (the “Agreement”) that is at the end of these instructions. The Agreement includes these Instructions to Respondents, any addenda published by the District, the bid provided by Respondent (the “Bid”), and all required certifications and affidavits.

2. CONTRACT ADMINISTRATION

All inquiries related to this solicitation may only be directed to the Procurement Specialist:

Amy Lucey, Senior Procurement Specialist
 Phone: 321-409-2156
 Fax: 321-722-5357
 Email: ALucey@sjrwmd.com

Between the release of this solicitation and the posting of the notice of intended decision, Respondents to this solicitation or persons acting on their behalf may not contact any employee or officer of the District concerning any aspect of this solicitation, except the procurement employee listed above. Violation of this provision is grounds for rejecting a response.

3. WHERE TO DELIVER BID

Documents may now be submitted online at www.demandstar.com or can be delivered to the address as indicated below.

The Bid must be submitted in a sealed envelope to:

Amy Lucey, Senior Procurement Specialist
 St. Johns River Water Management District
 Palm Bay Service Center
 525 Community College Parkway SE, Palm Bay, FL 32909

Respondents must clearly label the Bid envelope with **large bold, and/or colored lettering (place label on inner envelope if double sealed)** as follows:

SEALED BID — DO NOT OPEN
 Respondent’s Name: _____
 Invitation for Bid: 37505
 Opening Time: 2:00 p.m.
 Opening Date: January 11, 2022

4. **OPENING OF BIDS**

Respondents or their authorized agents are invited to attend the opening of the Bids at the following time and place:

2:00 p.m., January 11, 2022
 St. Johns River Water Management District
 Palm Bay Service Center
 525 Community College Parkway SE, Palm Bay, FL 32909

The Florida Public Records Act, §119.071(1)(b), Fla. Stat., exempts sealed Bids from inspection and copying until such time as the District provides notice of an intended decision pursuant to §120.57(3)(a), Fla. Stat., or until 30 days after opening of bids, proposals, submittals, or final replies, whichever is earlier. This exemption is not waived by the public opening of the Bids.

Unless otherwise exempt, Respondent's Bid is a public record subject to disclosure upon expiration of the above exemption period. If any information submitted with the Bid is a trade secret as defined in §812.081, Fla. Stat., and exempt from disclosure pursuant to §815.04, Fla. Stat., Respondent must clearly identify any such material as "CONFIDENTIAL TRADE SECRET" in its Bid and explain the basis for such exemption. The District reserves the right, in its sole judgment and discretion, to reject a Bid for excessive or unwarranted assertion of trade secret confidentiality and return the Bid to Respondent.

5. **PREPARATION AND ORGANIZATION OF BID DOCUMENTS**

Respondent must submit its Bid in "digital" format. Instructions for submitting are provided below.

1. Respondents must submit the following fully executed documents on reproduced copies of the attached forms provided in FORMS:
 - a. Bid Form
 - b. Cost Schedule
 - c. Certificate as to Corporation
 - d. Affidavit as to Non-collusion and Certification of Material Conformance with Specifications
 - e. Qualifications (General, Similar Projects, Client References, Subcontractors, and other required qualification forms)
 - f. Drug-Free Workplace Form (not required unless there is a tie bid)
2. Respondents must submit the original bid package in the form and manner specified herein. All blank spaces on the bid documents must be typewritten or legibly printed in ink. Respondent must specify the cost for any one complete bid item or the entire work described in the Agreement (the "Work") in figures as indicated by the spaces provided. In the event you decline to submit a bid, the District would appreciate submittal of the "No Response Form" provided at the end of the "FORMS" section to describe the reason for not submitting a bid.
3. Respondent must follow all procedures for digital submission or the Respondent's Bid may be determined as "non-responsive" and rejected.
4. Unless directed otherwise, all information required by the solicitation, including the forms and questionnaires listed under "A" above must be completed (typed or hand written) and included in the submission in electronic format (forms must be completed and converted/scanned to PDF format (Adobe).
5. The file-naming conventions for the bid shall include:
 - g. Bid: IFB # Respondent's name (abbreviated) Due Date
 (Example: IFB 12345 ABC Company 01-15-16)

6. All digitally submitted files shall be saved to a single CD or pin/thumb/jump drive. The CD or pin/thumb/jump drive **MUST** be placed in a sealed envelope pursuant to the instructions under Item 3 for sealed Bid – **DO NOT SUBMIT YOUR BID BY EMAIL — THIS WILL RESULT IN THE BID BEING REJECTED AS NON-RESPONSIVE.**
7. Please do **NOT** password protect your files. The District recommends that Respondents confirm their Submittal will open correctly on a non-company owned computer. Any electronic submittal received by the District that does not open on a District-owned computer is subject to rejection as a defective response.

All of the forms and questionnaires in the Invitation for Bids package are available upon request in Microsoft® Word to aid the Respondent in submitting its Bid.

If you need assistance or have any questions about the format, please call or email Amy Lucey at 321-409-2156 or ALucey@sjrwmd.com.

6. INQUIRIES AND ADDENDA

District staff are not authorized to orally interpret the meaning of the specifications or other Agreement documents, or correct any apparent ambiguity, inconsistency, or error therein. In order to be binding upon the District, the interpretation or correction must be given by the Procurement Specialist and must be in writing. The Procurement Specialist may orally explain the District's procedures and assist Respondents in referring to any applicable provision in the Invitation for Bids documents, but the Respondent is ultimately responsible for submitting the Bid in the appropriate form and in accordance with written procedures.

Every request for a written interpretation or correction must be received at least nine days prior to opening of Bids in order to be considered. Requests may be submitted by fax at 321-722-5357 or by email at ALucey@sjrwmd.com. Interpretations, corrections, and supplemental instructions will be communicated by written addenda to this solicitation posted by DemandStar and Vendor Registry to all prospective Respondents (at the respective addresses furnished for such purposes) no later than five days before the opening of Bids.

Submission of a Bid constitutes acknowledgment of receipt of all addenda. Bids will be construed as though all addenda had been received. Failure of the Respondent to receive any addenda does not relieve Respondent from any and all obligations under the Bid, as submitted. All addenda become part of the Agreement.

7. ENGINEER'S ESTIMATE

The engineer's construction estimate for the project is \$100,000.00. The above amount is an estimate only and does not limit the District in awarding the Agreement. Respondents are cautioned to not make any assumptions from the engineer's construction estimate about the total funds available for the Work. The District retains the right to adjust the estimate in awarding the Agreement. The District also reserves the right to reject all Bids if subsequent negotiations with qualified Respondents result in costs over the engineer's construction estimate. In addition, the District reserves the right to increase, decrease, or delete any class, item, or part of the Work in order to reduce costs for any reason. The District may discuss alternatives for reducing the cost of the Work with Respondents and make such modifications as it determines to be in its best interest.

8. MINIMUM QUALIFICATIONS

Respondent must use the "Qualification" forms (General, Similar Projects, and Client References) provided in these documents to document the minimum qualifications listed below. Failure to include these forms with the Bid may be considered non-responsive.

- a. Respondent (or a combination of the firm, individual, or project manager assigned to the work) must have successfully completed at least **three** projects of a similar nature (**underwater culvert repairs**) within the **three** years immediately preceding the date for receipt of Bids. Each project must have had a project value of at least **\$2,500.00**.
- b. Respondent must have no less than **three** years of experience on projects of the nature specified above.
- c. Respondent must provide three client references. Up to two of the client references may be from the similar projects listed in response to subparagraph (a), above. No more than one of the references may be from completed District projects. If a District project is cited, do not request a letter from District staff.

Irrespective of the minimum qualifications stated above, the District may make such investigations as it deems necessary to determine the ability of the Respondent to perform the Work. The District reserves the right to reject any Bid if the evidence submitted by such Respondent and/or the District's independent investigation of such Respondent fails to satisfy the District that such Respondent is properly qualified to carry out the obligations of the Agreement and complete the Work in a manner acceptable to the District within the time period specified.

9. **BID GUARANTY**

For the purposes of this Bid, a Bid guaranty is not required.

10. **SUBCONTRACTS**

Respondent must identify all portions of the Work Respondent intends to perform through subcontractors for each portion of the Work exceeding 15% of the Work on the attached "Proposed Subcontractors" form. Respondent must submit with its Bid a list of all known subcontractors who will be paid more than 15% of the Work. Acceptance of the Bid does not constitute approval of the subcontractors identified with the Bid.

11. **SIGNATURE AND CERTIFICATION REQUIREMENTS**

An individual submitting a Bid must sign his/her name therein and state his/her address and the name and address of every other person interested in the Bid as principal. If a firm or partnership submits the Bid, state the name and address of each member of the firm or partnership. If a corporation submits the Bid, an authorized officer or agent must sign the Bid, subscribing the name of the corporation with his or her own name and affixing the corporate seal. Such officer or agent must also provide the name of the state under which the corporation is chartered, and the names and business addresses of the President, Secretary, and Treasurer. Corporations chartered in states other than Florida must submit evidence of registration with the Florida Secretary of State for doing business in the State of Florida. Respondent must certify that all persons or entities having an interest as principal in the Bid or in substantial performance of the Work have been identified in the Bid forms.

12. **DISQUALIFICATION OF RESPONDENTS**

Any of the following causes will be considered as sufficient grounds for disqualification of a Respondent and rejection of the Bid:

- a. Contacting a District employee or officer other than the procurement employee named in this solicitation about any aspect of this solicitation before the notice of intended decision is posted.
- b. Submission of more than one Bid for the same subject matter by an individual, firm, partnership, or corporation under the same or different names;
- c. Evidence of collusion among Respondents;
- d. Submission of materially false information with the Bid;

- e. Information gained through checking of references or other sources which indicates that Respondent may not successfully perform the Work;
- f. Respondent is failing to adequately perform on any existing contract with the District;
- g. Respondent has defaulted on a previous contract with the District;
- h. The evidence submitted by Respondent, or the District's investigation of Respondent, fails to satisfy the District that Respondent is properly qualified to carry out the obligations of the Agreement in a manner acceptable to the District and within the time period specified;
- i. Any other cause that is sufficient to raise doubt regarding the ability of a Respondent to perform the Work in a manner that meets the District's objectives for the Work.

13. REJECTION OF BID

Bids must be delivered to the specified location and received before the Bid opening in order to be considered. Untimely Bids will be returned to the Respondent unopened. Bids will be considered irregular and may be rejected if they show material omissions, alterations of form, additions not called for, conditions, limitations, or other material irregularities. The District may consider incomplete any Bid not prepared and submitted in accordance with the provisions specified herein, and reserves the right to waive any minor deviations or irregularities in an otherwise valid Bid.

The District reserves the right to reject any and all Bids and cancel this request for qualifications when it determines, in its sole judgment and discretion, that it is not in its best interest to award the agreement.

14. WITHDRAWAL OF BIDS

Respondent may withdraw its Bid if it submits such a written request to the District prior to the designated date and hour of opening of Bids. Respondent may be permitted to withdraw its Bid no later than 72 hours after the Bid opening for good cause, as determined by the District in its sole judgment and discretion.

15. AWARDING THE AGREEMENT

- a. The Agreement will be awarded to the lowest responsive, responsible Respondent, being the Respondent with the lowest Total Bid Cost who demonstrates, in accordance with the requirements of the bid documents, a verifiable history of the skill, ability, integrity, and reliability necessary for the faithful performance of the Agreement (the "Successful Respondent"). The Agreement may be modified based on the District's acceptance of any alternatives listed in the bid that the District deems in its best interest.
- b. Section 286.0113, Fla. Stat., exempts from being open to the public, any portion of a meeting at which: (1) a negotiation with a Respondent is conducted pursuant to a competitive solicitation; (2) a Respondent makes an oral presentation as part of a competitive solicitation; (3) a Respondent answers questions as part of a competitive solicitation; or (4) negotiation strategies are discussed. Also, recordings of, and any records presented at, the exempt meeting are exempt from §119.07(1) and §24(a), Art. I of the State Constitution (Public Records) until such time as the District provides notice of an intended decision or until 30 days after opening the bids, proposals, submittals, or final replies, whichever occurs earlier. A complete recording shall be made of any portion of an exempt meeting. No portion of the exempt meeting may be held off the record.
- c. Pursuant to §286.0113 Fla. Stat., if the District rejects all bids and concurrently provides notice of its intent to reissue the competitive solicitation, any recordings or records presented at any exempt meeting relating to the solicitation shall remain exempt from §119.07(1) and §24(a), Art. I of the State Constitution (Public Records) until such time as the District provides notice of an intended decision concerning the reissued competitive solicitation or until the District withdraws the reissued competitive solicitation. A recording and any records presented at an exempt meeting are not exempt for longer than 12 months after the initial District notice rejecting all bids.

- d. If two or more bids are equal in all respects, the Agreement will be awarded as follows: (1) to the Respondent that certifies compliance with §287.087, Fla. Stat., via the Drug-Free Workplace Form; (2) to a Respondent university in the State University System pursuant to §373.63, Fla. Stat.; (3) to a Respondent whose bid contains commodities manufactured, grown, or produced within the State of Florida pursuant to §287.082 Fla. Stat.; or (4) by lot.
- e. The District reserves the right to award the Agreement to the next lowest available bidder in the event the Successful Respondent fails to enter into the Agreement, or the Agreement with said Respondent is terminated within 90 days of the effective date.
- f. All Respondents will be notified of the District's intent to award or decision to award the Agreement. For the purpose of filing a bid protest under §120.57(3), Fla. Stat., the time period will commence as provided in "NOTICES AND SERVICES THEREOF."

16. EXECUTION OF AGREEMENT

Submittal of a Bid binds the Successful Respondent to perform the Work upon acceptance of the Bid and execution of the Agreement by the District.

Unless all Bids are rejected, a contract substantially in the form included in these documents will be provided to the Successful Respondent, who must execute and return the Agreement to the District within ten days of the date of receipt, along with the following:

- a. A completed Internal Revenue Service Form W-9
- b. Satisfactory evidence of all required insurance coverage
- c. Proof satisfactory to the District of the authority of the person or persons executing the Agreement on behalf of Respondent
- d. All other information and documentation required by the Agreement

The District will not execute the Agreement until the above documents have been executed and delivered to the District. The Agreement will not be binding until executed by the District. A copy of the fully executed Agreement will be delivered to the Successful Respondent. The District reserves the right to cancel award of the Agreement without liability at any time before the Agreement has been fully executed by all parties and delivered to the Successful Respondent.

Failure upon the part of the Successful Respondent to execute the Agreement or timely submit the required evidence of insurance coverage, or any other matter required by the Agreement, will be just cause, if the District so elects, for the recommended award to be annulled.

17. EXAMINATION OF AGREEMENT DOCUMENTS AND WORK AREA

Respondent is solely responsible for being fully informed of the conditions under which the Work is to be performed in relation to existing conditions. Respondent is responsible for carefully examining the general area of the Work, the requirements of the drawings and other contract documents related to the Work, the time in which the Work must be completed, and any other details of the Work. Respondent must satisfy itself from its own personal knowledge and experience or professional advice as to the character of the Work, the conditions and materials to be encountered, the character, quality, and quantities of the Work, and any other conditions affecting the Work, including surrounding land.

Failure to satisfy the obligations of this paragraph will not relieve a Successful Respondent of its obligation to furnish all material, equipment, and labor necessary to perform the Agreement and to complete the Work for the consideration set forth in its Bid. Any such failure will not be sufficient cause to submit a claim for additional compensation.

No verbal agreement or conversation with any District officer, agent or employee, either before or after the execution of the Agreement, will affect or modify any of its terms.

18. DIVERSITY

The District is committed to the opportunity for diversity in the award and performance of all procurement activities. The District encourages its Prime Respondents to make a good faith effort to ensure that women and minority-owned business enterprises (W/MBE) are given the opportunity for maximum participation as second and lower tier participants. The District will assist Respondents by sharing information on W/MBEs to encourage their participation.

19. FLORIDA SALES TAX

The District is exempt from payment of State of Florida sales tax pursuant to §212.08(6), Fla. Stat. Any tangible personal property that is the subject of this Invitation for Bids is intended to remain tangible personal property and not become part of a public work owned by the District.

20. PUBLIC ENTITY CRIMES/DISCRIMINATORY VENDORS

In accordance with §287.133 and §287.134, Fla. Stat., a person or affiliate who has been placed on the convicted or discriminatory vendor lists following a conviction for a public entity crime or placement on the discriminatory vendor list may not submit a bid, proposal, or reply on a contract to provide any goods or services to a public entity; may not submit a bid, proposal, or reply on a contract with a public entity for the construction or repair of a public building or public work; may not submit bids, proposals, or replies on leases of real property to a public entity; may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity; and may not transact business with any public entity in excess of the threshold amount provided in §287.017 for CATEGORY TWO (\$35,000) for a period of 36 months following the date of being placed on the convicted or discriminatory vendor lists.

21. USE BY OTHER FLORIDA GOVERNMENTAL ENTITIES

Respondent may provide services to other State of Florida governmental entities pursuant to the terms and conditions of the Agreement. These governmental entities include other water management districts, state of Florida agencies (including members of the state university system and community college system), counties, school boards, municipalities, special districts, and other local public agencies or authorities. References to the St. Johns River Water Management District in the Agreement will be replaced with the purchasing entity and the District will not be a party to any other governmental entity's agreement to purchase. Nor will the District be responsible for payment for any goods or services delivered or performed for any other governmental entity that utilizes Respondent pursuant to this paragraph.

22. NOTICES AND SERVICES THEREOF

The District will publish notice of specifications and criteria, including addenda, intended agency decisions, or other matters pertinent to this solicitation on Onvia DemandStar at *DemandStar.com* and Vendor Registry at *vendorregistry.com*. Onvia DemandStar and Vendor Registry may also be accessed through the District's web site at *sjrwm.com*. In addition, the District will post notices of intended agency decisions at the District's headquarters, 4049 Reid Street, Palatka, Florida, Administration Building, Procurement Bulletin Board, on the date the publication is posted on Onvia DemandStar.

Notices that are posted on Onvia DemandStar and Vendor Registry are deemed received at 8:00 a.m. on the next business day following the date posted. Notices that are posted at the District's Procurement Bulletin Board are deemed received at 8:00 a.m. on the next business day following the date of posting. Notices will be posted for a minimum of 72 hours following the time at which they are deemed received. The time period for filing a Notice of Protest pursuant to §120.57(3), Fla. Stat., and Rule 28-110.003, Fla. Admin. Code, commences at the time notices are deemed received.

As a courtesy to Respondents, the District may send copies of the notices of intended agency decisions via email or facsimile to Respondent. These courtesy communications neither constitute official notice nor vary the times of receipt set forth above.

23. **PROTEST PROCEDURES**

Pursuant to §120.57(3), Fla. Stat., and Rule 28-110.003, Fla. Admin. Code, any person adversely affected by the procurement methodology described herein, or the specifications or criteria, including addenda, must file a Notice of Protest within 72 hours after receipt of the solicitation documents or addenda.

Pursuant to §120.57(3), Fla. Stat., and Rule 28-110.003, Fla. Admin. Code, any person adversely affected by a District decision or intended decision to award a contract, or to reject all bids, proposals, or qualifications, must file a Notice of Protest within 72 hours after receipt of the decision or intended decision. Pursuant to §120.57(3), Fla. Stat., and Rule 28-110.004, Fla. Admin. Code, the protester must also file with the District Clerk a Formal Written Protest within ten days after the date the Notice of Protest is filed with the District. The Formal Written Protest must state with particularity the facts and law upon which the protest is based. Pursuant to §287.042(2)(c), Fla. Stat., any person who files an action protesting the decision or intended decision must post with the District Clerk at the time of filing the formal written protest a bond, cashier's check, or money order made payable to the St. Johns River Water Management District in an amount equal to one percent (1%) of the estimated contract amount.

No additional time will be added for mailing. All filings must comply with Rule 28-106.104, Fla. Admin. Code, and must be addressed to and received by the District Clerk at the District Headquarters in Palatka, Florida within the prescribed time periods. The District will not accept as filed any electronically transmitted facsimile pleadings, petitions, Notice of Protest or other documents. Failure to file a protest within the time prescribed in §120.57(3), Fla. Stat., or failure to post the bond or other security required by law within the time allowed for filing a bond will constitute a waiver of proceedings under chapter 120, Fla. Stat. Mediation under §120.573, Fla. Stat., is not available.

FORMS
BID FORM

Include this form in the response

RESPONDENT:

The undersigned, as Respondent, hereby declares and certifies that the only person(s) or entities interested in this bid as principal(s), or as persons or entities who are not principal(s) of the Respondent but are substantially involved in performance of the Work, is or are named herein, and that no person other than herein mentioned has any interest in this bid or in the Agreement to be entered into; that this bid is made without connection with any other person, company, or parties making a bid; and that this bid is in all respects fair and in good faith without collusion or fraud.

Respondent represents to the District that, except as may be disclosed in an addendum hereto, no officer, employee or agent of the District has any interest, either directly or indirectly, in the business of Respondent to be conducted under the Agreement, and that no such person shall have any such interest at any time during the term of the Agreement, should it be awarded to Respondent.

Respondent further declares that it has examined the Agreement and informed itself fully in regard to all conditions pertaining to this solicitation; it has examined the specifications for the Work and any other Agreement documents relative thereto; it has read all of the addenda furnished prior to the bid opening, as acknowledged below; and has otherwise satisfied itself that it is fully informed relative to the Work to be performed.

Respondent agrees that if its bid is accepted, Respondent shall contract with the District in the form of the attached Agreement, and shall furnish everything necessary to complete the Work in accordance with the time for completion specified in the Agreement, and shall furnish the required evidence of the specified insurance.

Acknowledgment is hereby made of the following addenda (identified by number) received:

Addendum No.	Date	Addendum No.	Date
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Respondent (firm name) _____
Date

Address

Email address

Signature _____
Telephone number

Typed name and title _____
Fax number

COST SCHEDULE

Include this form in the response

Bid to be opened at 2:00 p.m., January 11, 2022

To: ST. JOHNS RIVER WATER MANAGEMENT DISTRICT

In accordance with the advertisement requesting bids for the Underwater Structure Repairs - USJRB, subject to the terms and conditions of the Agreement, the undersigned proposes to perform the Work for the price contained in the following schedule (fill in all blanks).

If said bid exceeds the estimated amount previously provided, the District expressly reserves the right to increase, decrease, or delete any class, item, or part of the Work, as may be determined by the District.

Respondents are reminded to refer to "PREPARATION AND ORGANIZATION OF BID DOCUMENTS" for information to be included with the bid package.

The bid will be awarded to the lowest responsive and responsible Respondent for items one through five..
RESPONDENTS MUST PROVIDE COSTS FOR ALL LISTED ITEMS.

BID SCHEDULE - UNDERWATER STRUCTURE REPAIRS (USJRB)				
ITEM NO	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE
1	S-23	1	LS	
2	S-250E	1	LS	
3	S-252E	1	LS	
4	S-252F	1	LS	
5	S-264	1	LS	
TOTAL PROJECT COST				

Cost schedule continued on the next page.

Pursuant to §287.084(2) Fla. Stat., a vendor whose principal place of business is outside the State of Florida must accompany any written bid, proposal, or reply documents with a written opinion of an attorney at law licensed to practice law in that foreign state, as to the preferences, if any or none, granted by the law of that state to its own business entities whose principal places of business are in that foreign state in the letting of any or all public contracts.

I HEREBY ACKNOWLEDGE, as Respondent's authorized representative, that I have fully read and understand all terms and conditions as set forth in this bid and upon award of such bid, shall fully comply with such terms and conditions.

Date

Respondent (firm name)

Address

E-mail address

Signature

Telephone number

Typed name and title

Fax number

PROPOSED SUBCONTRACTORS

Include this form in the response

Respondent must identify all portions of the Work Respondent intends to perform through subcontractors.

1. Name and address of subcontractor: _____

Description of work: _____

Estimated value of Work: _____

2. Name and address of subcontractor: _____

Description of work: _____

Estimated value of Work: _____

3. Name and address of subcontractor: _____

Description of work: _____

Estimated value of Work: _____

4. Name and address of subcontractor: _____

Description of work: _____

Estimated value of Work: _____

5. Name and address of subcontractor: _____

Description of work: _____

Estimated value of Work: _____

6. Name and address of subcontractor: _____

Description of work: _____

Estimated value of Work: _____

CERTIFICATE AS TO CORPORATION

Include this form in the response

The below Corporation is organized under the laws of the State of _____; is authorized by law to respond to this Invitation for Bids and perform all work and furnish materials and equipment required under the Agreement, and is authorized to do business in the state of Florida.

Corporation name: _____

Address: _____

Registration No.: _____

Registered Agent: _____

By: _____

(Official title)

(Affix corporate seal)

Attest: _____

(Secretary)

The full names and business or residence addresses of persons or firms interested in the foregoing bid as principals or officers of Respondent are as follows (specifically include the President, Secretary, and Treasurer and state the corporate office held of all other individuals listed):

Identify any parent, subsidiary, or sister corporations involving the same or substantially the same officers and directors that will or may be involved in performance of the Project, and provide the same information requested above on a photocopy of this form.

If applicable, attach a copy of a certificate to do business in the state of Florida, or a copy of the application that has been accepted by the state of Florida to do business in the state of Florida, for the Respondent and/or all out-of-state corporations that are listed pursuant to this form.

AFFIDAVIT AS TO NON-COLLUSION AND CERTIFICATION OF MATERIAL CONFORMANCE WITH SPECIFICATIONS

Include this form in the response

STATE OF _____

COUNTY OF _____

I, the undersigned, _____ being first duly sworn, depose and say that:

1. I am the owner or duly authorized officer, representative, or agent of:

_____ the Respondent that has submitted the attached bid.

2. The attached bid is genuine. It is not a collusive or sham bid.

3. I am fully informed respecting the preparation and contents of, and knowledgeable of all pertinent circumstances respecting the attached bid.

4. Neither Respondent nor any of its officers, partners, owners, agents, representatives, employees, or parties in interest, including this affiant, has in any way colluded, conspired, connived, or agreed, directly or indirectly, with any other Respondent, firm, or person to submit a collusive or sham bid in connection with the Agreement for which the attached bid has been submitted, or to refrain from bidding in connection with such Agreement, or has in any manner, directly or indirectly, sought by agreement, collusion, communication, or conference with any other Respondent, firm, or person to fix the price or prices in the attached bid of any other Respondent, or to fix any overhead, profit, or cost element of the bid prices or the bid price of any other Respondent, or to secure through collusion, conspiracy, connivance, or unlawful agreement any advantage against the District or any other person interested in the proposed Agreement.

5. The price(s) quoted in the attached bid are fair and proper and are not tainted by any collusion, conspiracy, connivance, or unlawful agreement on the part of the Respondent or any of its agents, representatives, owners, employees, or parties in interest, including this affiant.

6. No official or other officer or employee of the District, whose salary or compensation is payable in whole or in part by the District, is directly or indirectly interested in this bid, or in the supplies, materials, equipment, work, or labor to which it relates, or in any of the profits therefrom.

7. Any materials and equipment proposed to be supplied in fulfillment of the Agreement to be awarded conform in all respects to the specifications thereof. Further, the proposed materials and equipment will perform the intended function in a manner acceptable and suitable for the intended purposes of the District.

Signature: _____

Title: _____

Subscribed and sworn to before me this _____ day of _____, 20 ____.

Notary Public, state of _____ at Large

My commission expires:

(SEAL)

QUALIFICATIONS — GENERAL

Include this form in the response

As part of the bid, Respondent shall complete the following so that the District can determine Respondent's ability, experience, and facilities for performing the Work.

Name of Respondent: _____

Respondent's tax identification No.: _____

Year company was organized/formed: _____

Number of years Respondent has been engaged in business under the present firm or trade name: _____

Total number of years Respondent has experience in similar underwater structure repairs is work described in the INSTRUCTIONS TO RESPONDENTS: _____

Has Respondent previously been engaged in the same or similar business under another firm or trade name? If so, please describe each such instance.

Has Respondent ever been adjudicated bankrupt, initiated bankruptcy, or been the subject of bankruptcy proceedings on behalf of the current entity submitting this bid or a prior entity that Respondent substantially operated or controlled? If yes, please describe the nature and result of those proceedings and the entity involved.

Describe the background/experience of the person or persons who will be primarily responsible for directing the Work that will be performed pursuant to this bid. This inquiry is intended to encompass the project manager and/or superintendent who will be engaged on a daily basis in directing performance of the Work.

QUALIFICATIONS — SIMILAR PROJECTS

Include this form in the response

Respondent (or a combination of the firm, individual, or project manager assigned to the work) must have successfully completed at least three similar projects within the three years immediately preceding the date set for receipt of the response, as described in the INSTRUCTIONS TO RESPONDENTS. Each project shall have had a project value of at least \$\$2,500.00. (Add additional sheet for optional additional completed projects.)

Completed Project 1:

Agency/company: _____

Current contact person at agency/company: _____

Telephone: _____ Fax: _____ Email: _____

Address of agency/company: _____

Name of project: _____

Description: _____

Project value: _____ Start date: _____ Completion date: _____
(month/year) (month/year)

Name(s) of assigned personnel:

Project manager: _____

Others: _____

Completed Project 2:

Agency/company: _____

Current contact person at agency/company: _____

Telephone: _____ Fax: _____ Email: _____

Address of agency/company: _____

Name of project: _____

Description: _____

Project value: _____ Start date: _____ Completion date: _____
(month/year) (month/year)

Name(s) of assigned personnel:

Project manager: _____

Others: _____

QUALIFICATIONS — CLIENT REFERENCE

Include this form in the response

Respondent shall provide three client references, which may include the similar projects listed above. No more than one reference shall be from the District. (For similar projects listed above, simply state “Similar Project No. ____.”)

Client Reference 1:

Agency/company: _____

Current contact person at agency/company: _____

Telephone: _____ Fax: _____ E-mail: _____

Agency/Company Address: _____

Name of project: _____

Description: _____

Project value: _____ Project manager: _____

Client Reference 2:

Agency/company: _____

Current contact person at agency/company: _____

Telephone: _____ Fax: _____ E-mail: _____

Agency/Company Address: _____

Name of project: _____

Description: _____

Project value: _____ Project manager: _____

Client Reference 3:

Agency/company: _____

Current contact person at agency/company: _____

Telephone: _____ Fax: _____ E-mail: _____

Agency/Company Address: _____

Name of project: _____

Description: _____

Project value: _____ Project manager: _____

DRUG-FREE WORKPLACE FORM

This form required only in the event of a tie response

The Respondent, (business name) _____, in accordance with §287.087, Fla. Stat., hereby certifies that Respondent does the following:

1. Informs employees about the dangers of drug abuse in the workplace, the business’s policy of maintaining a drug-free workplace, any available drug counseling, rehabilitation, and employee assistance programs, and the penalties that may be imposed upon employees for drug abuse violations
2. Publishes a statement notifying employees that
 - a. 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 its employees for violations of such prohibition.
 - b. as a condition of working on the contractual services that are the subject of this solicitation, 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, Fla. Stat., or of any controlled substance law of the United States or any state, for a violation occurring in the workplace no later than five days after such conviction.
3. Gives each employee engaged in providing the contractual services that are the subject of this solicitation a copy of the statement specified in paragraph 2, above.
4. Imposes a sanction on, or require the satisfactory participation in a drug abuse assistance or rehabilitation program if such is available in the employee’s community, by any employee convicted of a violation listed in sub-paragraph 2.b., above.
5. Makes a good faith effort to continue to maintain a drug-free workplace through implementation of §287.087, Fla. Stat.

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

By: _____

Title: _____

Date: _____/

NO RESPONSE FORM
ST. JOHNS RIVER WATER MANAGEMENT DISTRICT
INVITATION FOR BIDS 37505

Your reasons for not responding to this Invitation for Bids are valuable to the St. Johns River Water Management District’s procurement process. Please complete this form and return it to the Office of Financial Services no later than the date set for receipt of bids. Thank you for your cooperation.

Please check (as applicable):

- Specifications too “general” (explain below)
- Insufficient time to respond to the solicitation
- Do not provide this type of work for this project
- Schedule would not permit us to perform
- Unable to meet solicitation specifications
- Specifications unclear (explain below)
- Disagree with solicitation or Agreement terms and conditions (explain below)
- Other (specify below)

Remarks: _____

DATE _____

RESPONDENT (FIRM NAME) _____

ADDRESS _____

E-MAIL ADDRESS _____

SIGNATURE

TYPED NAME AND TITLE

TELEPHONE NUMBER

FAX NUMBER

**AGREEMENT
BETWEEN THE
ST. JOHNS RIVER WATER MANAGEMENT DISTRICT
AND _____ TO/FOR
UNDERWATER STRUCTURE REPAIRS - USJRB**

THIS AGREEMENT is entered into by and between the GOVERNING BOARD of the ST. JOHNS RIVER WATER MANAGEMENT DISTRICT (the "District"), whose address is 4049 Reid Street, Palatka, Florida 32177-2571, and _____ (""), whose address is _____ . All references to the parties hereto include the parties, their officers, employees, agents, successors, and assigns.

In consideration of the payments hereinafter specified, Contractor agrees to furnish and deliver all materials and perform all labor required for 37505, Underwater Structure Repairs - USJRB (the "Work"). In accordance with IFB 37505, Contractor shall complete the Work in conformity with this Agreement, which consists of and incorporates all of the following documents: (1) advertisement for bids, proposals, or qualifications; (2) Instructions to Respondents; (3) addenda; certifications, and affidavits; (4) bid, proposal, or qualifications submittals; (5) Agreement, including the Statement of Work, and any Special Conditions or other attachments. If any provision in the body of this Agreement conflicts with any attachment hereto, the body of this Agreement shall prevail. This Agreement, including attachments, shall take precedence over all solicitation documents (items 1 – 4). The parties hereby agree to the following terms and conditions.

1. TERM

- (a) The term of this Agreement shall be from the Effective Date to the Completion Date. Time is of the essence for each and every aspect of this Agreement. Where additional time is allowed to complete the Work, the new time limit shall also be of the essence. All provisions of this Agreement that by their nature extend beyond the Completion Date survive termination or expiration hereof.
- (b) **Effective Date.** The Effective Date is the date upon which the last party to this Agreement has dated and executed the same.
- (c) **Completion Date.** The Completion Date of this Agreement is March 31, 2021, unless extended by mutual written agreement of the parties. The Work shall be completed for use no later than said date.

2. LIQUIDATED DAMAGES

- (a) If Contractor neglects, fails, or refuses to satisfactorily complete the Work by the Completion Date, Contractor shall, as a part of the consideration for this Agreement, pay the District the amount stipulated herein, not as a penalty, but as liquidated damages for such breach, for each day Contractor is in default thereafter. This amount is fixed and agreed upon between the parties due to the impracticability and extreme difficulty of ascertaining the actual damages the District would sustain in such event. The amount of liquidated damages shall be one half of one percent (.5%) of the total contract amount per day. Liquidated damages shall be deducted from payments as they become due and may be deducted from the retainage due upon completion. They constitute an agreed-upon liquidated sum solely for consequential damages attributable to delay and are not a substitute for any other consequential damages incurred by the District, such as the cost of finding a replacement Contractor for completion of the Work if this Agreement is terminated by the District for non-performance.

- (b) Contractor shall not be charged with liquidated damages or any excess cost when the District determines that Contractor's reasons for the time extension are acceptable in accordance with **FORCE MAJEURE; DELAYS; EXTENSION OF COMPLETION DATE**. A written extension of the Completion Date constitutes a waiver of liquidated damages to the new Completion Date unless expressly provided therein to the contrary.

3. DELIVERABLES

- (a) The Work is specified in the Statement of Work, Attachment A. Contractor shall deliver all products and deliverables as stated therein. Contractor is responsible for the professional quality, technical accuracy, and timely completion of the Work. Both workmanship and materials shall be of good quality. Contractor shall, if required, furnish satisfactory evidence as to the kind and quality of materials provided. Unless otherwise specifically provided for herein, Contractor shall provide and pay for all materials, labor, and other facilities and equipment necessary for performance of the Work. The District's Project Manager shall make a final acceptance inspection of the deliverables when completed and finished in all respects.
- (b) If not otherwise addressed in the Statement of Work, upon written request, Contractor shall submit written progress reports to the District's Project Manager at the frequency requested in the form approved by the Project Manager at no additional cost to the District. The progress report shall provide an updated progress schedule, taking into account all delays and approved changes in the Work. Failure to provide a progress report will be cause to withhold payment.

4. **OWNERSHIP OF DELIVERABLES.** All deliverables, including Work not accepted by the District, are District property when Contractor has received compensation therefor, in whole or in part. Any District source documents or other District or non-District documents, specifications, materials, reports, or accompanying data developed, secured, or used in the performance of the Work, excluding proprietary materials, as outlined in a Statement of Work, are District property and shall be safeguarded and provided to the District upon request. District plans and specifications shall not be used on other work and, with the exception of the original plans and specifications, shall be returned to the District upon request. This obligation shall survive termination or expiration of this Agreement.

5. FUNDING OF AGREEMENT

- (a) For satisfactory performance of the Work, the District agrees to pay Contractor \$_____ (the "Total Compensation").

6. PAYMENT OF INVOICES

- (a) Contractor shall submit itemized invoices on a monthly basis by one of the following two methods: (1) by email to acctpay@sjrwmd.com (preferred) or (2) by mail to the St. Johns River Water Management District, Finance Director, 4049 Reid Street, Palatka, Florida 32177-2571. Each invoice shall be submitted in detail sufficient for proper pre-audit and post-audit review. If necessary for audit purposes, Contractor shall provide additional supporting information as required to document invoices.
- (b) **End of District Fiscal Year Reporting.** The District's fiscal year ends on September 30. Irrespective of the invoicing frequency, the District is required to account for all encumbered funds at that time. When authorized under the Agreement, submittal of an invoice as of September 30 satisfies this requirement. The invoice shall be submitted no later than October 30. If the Agreement does not authorize submittal of an invoice as of September 30, Contractor shall submit, prior to October 30, a description of the additional Work completed between the last invoice and September 30, and an estimate of the additional amount due as of September 30 for such Work. If there have been no prior invoices, Contractor shall submit a description of the

Work completed on the project through September 30 and a statement estimating the dollar value of that Work as of September 30.

- (c) **Final Invoice.** The final invoice must be submitted no later than 20 business days after the Completion Date; provided, however, that when the Completion Date corresponds with the end of the District's fiscal year (September 30), the final invoice must be submitted no later than 30 days after the Completion Date. **Final invoices that are submitted after the requisite date shall be subject to a penalty of ten percent of the invoice. This penalty may be waived by the District, in its sole judgment and discretion, upon a showing of special circumstances that prevent the timely submittal of the final invoice. Contractor must request approval for delayed submittal of the final invoice not later than ten days prior to the due date and state the basis for the delay.**
 - (d) All invoices shall include the following information: (1) District contract number; (2) Contractor's name and address (include remit address, if necessary); (3) Contractor's invoice number and date of invoice; (4) District Project Manager; (5) Contractor's Project Manager; (6) supporting documentation as to cost and/or project completion (as per the cost schedule and other requirements of the Statement of Work; (7) Progress Report (if required); (8) Diversity Report (if otherwise required herein). Invoices that do not correspond with this paragraph shall be returned without action, stating the basis for rejection. Payments shall be made within 20 business days of receipt of the invoice. Disputes regarding invoice sufficiency are resolved pursuant to the dispute resolution procedure of this Agreement.
 - (e) **Travel expenses.** If the cost schedule for this Agreement includes a line item for travel expenses, travel expenses shall be drawn from the project budget and are not otherwise compensable. If travel expenses are not included in the cost schedule, they are a cost of providing the service that is borne by Contractor and are only compensable when specifically approved by the District as an authorized District traveler. In such instance, travel expenses must be submitted on District or State of Florida travel forms and shall be paid pursuant to District Administrative Directive 2000-02.
 - (f) **Payments.** Absent exceptional circumstances, Contractor is required to sign up and receive payment(s) electronically from the District via Automated Clearing House (ACH) payment.
 - (g) **Payments withheld.** The District may withhold or, on account of subsequently discovered evidence, nullify, in whole or in part, any payment to such an extent as may be necessary to protect the District from loss as a result of: (1) defective Work not remedied; (2) failure of Contractor to make payments when due to subcontractors or suppliers for materials or labor; (3) failure to maintain adequate progress in the Work; (4) damage to another contractor; or (5) any other material breach of this Agreement. Amounts withheld shall not be considered due and shall not be paid until the ground(s) for withholding payment have been remedied.
 - (h) **Payments.** The District shall pay Contractor 100% of each approved invoice.
7. **PAYMENT AND RELEASE.** Upon satisfactory completion of the Work, the District will provide Contractor a written statement accepting all deliverables. Contractor's acceptance of final payment shall constitute a release in full of all Contractor claims against the District arising from the performance of this Agreement, with the exception of any pending claims for additional compensation that have been documented and filed as required by this Agreement.
8. **INDEMNIFICATION.** Contractor shall indemnify and hold harmless, release, and forever discharge the District, its public officers, employees, agents, representatives, successors, and assigns, from any and all liabilities, damages, losses, and costs, including, but not limited to, reasonable attorney's fees, arising from or caused by the Contractor, its employees or subcontractors, in the performance of the

Work. Contractor shall further indemnify the District for all costs and penalties the District incurs related to any failure to offer Patient Protection and Affordable Care Act compliant health care coverage to Contractor-employees performing under this contract.

- 9. **INSURANCE.** Contractor shall acquire and maintain all insurance required by Attachment B, Insurance Requirements, and shall not commence Work until it has provided Certificates of Insurance to the District as per Attachment B. Receipt of Certificates of Insurance indicating less coverage than required does not constitute a waiver of the Insurance Requirements. Contractor waives its right of recovery against the District to the extent permitted by its insurance policies. Contractor’s insurance shall be considered primary, and District insurance shall be considered excess, as may be applicable to Contractor’s obligation to provide insurance.

- 10. **FUNDING CONTINGENCY.** This Agreement is at all times contingent upon funding availability, which may include a single source or multiple sources, including, but not limited to: (1) ad valorem tax revenues appropriated by the District's Governing Board; (2) annual appropriations by the Florida Legislature, or (3) appropriations from other agencies or funding sources. Agreements that extend for a period of more than one Fiscal Year are subject to annual appropriation of funds in the sole discretion and judgment of the District's Governing Board for each succeeding Fiscal Year. Should the Work not be funded, in whole or in part, in the current Fiscal Year or succeeding Fiscal Years, the District shall so notify Contractor and this Agreement shall be deemed terminated for convenience five days after receipt of such notice, or within such additional time as the District may allow. For the purpose of this Agreement, “Fiscal Year” is defined as the period beginning on October 1 and ending on September 30.

11. PROJECT MANAGEMENT PERSONNEL

- (a) The Project Managers listed below shall be responsible for overall coordination and management of the Work. Either party may change its Project Manager upon three business days’ prior written notice to the other party. Written notice of change of address shall be provided within five business days. All notices shall be in writing to the Project Managers at the addresses below and shall be sent by one of the following methods: (1) hand delivery; (2) U.S. certified mail; (3) national overnight courier; (4) email or, (5) fax. Notices via certified mail are deemed delivered upon receipt. Notices via overnight courier are deemed delivered one business day after having been deposited with the courier. Notices via email or fax are deemed delivered on the date transmitted and received.

<u>DISTRICT</u>	<u>CONTRACTOR</u>
James Rider, Project Manager	TBD, Project Manager
St. Johns River Water Management District	TBD
525 Community College Parkway, S.E	TBD
Palm Bay, FL 32909-2213	TBD
Phone: 321-984-4941	Phone: TBD
Email: jrider@sjrwm.com	Email: TBD

- (b) The District’s Project Manager shall have sole responsibility for transmitting instructions, receiving information, and communicating District policies and decisions regarding all matters pertinent to performance of the Work.

- (c) Contractor shall provide efficient supervision of the Work, using its best skill and attention. Contractor shall keep, on the worksite during its progress, a competent superintendent that is satisfactory to the District. The superintendent shall not be changed except with the District’s consent, unless the superintendent proves to be unsatisfactory to Contractor and/or ceases to be in its employ. The superintendent shall represent Contractor in the absence of Contractor’s Project

Manager. All directions given to him shall be as binding as if given to Contractor. If the District produces documented evidence and informs the Contractor that any person on the job is incompetent, disorderly, or is working contrary to the Agreement or the District's instructions, that person shall thereupon be immediately dismissed from the project and shall not be given employment on any work connected with this Agreement. The District may request Contractor replace its Project Manager if said manager fails to carry the Work forward in a competent manner, follow instructions or specifications, or for other reasonable cause.

- (d) Contractor shall maintain an adequate and competent professional staff. Contractor's employees, subcontractors, or agents shall be properly trained to meet or exceed any specified licensing, training and/or certification applicable to their profession. Upon request, Contractor shall furnish proof thereof.

12. SCHEDULING AND WORK PLANNING; PROGRESS REPORTING

- (a) **Progress Reports.** Contractor shall provide to the District update/status reports as provided in the Statement of Work. Reports will provide detail on progress of the Work and outline any potential issues affecting completion or the overall schedule. Reports may be submitted in any form agreed to by District's Project Manager and Contractor, and may include emails, memos, and letters.
1. **Progress Meetings.** The District may conduct progress meetings with Contractor on a frequency to be determined by the District. In such event, Contractor shall make available its Project Manager and other appropriate personnel to discuss matters pertinent to the Work.
 2. **Failure to Meet Schedule.** If progress of the Work falls five percent or more behind schedule, except as a result of District-approved delays, Contractor shall take all necessary steps to augment the work effort to get the project back on schedule. Should the progress of the Work fall ten percent or more behind schedule, the District may advise Contractor through a "cure" notice that this Agreement is subject to termination for cause if the failure is not cured within the time frame specified in said notice.

13. FORCE MAJEURE; DELAYS

- (a) **Force Majeure.** Contractor shall not be liable for failure to carry out the terms of this Agreement to the extent such failure is due to a Force Majeure event, except for failures that could have been reasonably foreseen and guarded against so as to avoid or reduce the adverse impact thereof. A Force Majeure event is hereby defined as the failure to carry out any of the terms of this Agreement due to any one of the following circumstances beyond the control of Contractor: (a) the operation and effect of rules, regulations, or orders promulgated by any commission, county, municipality, or governmental agency of the State of Florida or the United States, (b) a restraining order, injunction, or similar decree of any court of competent jurisdiction, (c) war, (d) flood, (e) earthquake, (f) fire, (g) severe wind storm, (h) acts of public disturbance, (i) quarantine restrictions, (j) epidemics, (k) strikes, (l) freight embargoes, or (m) sabotage. The times specified herein for performances include delays that can ordinarily be anticipated due to adverse weather conditions. The District is not obligated to grant an extension of time due to adverse weather conditions unless such conditions rise to the level of Force Majeure.
- (b) **Delay.** Contractor shall not be compensated for delays caused by Contractor's inefficiency, rework made necessary by Contractor's error, failure to perform the Work as scheduled, or any other corrective or productivity measures made necessary by errors, omissions, or failures to properly perform the Work. Within ten days after the onset of a delay, Contractor shall notify the District in writing of the delay, which shall provide: (1) a detailed description the delay and its probable duration, (2) the specified portion of the Work affected, and (3) an opinion as to the

cause of the delay and liability (if any) for the delay. Notices provided more than ten days after the inception of the delay shall only be effective as to additional costs or delay incurred during the ten day period preceding receipt of such notice. In the case of continuing cause delay for the same cause, only one notice of delay is necessary. **Failure to provide this notice waives any claim for extension of time or additional compensation resulting from such delay.** If the delay is due to the failure of another District contractor to complete its work in a timely manner, changes ordered in the Work, a Force Majeure event, or any other cause which the District, in its sole judgment and discretion, determines to justify the delay, then the Completion Date may be extended as necessary to compensate for the delay. All time extensions shall be in the form of a written amendment signed by both parties.

14. AMENDMENTS; EMERGENCY CHANGES IN WORK

- (a) **Amendments.** The parties may not amend this Agreement except in writing. Modifications that alter, add to, or deduct from the Work, or otherwise modify the terms of this Agreement, shall be implemented through a change order or formal amendment, specifying the nature of the change and any associated change in the Total Compensation and/or Completion Date. The District's Project Manager may also issue a District Supplemental Instruction (DSI) form (Attachment C) to authorize minor adjustments to the Work that are consistent with the purpose of the Work. Both parties must sign the DSI. A DSI may not be used to change the Total Compensation, quantity, quality or the Completion Date of the Work, or to change or modify the Agreement.
- (b) **Emergency Changes in Work.** In the event an emergency endangering life or property requires immediate action, the District may give Contractor an oral instruction to proceed with an emergency change in the Work, which will be confirmed in writing within five days. Within 15 days after commencement of the emergency change in the Work, Contractor shall provide the District with a written estimate of any increased costs or delays as a result thereof. **Failure to so notify the District constitutes a waiver of any right to an extension of time or increase in compensation.** Within 15 days after receipt of Contractor's estimate, the parties shall negotiate a Change Order. If unable to reach agreement, disputed issues shall be resolved pursuant to the dispute resolution procedure. In no event shall Contractor decline to perform the emergency change in the Work.

15. TERMINATION AND SUSPENSION

- (a) **District Termination for Cause.** The Agreement may be terminated by the District for cause in the event of any breach hereof, including, but not limited to, Contractor's: (1) failing to carry forward and complete the Work as provided herein; (2) failing to comply with applicable laws, regulations, permits, or ordinances; (3) failing to timely correct defective Work; (4) making a general assignment for the benefit of its creditors; (5) having a receiver appointed because of insolvency; (6) filing bankruptcy or having a petition for involuntary bankruptcy filed against it; (7) failing to make payments when due to subcontractors, vendors, or others for materials or labor used in the Work; (8) making a material misrepresentation to the District regarding the Work, or (9) any other material breach of this Agreement. In such event, the District shall provide Contractor with written notice of its intention to terminate this Agreement, stating the nature of the deficiency and the effective date of termination. At the District's sole judgment and discretion, the District may afford Contractor an opportunity to cure said deficiency, in which event the notice shall specify the time allowed. Upon termination, the District may take possession of the premises and of all materials thereon and finish the Work by whatever means it deems expedient. In such event, Contractor shall not receive any further payment until the Work is completed by the District. Contractor shall be liable for all costs involved in completing the

Work, including additional managerial and administrative services, which shall be offset against any amount due to Contractor.

- (b) **District Termination for Convenience.** Notwithstanding any other provision hereof, the District may at any time terminate this Agreement or any Work issued under it, in whole or in part, without cause, upon 30 days' written notice to Contractor. In such event, Contractor shall be compensated for any Work performed prior to the date of termination and for materials that were ordered prior to receipt of notice of termination that cannot be returned to the vendor, which shall become District property. Upon receipt of notice, Contractor shall discontinue the Work on the date and to the extent specified therein and shall place no further orders for materials, equipment, services, or facilities, except as needed to continue any portion of the Work not terminated. Contractor shall also make every reasonable effort to cancel, upon terms satisfactory to the District, all orders or subcontracts related to the terminated Work. Contractor may not claim any compensation not specifically provided for herein, including, but not limited to: loss of anticipated profits; idle equipment, labor, and facilities; any additional claims of subcontractors and vendors.
- (c) **District Suspension for Cause.** The District may issue a written partial or full Stop Work Notice in the event Contractor fails to comply with or is negligent in performing any provision hereof. All performance shall immediately cease as per such notice and no further billable costs shall be incurred. The District may terminate this Agreement if Contractor fails or refuses to comply with a Stop Work Notice.
- (d) **District Suspension for Convenience.** The District may direct Contractor to stop Work, in whole or in part, whenever, in the District's sole judgment and discretion, such stoppage is necessary to ensure proper completion of the Work, avoid injury to third persons, or otherwise meet the District's objectives. The District shall provide Contractor not less than five days' written notice, except in emergency circumstances. Contractor shall immediately comply with such notice. Should such stoppage increase Contractor's cost, an equitable adjustment will be made by Change Order. The notice shall be effective until rescinded in writing, unless the period of suspension is stated in the notice.
- (e) **Contractor's Right to Stop Work or Terminate Agreement**
- (i) **Stop Work.** Contractor may stop work only under the following circumstances: (1) the Work is ordered temporarily discontinued by a court or other public authority; (2) it is necessary to stop work in order to protect the safety of Contractor or third persons; or (3) the District fails to pay Contractor when due any undisputed and adequately documented sum certified for payment by the District Project Manager. In such event, Contractor shall provide the District not less than seven days prior written notice of its intention to stop work, except in emergency circumstances or when necessary to prevent injury to persons or property.
- (ii) **Termination.** Contractor may terminate this Agreement under only the following circumstances: (1) the Work is ordered discontinued by a court or other public authority, through no act or fault of Contractor, for a period of not less than three months; (2) the District fails to pay Contractor when due any undisputed and adequately documented sum certified for payment by the District Project Manager. In such event, Contractor shall provide not less than 20 days written notice of its intention to terminate and afford the District the opportunity to cure said deficiency within said time period.
- (iii) **Duty to Perform.** Except as expressly provided above, in the event of any event, dispute, or other matter arising under this Agreement, Contractor shall fully perform the Work in

accordance with the District's written instructions and may claim additional compensation as a Change Order, subject to the dispute resolution procedure.

**ADDITIONAL PROVISIONS
(In Alphabetical Order)**

16. DEFINITIONS

ADDENDA: Written or graphic instruments issued prior to the opening of responses, which make additions, deletions, or revisions to the solicitation or contract documents.

AGREEMENT: The written contract between the District and Contractor covering the Work, which includes all documents attached to this Agreement or incorporated herein by reference. The words "contract" and "Agreement" are synonymous in these documents.

AMENDMENT: Any written change made to the terms and conditions of the Agreement.

BID: The written offer of Respondent (when submitted on the reproduced approved forms) to perform the Work and furnish the necessary materials in accordance with the provisions of this Agreement.

BUSINESS DAY: Monday through Friday, excepting those holidays observed by the District – New Years Day, Martin Luther King Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving (and Friday), and Christmas Day.

CHANGE ORDER: A written agreement of the parties after the Commencement Date to amend this Agreement so as to modify the Statement of Work or the Total Compensation or provide for an extension of time.

CONTRACTOR: Contractor, its officers, employees, agents, successors, and assigns.

CONTRACTOR'S PROJECT MANAGER: The individual designated by the Contractor to be responsible for overall coordination, oversight, and management of the Work for Contractor.

INVITATION FOR BIDS: An advertised solicitation for sealed competitive Bids, with the title, date, and hour of the public opening designated. It includes a detailed description of the goods and/or services sought, the date for submittal of Bids, and all contractual terms and conditions.

PERSON: Any individual, partnership, society, association, joint stock company, corporation, estate, receiver, trustee, assignee, referee, or capacity, whether appointed by a court or others, and any combination of individuals.

STATEMENT OF WORK: The District's written directions, requirements and technical specifications for completing the Work. Standards for specifying materials or testing that are incorporated therein by reference shall have the same force and effect as if fully set forth therein.

SUBCONTRACTORS: Those persons having a direct contract with Contractor relating to performance of the Work, including one who furnishes material worked into a special design in accordance with the plans or specifications of the Work, but not including one who merely furnishes material.

TOTAL BID: The total cost to be paid to Contractor for completion of the Work.

TOTAL COMPENSATION: The total funds to be expended pursuant to this Agreement upon satisfactory completion of the Work.

WORK: All labor, materials, equipment, transportation, supporting documentation, and other products, services, or facilities necessary for complete performance of the Agreement.

17. ACCESS; WORK AREA; GATES

- (a) **Access.** The District will provide sufficient access to accomplish Work performed on District property. Contractor shall maintain all on-site roadways and paved and unpaved access roadways to and from the worksite in an acceptable and passable condition at no additional cost to the District, which shall, upon conclusion of the Work, be returned to their original condition. Land access to construction sites is restricted to the route designated by the District. Contractor is responsible for improvements and repairs to access routes required during construction. All access routes shall be used for the purpose of construction only. Contractor shall not disturb lands or waters outside the area of construction, except as may be found necessary and authorized by the District.
- (b) **Work Area.** All Work shall be confined to the designated work area(s). Contractor shall obtain written approval from the District before making any adjustments.
- (c) **Gates.** Contractor shall keep all gates to District lands or easements closed and locked in accordance with District specifications when not in use, and shall immediately notify the District when a gate has become impaired due to vandalism or other cause. Unless otherwise stated in the specifications, Contractor shall be responsible for providing lock(s) to District properties.

18. ASSIGNMENT AND SUBCONTRACTS

- (a) Contractor shall not sublet, assign, or transfer any Work involving more than 15% of the total cost of the Work, or assign any monies due hereunder, without the District's prior written consent. As soon as practicable after signing this Agreement, but not less than seven business days prior to the effective date of any subcontracts, Contractor shall notify the District's Project Manager in writing of the name of any subcontractor that has not been previously disclosed in the procurement process. Within five business days the District shall indicate its approval or disapproval, which shall not be unreasonably withheld. Failure to timely provide such approval or disapproval shall constitute approval. Neither District approval of a subcontractor nor any other provision of this Agreement creates a contractual relationship between any subcontractor and the District.
- (b) Contractor is responsible for fulfilling all work elements in any subcontracts and payment of all monies due. Contractor is fully responsible to the District for the acts and omissions of its subcontractors and persons directly or indirectly employed by them, and shall hold the District harmless from any liability or damages resulting from any subcontract to the extent allowed by law.

19. AUDIT; ACCESS TO RECORDS. Contractor must preserve its books and other records involving transactions related to this Agreement and provide the District, or its duly authorized representatives, access and necessary facilities to inspect and audit those records for five years after the receipt of funds. If an examination or audit is performed, Contractor must continue to maintain all required records until such audit has been completed and all questions arising from it are resolved. Contractor shall refund any payment(s) that are found to not constitute allowable costs based upon an audit examination.

20. CIVIL RIGHTS. Pursuant to chapter 760, Fla. Stat., Contractor shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, pregnancy, or national origin, age, handicap, or marital status.

21. CLEANUP; EQUIPMENT REMOVAL. Upon expiration or termination of this Agreement, Contractor shall restore the worksite to its original condition, except for replacement of vegetation, unless otherwise required by this Agreement. Contractor shall remove from District property and all

public and private property all machinery, equipment, supplies, surplus materials, temporary structures, rubbish, and waste materials resulting from its activities. After 20 days, the District may sell or dispose of any materials left at the worksite as it sees fit and deduct the cost of sale or disposal from any amounts due to Contractor. Any revenues obtained shall be applied toward costs incurred by the District, with excess revenues paid to Contractor.

22. COOPERATION WITH THE INSPECTOR GENERAL, PURSUANT TO §20.055(5) FLA.

STAT. Contractor and any subcontractors understand and will comply with their duty, pursuant to §20.055(5), Fla. Stat., to cooperate with the inspector general in any investigation, audit, inspection, review, or hearing.

23. COORDINATION WITH THE DISTRICT AND OTHER DISTRICT CONTRACTORS

(a) The District may let other contracts in connection with the Work. Wherever work done by the District or another District contractor is contiguous to Contractor's Work, the respective rights of the various interests shall be established by the District so as to secure completion of the Work. Contractor shall arrange its Work so as not to interfere with the District or other District contractors and join its Work to that of others in a proper manner, and in accordance with the intent of the Statement of Work. Contractor shall perform its Work in the proper sequence in relation to that of other District contractors, as may be directed by the District. Contractor shall afford other District contractors reasonable opportunity for introduction and storage of their materials and execution of their work, and shall properly conduct and coordinate its Work with theirs. Contractor shall take into account all contingent work to be done by others and shall not plead its want of knowledge of such contingent work as a basis for delay or non-performance. Contractor shall be liable for any damage it causes to the work performed by other District contractors.

(b) If any part of the Work depends for proper execution or results upon the work of other District contractors, Contractor shall inspect and promptly report any defects in the other contractors' work that render it unsuitable for Contractor's Work. Failure to so inspect and report shall constitute an acceptance of the other contractors' work as fit and proper for the reception of its Work, except as to defects which may develop in the other contractors' work after execution of the Work.

24. CORRELATION AND INTENT OF DOCUMENTS; QUESTIONS OR ISSUES REGARDING PERFORMANCE OF THE WORK

(a) This Agreement and all attachments are complementary. What is called for by one is as binding as if called for by all. The intent is to include all labor and materials, equipment, transportation, and incidentals necessary for the proper and complete execution of the Work. Materials or work described in words, which so applied have a well-known technical or trade meaning, shall be held to refer to such recognized standards.

(b) It is the District's intention to fully assist Contractor in the successful performance of the Work and to respond in a timely manner to questions or issues that arise. Contractor should discuss any questions or issues with the District's Project Manager and communicate such questions or issues in writing when required by this Agreement. The District shall respond through its Project Manager.

25. DISPUTE RESOLUTION

(a) **During the course of work.** In the event any dispute arises during the course of the Work, Contractor shall fully perform the Work in accordance with the District's written instructions and may claim additional compensation. Contractor is under a duty to seek clarification and resolution

of any issue, discrepancy, or dispute by submitting a formal request for additional compensation, schedule adjustment, or other dispute resolution to the District's Project Manager no later than 15 days after the precipitating event. If not resolved by the Project Manager within five business days, the Project Manager shall forward the request to the District's Office of General Counsel, which shall issue a written decision within 15 days of receipt. This determination shall constitute final action of the District and shall then be subject to judicial review upon completion of the Work. **Contractor shall proceed with the Work in accordance with said determination. This shall not waive Contractor's position regarding the matter in dispute.**

- (b) **Invoices.** In the event the District rejects an invoice as improper, and the Contractor declines to modify the invoice, the Contractor must notify the District in writing within ten days of receipt of notice of rejection that the Contractor will not modify the invoice and state the reason(s) therefor. Within five business days of receipt of such notice, if not informally resolved through discussion with the District Project Manager, the Project Manager shall forward the disputed invoice and the Contractor's written response to the District's Office of General Counsel. The matter shall then proceed as described in subsection (a), above.

26. **DIVERSITY REPORTING.** The District is committed to the opportunity for diversity in its procurement activities, and encourages its prime vendors (contractors and suppliers) to make a good faith effort to ensure that women and minority-owned business enterprises (W/MBE) are given the opportunity for maximum participation as sub-contractors. The District will assist Contractor by sharing information on W/MBEs. Contractor shall provide with each invoice a report describing the company names for all W/MBEs, the type of minority, and the amount spent with each at all levels. The report will also denote if there were no W/MBE expenditures.

27. **DUTY TO INSPECT AND REPORT DEFICIENCIES IN PLANS AND SPECIFICATIONS**

- (a) For any Work that is dependent upon conditions at the worksite, Contractor's acceptance of contract award represents and warrants that Contractor has inspected and satisfied itself concerning the nature and location of the Work and general and local conditions, including, without limitation: (1) conditions affecting transportation, disposal, handling, and storage of materials; (2) availability and quality of labor; (3) availability and condition of roads; (4) climatic conditions and seasons; (5) hydrology of the terrain; (6) topography and ground surface conditions; (7) nature and quantity of surface materials to be encountered; (8) equipment and facilities needed preliminary to and during the Work; and (9) all other matters that can affect the Work and the cost thereof. Contractor's failure to acquaint itself with such conditions will not relieve it from its responsibility for properly estimating the time required or cost of performing the Work. Where the District has investigated subsurface conditions, this data may be provided to Contractor or is available upon request. Contractor must either seek clarification concerning the data or assume the responsibility for its interpretation.
- (b) If Contractor discovers hidden or subsurface conditions that differ materially from those normally expected or indicated in the technical specifications, Contractor shall immediately, and before such conditions are disturbed, notify the District in writing of: (1) subsurface or latent physical conditions differing materially from those indicated in the technical specifications, or (2) unknown physical conditions of an unusual nature differing materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for herein. The District shall promptly investigate the conditions and determine whether they materially differ so as to cause an increase or decrease in Contractor's cost. Where the differing site conditions materially impact Contractor's cost, an equitable adjustment shall be made and the Agreement modified accordingly. No claim will be allowed if Contractor fails to provide the required notice.

- (c) If Contractor in the course of the Work finds any defect in the plans and specifications, including, but not limited to, any discrepancy between the drawings and the physical conditions at the worksite, or any errors or omissions in the drawings or in the layout, as given by points and instructions, it shall immediately inform the District in writing, which shall be promptly verified by the District. Any Work done after such discovery, until authorized, will be done at Contractor's risk as to cost overruns and modifications necessary to correct deficiencies in the Work. To ensure the proper execution of its subsequent Work, Contractor shall measure Work already in place or completed and shall immediately report any discrepancy between the executed Work and the drawings or other specifications.
28. **GOVERNING LAW, VENUE, ATTORNEY'S FEES, WAIVER OF RIGHT TO JURY TRIAL.** This Agreement shall be construed according to the laws of Florida and shall not be construed more strictly against one party than against the other because it may have been drafted by one of the parties. As used herein, "shall" is always mandatory. In the event of any legal proceedings arising from or related to this Agreement: (1) venue for any state or federal legal proceedings shall be in Orange County; (2) each party shall bear its own attorney's fees, including appeals; (3) for civil proceedings, the parties hereby consent to trial by the court and waive the right to jury trial.
29. **INTEREST IN THE BUSINESS OF CONTRACTOR; NON-LOBBYING.** Contractor certifies that no officer, agent, or employee of the District has any material interest, as defined in chapter 112, Fla. Stat., either directly or indirectly, in the business of Contractor to be conducted under this Agreement, and that no such person shall have any such interest at any time during the term of this Agreement. Pursuant to §216.347, Fla. Stat., monies received from the District pursuant to this Agreement shall not be used to lobby the Florida Legislature or any other state agency.
30. **INDEPENDENT CONTRACTOR.** Contractor is an independent contractor. Neither Contractor nor Contractor's employees are employees or agents of the District. Contractor controls and directs the means and methods by which the Work is accomplished. Contractor is solely responsible for compliance with all labor, health insurance (Patient Protection and Affordable Care Act 42 U.S.C. §§ 18001, et seq.), and tax laws pertaining to Contractor, its officers, agents, and employees, and shall indemnify and hold the District harmless from any failure to comply with such laws.
31. **LAND AND WATER RESOURCES.** Contractor shall not discharge or permit the discharge, directly or indirectly, of any fuels, oils, calcium chloride, acids, insecticides, herbicides, wastes, toxic or hazardous substances, or other pollutants or harmful materials, onto any lands or into any surface or ground waters, including, but not limited to, streams, lakes, rivers, canals, ditches, or reservoirs. Contractor shall investigate and comply with all applicable federal, state, county, and municipal laws concerning toxic wastes, hazardous substances, and pollution of surface and ground waters. If any waste, toxic or hazardous substance, or other material that can cause pollution, as defined in §403.031, Fla. Stat., is dumped or spilled in unauthorized areas, Contractor shall notify the District thereof within one workday and thereafter shall remove the material and restore the area to its original condition. If necessary, contaminated ground shall be excavated and disposed of as directed by the District and replaced with suitable fill material, compacted and finished with topsoil, and planted as required to re-establish vegetation. All cleanup and disposal costs shall be borne by Contractor.
32. **LIENS.** Neither final payment nor payment of any part of the retainage shall become due until Contractor delivers to the District releases of all labor and material cost liens arising from Contractor's performance of the Work, including Contractor and any subcontractor(s), and an affidavit by Contractor stating that the releases and receipts include all labor and material costs for which a lien could be filed. If any subcontractor refuses to furnish Contractor a release or a receipt in full, Contractor may furnish to the District a bond satisfactory to the District, indemnifying the

District against any such potential lien. If any lien or potential lien remains unsatisfied, the District may discharge the same forthwith and deduct the cost thereof from any amounts due to Contractor. In the event Contractor has been fully paid or the amount of such lien exceeds the amount due to Contractor, Contractor shall refund to the District all monies that the District paid in discharging such lien, including all costs and a reasonable attorney's fee. The discharging of such a lien by the District shall not constitute a waiver of any claims of defenses that Contractor may have against the lienor.

33. **NUISANCE.** Contractor shall exercise every reasonable means to avoid creating or continuing a public or private nuisance resulting from the Work, including, but not limited to: (1) excessive noise associated with radio or other forms of electronic entertainment for persons at the worksite; (2) dust from construction operations, and (3) the uncontrolled flow of surface waters.
34. **PERMITS AND LICENSES; COMPLIANCE WITH LAW.** Contractor shall comply with all applicable federal, state and local laws and regulations, including those pertaining to health and safety. All materials used and work performed must conform to the laws of the United States, the state of Florida and county and municipal ordinances. Contractor represents and warrants that it is duly licensed to perform the Work in accordance with the laws of the state of Florida and the county or municipality in which the Work is to be performed. Unless otherwise specifically provided for herein, Contractor shall give to the proper authorities all required notices relative to the Work in its charge; obtain and pay for all official permits or any other licenses, including any and all professional licenses required by the nature of the Work; and furnish any bonds, security, or deposits required to permit performance of the Work. Contractor is responsible for the resolution of any issues resulting from a finding of noncompliance by any regulatory agencies, due to the Contractor's failure to comply with applicable regulatory requirements, including all costs for delays, litigation, fines, or other costs.
35. **PETROLEUM STORAGE TANKS.** Any petroleum storage tanks with a capacity of 55 gallons or greater that Contractor brings onto District property must be either double-walled or kept within secondary containment that will contain 110% of the tank volume.
36. **PUBLIC RECORDS**
- (a) Contractor is responsible for identifying confidential trade secret information as such upon submittal to the District. Notwithstanding any other provision hereof, the District shall not be liable to Contractor for release of confidential information not identified as such upon submittal. If the District receives a public records request that requests information claimed to be confidential by Contractor, the District shall take such steps as are necessary to comply with chapter 119, Fla. Stat., while protecting the confidentiality of trade secret information. In the event of a dispute as to whether the requested information is a trade secret, Contractor shall be liable for all costs incurred by the District resulting from the dispute, including any court costs and attorney's fees. The calculation of those costs shall not include costs that are charged to the public records requestor.
 - (b) Contractor shall comply with Florida Public Records law under Chapter 119, Fla. Stat. Records made or received in conjunction with this Agreement are public records under Florida law, as defined in §119.011(12), Fla. Stat. Contractor shall keep and maintain public records required by the District to perform the services under this Agreement.
 - (c) If Contractor meets the definition of "Contractor" found in §119.0701(1)(a), Fla. Stat.; [i.e., an individual, partnership, corporation, or business entity that enters into a contract for services with a public agency and is acting on behalf of the public agency], then the following requirements apply:

- (i) Pursuant to §119.0701, Fla. Stat., a request to inspect or copy public records relating to this Agreement for services must be made directly to the District. If the District does not possess the requested records, the District shall immediately notify the Contractor of the request, and the Contractor must provide the records to the District or allow the records to be inspected or copied within a reasonable time. If Contractor fails to provide the public records to the District within a reasonable time, the Contractor may be subject to penalties under s. 119.10, Fla. Stat.
- (ii) Upon request from the District's custodian of public records, Contractor shall provide the District with a copy of the requested records or allow the records to be inspected or copied within a reasonable time at a cost that does not exceed the cost provided in Chapter 119, Fla. Stat., or as otherwise provided by law.
- (iii) Contractor shall identify and ensure that all public records that are exempt or confidential and exempt from public records disclosure requirements are not disclosed except as authorized by law for the duration of the Agreement term and following completion of the Agreement if the Contractor does not transfer the records to the District.
- (iv) Upon completion of the Agreement, Contractor shall transfer, at no cost to District, all public records in possession of Contractor or keep and maintain public records required by the District to perform the services under this Agreement. If the Contractor transfers all public records to the District upon completion of the Agreement, the Contractor shall destroy any duplicate public records that are exempt or confidential and exempt from public disclosure requirements. If the Contractor keeps and maintains public records upon completion of the Agreement, the Contractor shall meet all applicable requirements for retaining public records. All records that are stored electronically must be provided to the District, upon request from the District's custodian of public records, in a format that is accessible by and compatible with the information technology systems of the District.

(d) IF THE CONTRACTOR HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLA. STAT., TO THE CONTRACTOR'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS CONTRACT, CONTACT THE DISTRICT'S CUSTODIAN OF PUBLIC RECORDS AT:

**District Clerk
St. Johns River Water Management District
4049 Reid Street
Palatka, Florida 32177-2571
(386) 329-4127
clerk@sjrwmd.com**

37. **REMEDIES FOR NON-PERFORMANCE.** In the event of incomplete or damaged Work caused by Contractor's failure of performance, the District may terminate this Agreement for cause. Alternatively, the District, in its sole discretion and judgment, may allow Contractor to correct the deficiency at its expense. If the District determines that it is not in its best interest for Contractor to correct the deficiency, the District may pursue any or all of the following remedies, in whole or in part: (1) accept the Work as is and deduct the reasonable value of the deficient Work from the Total Compensation; (2) complete the Work through the utilization of District employees and deduct the cost thereof from the Total Compensation; (3) contract with a third party to complete the deficient

Work and deduct the cost thereof from the Total Compensation. In addition to the remedies set forth above, the District may avail itself of any statutory and/or common law remedies. Delay or failure by the District to enforce any right or remedy hereunder shall not impair, or be deemed a waiver of, any such right or remedy, or impair the District's rights or remedies for any subsequent breach of this Agreement.

38. **SAFETY.** For any Work that is to be performed on premises that are owned or controlled by the District (the Premises), Contractor has the sole and exclusive duty for the safety of the premises. Contractor shall provide and maintain sufficient protection for the safety of its employees and other persons who may utilize the Premises, and prevent damage to District property, materials, and equipment. Contractor shall at all times enforce strict discipline and good order among its employees and shall not employ any unfit person or anyone not skilled in the work assigned. Neither Contractor nor its subcontractors shall allow or cause to be allowed any hunting or any weapons, animals, alcohol, or drugs, on or from the Premises or adjacent property. Contractor employees shall not park their vehicles or store equipment or materials adjacent to roads where it may be a hazard to traffic. A clear distance of at least 30 feet from the edge of the pavement or right-of-way shall be kept free of any obstacles unless otherwise authorized by the District. Contractor shall ensure that only authorized personnel are allowed on the worksite and shall post notices warning both employees and the public of all safety hazards created by Contractor.
39. **SCRUTINIZED COMPANIES.** Contractor certifies that it is not on the Scrutinized Companies that Boycott Israel List or engaged in a boycott of Israel. Pursuant to §287.135, Fla. Stat., the District may terminate this Agreement at its sole option if the Contractor is found to have submitted a false certification; or if the Contractor is placed on the Scrutinized Companies that Boycott Israel List or is engaged in the boycott of Israel during the term of the Agreement.
40. **USE OF COMPLETED PORTIONS OF THE WORK.** The District shall have the right to take possession of and use any completed or partially completed portions of the Work, notwithstanding the fact that the time for completing the entire Work or such portions may not have expired. Such taking of possession and use will not be deemed an acceptance of any Work not completed. If such possession and use increases the cost of or delays the Work, Contractor shall be entitled to a Change Order for extra compensation, or extension of time, as necessary, to offset the effect of such prior possession and use.
41. **WARRANTY**
- (a) Contractor warrants that the Work, workmanship and material furnished by Contractor shall be new and of specified quality, shall conform to the requirements of this Agreement, shall be free from defects, and shall be free from any security interest, lien, or other encumbrances. This warranty shall remain in effect for a period of 12 months after completion of the Work, unless otherwise specified herein. Any defective Work, workmanship, or material corrected during the warranty period shall be similarly warranted for 12 months following its correction or for such other period as specified herein. The express warranty set forth herein shall not be exclusive and shall not act as a limitation upon any statutory or other warranty of any kind, express or implied, including any implied warranty of merchantability or fitness for a particular purpose.
- (b) In the event of breach of this warranty, Contractor shall take the necessary actions to correct the breach in the most expedient manner as dictated by then-existing circumstances. All costs incidental to the repair, replacement, redesign, and testing incurred as a result thereof, including the removal, replacement, and reinstallation of equipment in place when the Work was started, shall be Contractor's responsibility. Upon written notification of a breach, Contractor shall promptly send the necessary personnel to the project site to assume responsibility for corrective

action. Time is of the essence. Contractor shall be afforded necessary and reasonable access to perform warranty work. If Contractor fails to promptly correct the breach, the District may take corrective action without waiving any other rights or remedies it may have, and Contractor shall reimburse the District for all expenses reasonably incurred in performing such corrective action.

42. **WORK SCHEDULE.** For construction or other services upon District property, no Work shall be accomplished on official holidays or weekends unless approved in advance by the District Project Manager. Unless otherwise approved by the District Project Manager, Contractor's work hours on District property shall not commence before 7:00 a.m. and shall conclude on or before 6:00 p.m. All requests to change the schedule shall be coordinated with the District a minimum of 24 hours in advance of the change and confirmed in writing.

IN WITNESS WHEREOF, the St. Johns River Water Management District has caused this Agreement to be executed on the day and year written below in its name by its Executive Director, or duly authorized designee, and Contractor has caused this Agreement to be executed on the day and year written below in its name by its duly authorized representatives, and, if appropriate, has caused the seal of the corporation to be attached. This Agreement may be executed in separate counterparts, which shall not affect its validity. Upon execution, this Agreement constitutes the entire agreement of the parties, notwithstanding any stipulations, representations, agreements, or promises, oral or otherwise, not printed or inserted herein. This Agreement cannot be changed by any means other than written amendments referencing this Agreement and signed by all parties.

ST. JOHNS RIVER WATER
MANAGEMENT DISTRICT

CONTRACTOR

By: _____
Michael A. Register, P.E., Executive Director, or designee

By: _____

Typed Name and Title

Date: _____

Date: _____

Attest: _____

Typed Name and Title

- Attachments:
- Attachment A — Statement of Work/Technical Specifications
- Attachment B — Insurance Requirements
- Attachment C — District’s Supplemental Instructions (sample)

ATTACHMENT A — STATEMENT OF WORK
**UNDERWATER STRUCTURE REPAIRS
UPPER ST. JOHNS RIVER BASIN**

I. INTRODUCTION

The St. Johns River Water Management District (District) comprises all or part of 18 counties starting at the Florida/Georgia border (Nassau County) down to Vero Beach (Indian River County) and from the Atlantic Ocean to Interstate 75 and south through Orlando. The District's boundaries are based on natural, hydrogeologic basins rather than political/county limits to allow for effective and efficient planning and management. The District is a local sponsor for the US Army Corps of Engineers (USACE) federal flood control projects within the District's boundaries and conducts water control operations throughout many of these counties.

USACE requires inspection of all underwater structures within federal flood control levees every five years. In summer 2020, Underwater Engineering Services, Inc. (UESI) performed the most recent underwater inspections of the minor water control structures associated with the federal levee system for the District. During these inspections, commercial divers utilizing surface supplied diving equipment performed complete and thorough inspections of the interior and exterior portions of the water control structures as well as the surrounding channel and instrumentation. The defects and conditions of the structures inspected were recorded and conveyed through written condition reports and video taken during the inspections. These inspections revealed that a number of the structures and culverts require repairs to ensure their continued operability.

II. OBJECTIVE

The objective of this work order is to perform repairs to five structures associated with the Federal levee systems within the Upper St. Johns River Basin (USJRB). Figure 1 depicts a structure location map for this work. The structures to be repaired include the following:

- S-23
Structure S-23 is a gated culvert comprised of one barrel, extending west (gated end) to east under Levee L-75, on the boundary between the Blue Cypress Marsh Conservation Area and the Fellsmere Water Management Area in the USJRB. The barrel is a CMP, 60 inches diameter by 150 feet long. The west end has an access pier comprised of a concrete superstructure supported by a concrete abutment (buried) and the gate box structure. There is a gate at the upstream end.
- S-250E
Structure S-250E is a gated culvert comprised of one barrel, extending south (gated end) to north under Levee L-74W on the northern boundary of the Blue Cypress Marsh Conservation Area in the USJRB. The barrel is a CAP, 72 inches diameter by 112 feet long. The south end has an access pier comprised of steel H-piles and an aluminum superstructure.
- S-252E
Structure S-252E is a discharge culvert comprised of five barrels, extending west to east under Levee L-78, inside the Fort Drum Marsh Conservation Area in the USJRB. The barrel has been relined with HDPE with flap gates on the east end. The barrels are 145' long each.

- **S-252F**
Structure S-252F is a gated culvert comprised of two barrels, extending south to north adjacent to Levee L-78 inside the Fort Drum Marsh Conservation Area in the USJRB. The barrels have been relined with HDPE. The barrels are 100 ft long each.
- **S-264**
Structure S-264 is a gated culvert comprised of two barrels, extending north (gated end) to south under Levee L-74N Extension, which forms the eastern border of the Three Forks Marsh Conservation Area in the USJRB. The barrels are galvanized CMP, 72 inches diameter by 94 feet long. The north end has an access pier comprised of coated steel H-piles and a metal superstructure.

III. SCOPE OF WORK

The scope of work includes repairs of identified deficiencies at five structures across the District. The Contractor shall provide a construction team including qualified divers and alligator trapping services to perform the repairs, which are primarily below water. The construction team shall include individuals qualified by experience and training in the inspection, design, construction and understanding of the operation of flood control structures. All dive operations shall meet the requirements and qualifications of 29 CFR 1910 Subpart T Commercial Dive Operations. The Contractor shall provide all necessary equipment to perform the tasks in this statement of work at no additional charge to the District.

The repairs required at each structure are described below. Item numbers are deficiency Item Numbers identified in the Inspection Reports located in Attachment A. Not all deficiencies identified in the inspection reports are to be repaired as part of this project. Only the items listed below are included in the Scope of Work.

- **S-23**

Item DS115: The culvert has a hole, 2" diameter, located at 11:00 position and 3' from the downstream end, with 6" penetration and gravel and rocks felt.

Recommended Action: Contractor shall uncover the top of the pipe and expose the hole, plug and seal hole with splash zone epoxy or approved equal, then backfill and cover pipe. Great care shall be taken not to damage pipe further while uncovering hole.

- **S-250E**

Item DS115: The culvert has a loose repair clamp 52' from the downstream end. There are three threaded rods for the clamp that have minor to moderate corrosion. The clamp appears to still be functioning. The clamp at 12' of penetration has minor to moderate corrosion on the threaded rods.

Recommended Action: Replace the threaded rods (assume 1/2" x 8"), Contractor to field verify all sizes and quantities) and nuts for both clamps (6 rods total) with stainless steel, resealing both clamps in position.

- **S-252E**

Item DS152: The flap gates are bolted to the HDPE liners via a flange and bolts. There are several loose bolts on Flap Gate No's. 1, 2, 3, 4 and 5, respectively. Gate No. 1 is the north gate.

Recommended Action: Tighten all bolts from the flap gate flanges to the HDPE liners.

- **S-252F**

Item US152: The gate guides are secured to the timber piles by threaded rods. Aluminum brackets are welded to the gates guides and bolted to the piles. Threaded rods extend between the two brackets. The aluminum bracket bolted to the east pile is broken.

Recommended Action: Remove broken aluminum bracket (4"x6"x1/2") and reattach by welding new bracket to gate guide and bolting to east pile w/ 1" and 3/4" diameter bolts (match existing). Contractor to field verify all sizes and quantities.

Item US60: The large diameter PVC pipe on the pier has no slots on the tube and has a cap on the bottom (unsure if this is a stilling well downpipe). The tube has a broken strap.

Recommended Action: Replace the broken strap for the large diameter (8") PVC pipe.

Item US114: The bolts connecting the battered piles and the cross bracing to the piles have moderate corrosion with up to 30% section loss

Recommended Action: Replace the bolts on the timber piles with stainless steel. Match existing sizes. Assume 1" diameter bolts w/ washers, 6 per pile x 5 piles. Contractor to field verify all sizes and quantities.

Item US115: The barrels have two clamps behind the gates connecting the new liner section to the existing CMP. One is larger and connects the CMP to the larger end of the reducer. The other clamp is smaller and connects the smaller end of the reducer to the HDPE. The larger clamp nearer the gate is made of two halves that are clamped at the 3:00 and 9:00 positions. The smaller clamp has only one set of bolts on the west side of the west barrel and the east side of the east barrel. (1) The larger clamp on the west barrel has three of four bolts for the clamp loose on each side of the barrel. (2) The second (smaller) clamp on the west barrel has one missing bolt and one loose bolt (out of four) and the clamp has slight movement. (3) The larger clamp on the east barrel is at the 12:00 position and has one of four bolts for the clamp loose on the east side of the barrel.

Recommended Action: Tighten all of the clamp bolts for both barrels.

Item US152: The bolts securing the aluminum brackets to the timber piles are carbon steel and have moderate corrosion with up to 20% section loss.

Recommended Action: Replace all of the bolts securing the aluminum brackets to the piles. Assume 1" and 3/4" bolts, replace in kind. Assume 2 bolts per bracket x 4 brackets. Contractor to field verify all sizes and quantities.

Item DS56: The east barrel has a pile of riprap, sand and silt up to 12" high within 4' of the gate.

Recommended Action: Remove the riprap, sand, and silt from the east barrel near the gate.

- **S-264**

Item US114: Vertical support columns have moderate corrosion and scaling, from 2' above waterline to 6" below waterline with 10 to 20% metal loss and pitting up to 1/8" deep. Beyond the corroded area, there is 5% coating loss throughout.

Recommended Action: Clean and recoat the corroded areas with moisture-tolerant protective barrier coating (Belzona 5831 product or approved equal), which is able to be placed while submerged.

Item US152: East culvert gate bracket flange is missing two bolts and has eight loose bolts. The west culvert gate bracket flange is missing four bolts and has three loose bolts. The inspector tightened several of the bolts, but some were galled and unable to be tightened.

Recommended Action: Tighten remaining loose hardware and replace missing and galled hardware using 1/2"x 2" stainless steel bolts, washers & nuts. Contractor to field verify all sizes and quantities.

Contractor's Responsibilities:

- Conduct a preconstruction meeting with District operations staff 48-hours in advance of mobilizing to site. At this meeting, Contractor will present a proposed schedule and order of the repairs.
- The above recommendation actions are recommendations only; the District will entertain other repair options at the preconstruction meeting and in the field as necessary.
- Mobilize to site and provide all labor, equipment and material to complete each specified repair.
- The Contractor shall not operate any structure machinery or perform equipment lock-out/tag-out associated with the structure being inspected. This will be performed by District staff.
- The Contractor shall be responsible for animal control. Problems with nuisance animals shall be the responsibility of the Contractor. The Contractor shall be responsible for obtaining Florida Fish and Wildlife Conservation Commission (FWC) Special Purpose Permit (Permit) which allows for alligator security services for the purpose of repair of District structures, facilities and properties. The Contractor shall obtain in writing from FWC several preapproved disposal locations, off District property, throughout the District service area. The Contractor shall be responsible for all materials, labor and equipment needed to properly dispose killed alligators. The Contractor shall provide the District proof of proper disposal of each killed alligator as necessary. It is the District's desire to limit the number of killed alligators by having the permitted Trapper capture and release nuisance animals within the same day on District property if possible.
- Demobilize from site. The Contractor shall take care to protect all existing structures, roads, utilities and other improvements from damage. Additionally, the Work will be considered complete only after all rubbish and unused material associated with the Work has been removed and the premises left in a condition satisfactory to the District. All property disturbed or damaged during prosecution of the Work shall be restored to its former condition or better at no additional expense to the District.

IV. DISTRICT RESPONSIBILITIES

- Provide access to contractor.
- Participate in preconstruction meeting.
- Operate all structures as requested by Contractor.
- Oversee all aspects of the construction.
- Review work completed and approve invoices.

V. TIMEFRAMES AND DELIVERABLES

All construction activities outlined in the Task Identification section shall be completed by March 30, 2022.

VI. BUDGET AND INVOICE REQUIREMENTS

For satisfactory performance, the District agrees to compensate Contractor in accordance with the Contract terms.

PAYMENT OF INVOICES

Contractor shall submit monthly itemized invoices by one of the following two methods: (1) by mail to the St. Johns River Water Management District, Director, Division of Financial Management, 4049 Reid Street, Palatka, Florida 32177, or (2) by e-mail to acctpay@sjrwmd.com. Each invoice shall be submitted in detail sufficient for proper pre-audit and post-audit review. If necessary for audit purposes, the District may require and Contractor shall provide additional supporting information to document invoices.

PROJECT MANAGER

James Rider
South Operations Program Manager
Bureau of Operations and Maintenance
321-863-0029 (cell)
321-984-4941 (office)
jrider@sjrwmd.com (email)

Attachments:

Figure 1 Map

Appendix A – Inspection Reports

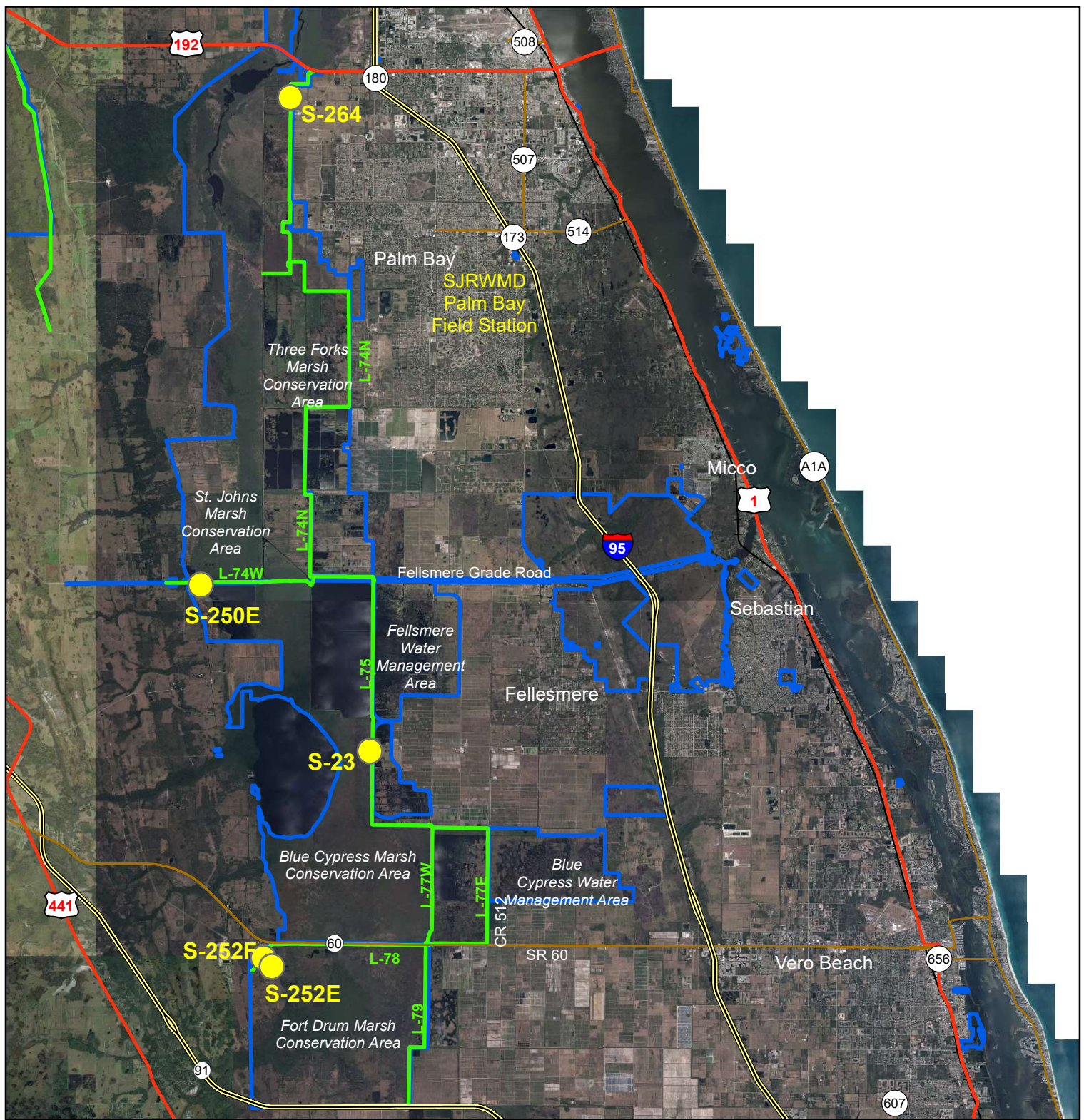
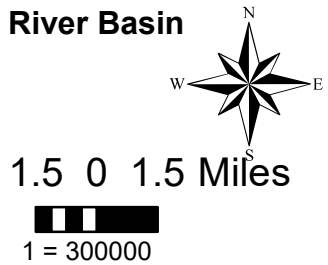
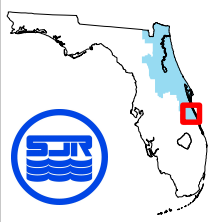


Figure 1
Repairs to Underwater Structures
Upper St. Johns River Basin



Legend

- Interstate Highway
- U.S. Highway
- State Highway
- Federal Levee
- Management Area Boundaries
- Structures to be Repaired

The St. Johns River Water Management District prepares and uses this Information for its own purposes and this information may not be suitable for other purposes. This information is provided as is. Further documentation of this data can be obtained by contacting: St. Johns River Water Management District, Geographic Information Systems, Program Management, P.O. Box 1429, 4049 Reid Street Palatka, Florida 32178-1429 Tel: (386) 329-4500.

STRUCTURE S-23
INSPECTION DATE: 2/13/2020



Single Barrel, 60" Diameter x 150' Long

Location:	USJRB South
	Levee L-75
Latitude:	27.7405 N
Longitude:	80.7084 W
Type:	Gated Culvert
No. Barrels:	One
Inspection	
Start Date:	2/13/2020
End Date:	2/13/2020

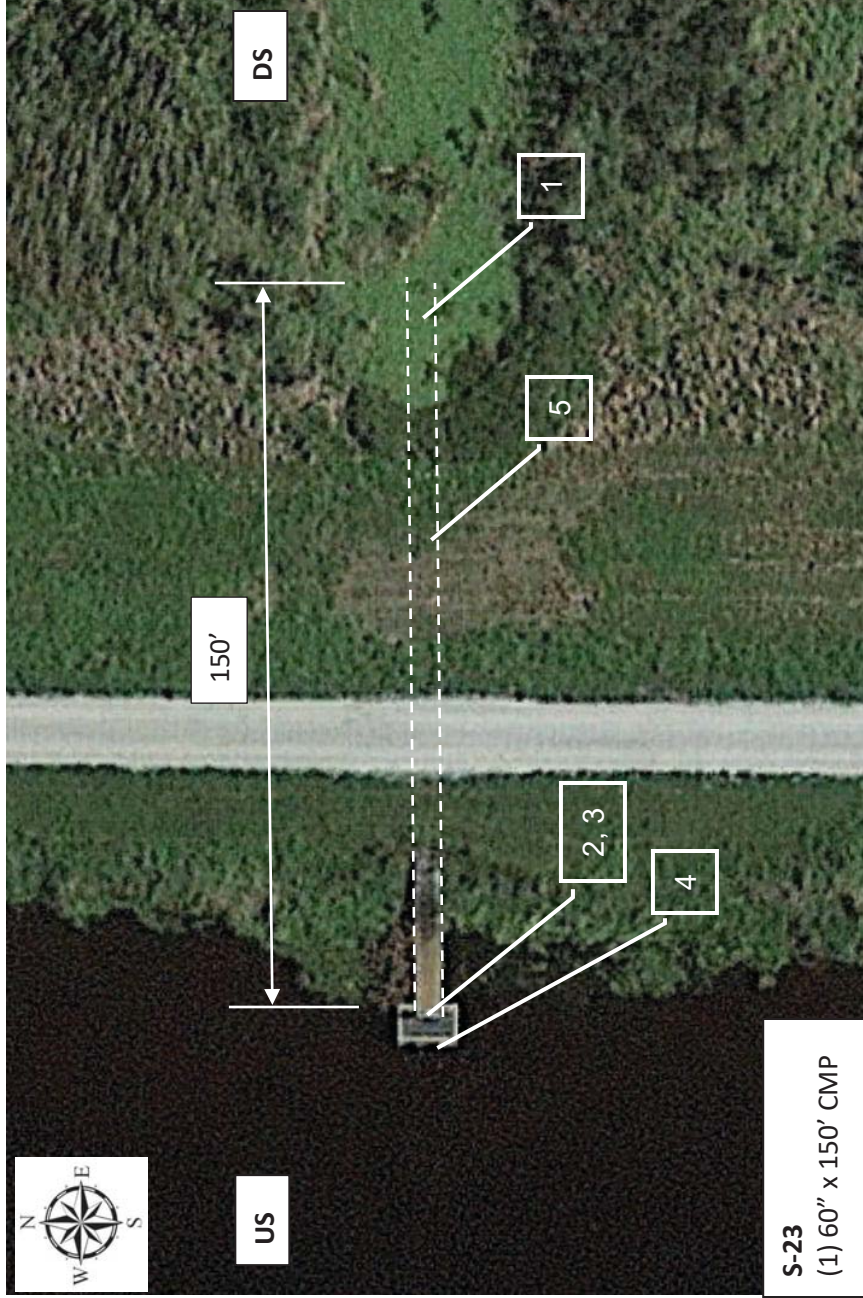
TEAM MEMBERS	
Lead Engineer	Jeffrey O'Connor, P.E.
Dive Supervisor	Jeremiah Duncan
Diver	Natasha Daniel
Diver – Standby	Dillon Sims
Dive Tender	Andre Lorenzo
Dive Tender	
Animal Control	TJ McDonagh
SJRWMD Agent	

Respectfully Submitted,
UNDERWATER ENGINEERING SERVICES, INC.
3306 Enterprise Road
Fort Pierce, FL 34982
(772) 337-3116 Lic. No. CA3703
Jeffrey O'Connor, P.E. (FL 50914)
Vice President
Project Manager



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Aerial View of Structure



S-23
(1) 60" x 150' CMP

No.	Item No.	Inspection Item	Rating	Deficiency
1	DS115	Culvert	C-3	Hole at 3' penetration
2	DS151, DS155	Structure Gate, Operator/Actuator	C-3	Gate was open 4" with strong flow.
3	DS153	Gate Seals	C-3	The side seals had flow escaping around them.
4	US54	Channels for Stoplogs	C-2	Moderate corrosion on anchor hardware.
5	DS115	Culvert	C-2	Protruding sealant at 51' inside culvert; Occasional loss of coating with minor pitting.

Structure Description and Method of Underwater Inspection

Structure S-23 is a gated culvert comprised of one barrel, extending west (gated end) to east under Levee L-75. The barrel is a CMP, 60 inches diameter by 150 feet long. The west end has an access pier comprised of a concrete superstructure supported by a concrete abutment (buried) and the gate box structure. There is a gate at the upstream end.

The underwater inspection was performed by a 5-person dive team on February 13, 2020. The dive team worked from a dive trailer, using surface-supplied air, and accessed the structure areas from the bank.

The scope of services included the underwater inspection of the submerged structure components. The area extended 20 feet beyond the structure edges. There were no boat barriers.

The air temperature was 85 degrees F. and the weather was mostly clear. The underwater visibility ranged from 1 to 2 feet. The water level was unknown – there were no staff gauges present. The gate was open 4" with strong flow. The downstream side of the gate was observed, but due to safety, the upstream side of the gate was not inspected.

Rating System

- C-1: No action needed
- C-2: Monitor condition at next dive inspection (5 years)
- C-3: Schedule repair/replacement (for routine items)
- C-4: Schedule repair/replacement (for safety or operational items)
- C-5: Repair/replace immediately (for structural items)
- C-6: Critical - Repair/replace immediately (for operational items)

Summary of Observations

Items Rated C-5 and Above

There were no items rated C-5 and above.

Items Rated C-4

There were no items rated C-4.

Items Rated C-3

- Item DS115: The culvert has a hole, 2" diameter, located at 11:00 position and 3' in from the downstream end, with 6" penetration and gravel and rocks felt.
 - Recommended Action: The hole located at 11:00 and 3' in should be plugged and sealed with splash zone epoxy.
- Item DS151, DS155: No deficiencies noted. The gate was open 4" with very strong flow.
 - Recommended Action: There were no obstructions to prevent gate closure. Review/adjust the gate if it is not closing properly.

- Item DS153: The side seals had moderate flow escaping around them.
 - Recommended Action: Replace or repair/adjust the seals to stop the leaks.

Items Rated C-2

- Item US54: The hardware (carbon steel) for the stoplog guides (aluminum) has minor to moderate corrosion with less than 10% section loss on isolated anchors.
 - Recommended Action: Monitor the hardware for advanced corrosion.
- Item DS115: C-2: The field joint at 51' in from the downstream end is 1/4" to 1" wide with protruding sealant. The sealant has cracks over 70% of the length. The culvert overall has spotty loss of bitumen coating and pitting up to 1/64" deep.
 - Recommended Action: Monitor the field joint sealant for advanced deterioration. Monitor the culvert metal for advanced corrosion and holes.

PHOTOGRAPHS

Item No.: DS115 Culvert	Rating: C-3	Photo Description: Corrosion hole at 11:00 at 3' penetration
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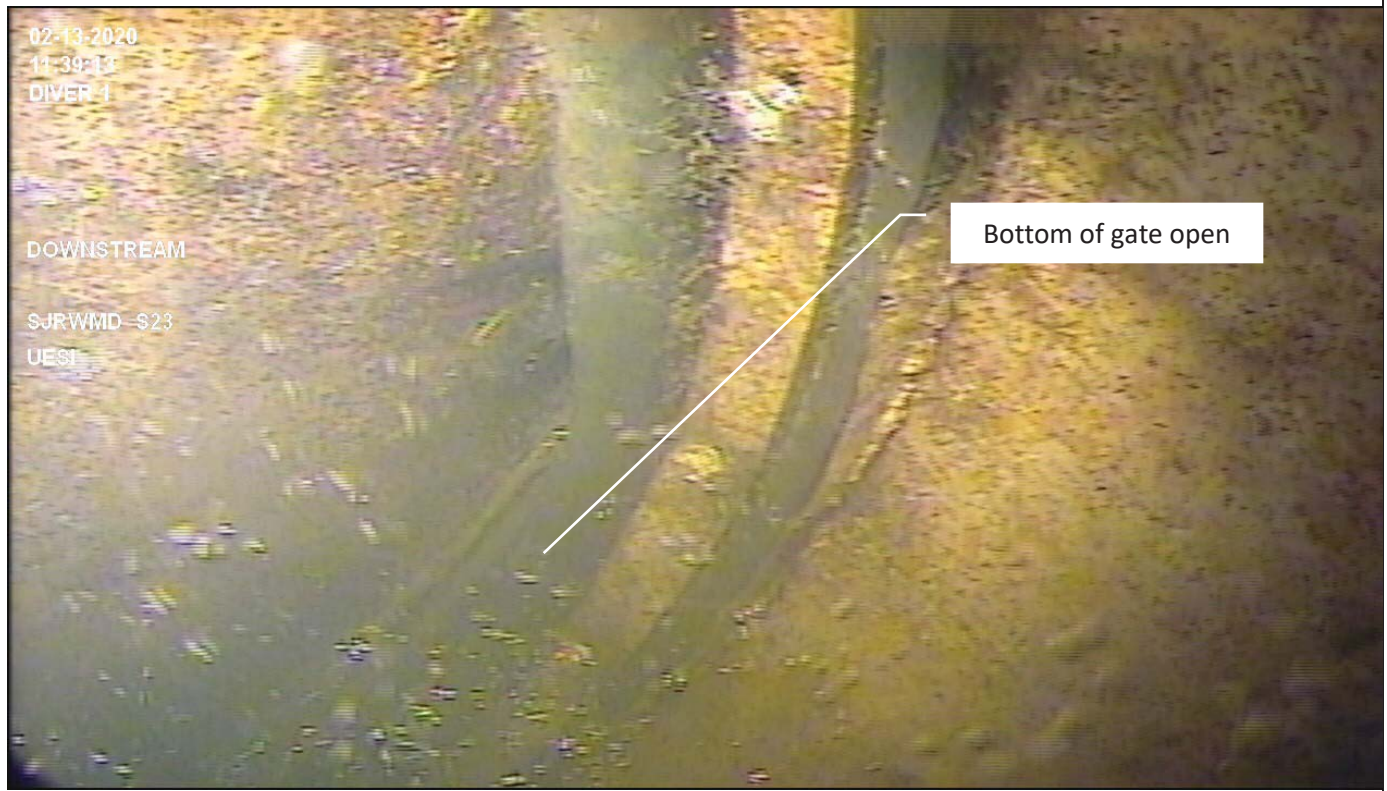
Deficiency: The culvert has a hole, 2" diameter, located at 11:00 position and 3' in from the downstream end, with 6" penetration and gravel and rocks felt.

Probable Cause: The hole may have been caused by mechanical impact or may have had early coating loss leading to early corrosion from chemical attack of the water.

Recommendation: The hole located at 11:00 and 3' in should be plugged and sealed with splash zone epoxy.



Item No.: DS151, DS155 Structure Gate	Rating: C-3	Photo Description: Gate open
Deficiency: No deficiencies noted. The gate was open 4" with very strong flow.		
Probable Cause: If the gate is not closing, the operational components may be damaged.		
Recommendation: There were no obstructions to prevent gate closure. Review/adjust the gate if it is not closing properly.		



Item No.: DS153 Gate Seals	Rating: C-3	Photo Description: Side seal leaking
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Deficiency: The side seals have moderate flow escaping around them.

Probable Cause: The inspector did not observe any obvious damage to the seals, so the leaks may be due to general deterioration of the seals.

Recommendation: Replace or repair/adjust the seals to stop the leaks.



APPENDIX

CHECKLISTS

Structure Name/No.: S-23

UPSTREAM EROSION CONTROL

Finding #	Inspection Item	Rating	Comments	Recommended action	Probable cause
US1	Slope/Banks of Channel	1	No deficiencies noted		
US2	Rip Rap	NA	Item not present		
US3	Exposed erosion-Control Fabric	1	No deficiencies noted		
US4	Evidence of stone displacement (bedding stone)	1	No deficiencies noted		
US5	Channel Stabilization and erosion control	1	No deficiencies noted		

UPSTREAM GENERAL

Finding #	Inspection Item	Rating	Comments	Recommended action	Probable cause
US50	Structural - General Concrete Condition	1	No deficiencies noted		
US51	Structural - General Metal Condition	2	Refer to US54		
US52	Structural - General Timber Condition	NA	Item not present		
US53	Construction Joints (Bolts, Welds)	1	No deficiencies noted		
US54	Channels for Stoplogs or Flashboards		The hardware (carbon steel) for the stoplog guides (aluminum) has minor to moderate corrosion with less than 10% section loss on isolated anchors [12:20].	Monitor the hardware for advanced corrosion.	The corrosion was due to chemical attack from the water and areas of galvanic corrosion due to contact of dissimilar metals.
US55	Settlement	1	No deficiencies noted		
US56	Shoaling/Scour	1	No deficiencies noted		
US57	Fouling/Marine Growth	1	No deficiencies noted		
US58	Debris	1	No deficiencies noted		
US59	Stilling Wells	NA	Item not present		
US60	Underwater Controls/Instruments	NA	Item not present		
US61	Fenders	NA	Item not present		

UPSTREAM STRUCTURE

Finding #	Inspection Item	Rating	Comments	Recommended action	Probable cause
US100	Wingwalls	NA	Item not present		
US101	Buttresses (support arms for wall)	NA	Item not present		
US102	Abutments	NA	Item not present		
US103	Retention Walls	NA	Item not present		
US104	Headwall	1	No deficiencies noted		
US105	Expansion/Construction Joints	1	No deficiencies noted		
US106	Sheetpiles and Bulkheads	NA	Item not present		
US107	Wales/Tiebacks	NA	Item not present		
US108	Intake Bays	NA	Item not present		
US109	Piers	NA	Item not present		
US110	Foundation	NA	Item not present		
US111	Weir/Weir crest	NA	Item not present		
US112	Baffles	NA	Item not present		
US113	Underwater Apron Slabs	1	No deficiencies noted		
US114	Structural Support, Bracing or Frames	NA	Item not present		
US115	Culverts	NA	Item not present		
US116	Risers	NA	Item not present		

UPSTREAM GATES

Finding #	Inspection Item	Rating	Comments	Recommended action	Probable cause
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Structure Name/No.: S-23

US151	Structure Gate(s)	NA	US side not inspected due to flow in open gate		
US152	Gate Guides and Gate Control	NA	US side not inspected due to flow in open gate		
US153	Gate Seals & Mating Surface	NA	US side not inspected due to flow in open gate		
US154	Cathodic Protection (entire structure)	NA	Item not present		
US155	Operator/Actuator Components	NA	US side not inspected due to flow in open gate		
US156	Emergency Closure Gates	NA	Item not present		
US306	Navigation Lock Miter Gates	NA	Item not present		

Structure Name/No.: S-23

DOWNSTREAM EROSION CONTROL

Finding #	Inspection Item	Rating	Comments	Recommended action	Probable cause
DS1	Slope/Banks of Channel	1	No deficiencies noted		
DS2	Rip Rap	1	No deficiencies noted		
DS3	Exposed erosion-Control Fabric	1	No deficiencies noted		
DS4	Evidence of stone displacement (bedding stone)	1	No deficiencies noted		
DS5	Channel Stabilization and erosion control	1	No deficiencies noted		

DOWNSTREAM GENERAL

Finding #	Inspection Item	Rating	Comments	Recommended action	Probable cause
DS50	Structural - General Concrete Condition	NA	Item not present		
DS51	Structural - General Metal Condition	3	Refer to DS115		
DS52	Structural - General Timber Condition	NA	Item not present		
DS53	Construction Joints (Bolts, Welds)	NA	Item not present		
DS54	Channels for Stoplogs or Flashboards	NA	Item not present		
DS55	Settlement	1	No deficiencies noted		
DS56	Shoaling/Scour	1	No deficiencies noted		
DS57	Fouling/Marine Growth	1	No deficiencies noted		
DS58	Debris	NA	Item not present		
DS59	Stilling Wells	NA	Item not present		
DS60	Underwater Controls/Instruments	NA	Item not present		
DS61	Fenders	NA	Item not present		

DOWNSTREAM STRUCTURE

Finding #	Inspection Item	Rating	Comments	Recommended action	Probable cause
DS100	Wingwalls	NA	Item not present		
DS101	Buttresses (support arms for wall)	NA	Item not present		
DS102	Abutments	NA	Item not present		
DS103	Retention Walls	NA	Item not present		
DS104	Headwall	NA	Item not present		
DS105	Expansion/Construction Joints	NA	Item not present		
DS106	Sheetpiles and Bulkheads	NA	Item not present		
DS107	Wales/Tiebacks	NA	Item not present		
DS108	Intake Bays	NA	Item not present		
DS109	Piers	NA	Item not present		
DS110	Foundation	NA	Item not present		
DS111	Weir/Weir crest	NA	Item not present		
DS112	Baffles	NA	Item not present		
DS113	Underwater Apron Slabs	NA	Item not present		
DS114	Structural Support, Bracing or Frames	NA	Item not present		

Structure Name/No.: S-23

DS115	Culverts	3	(1) C-3: The culvert has a hole, 2" diameter, located at 11:00 position and 3' in from the downstream end, with 6" penetration and gravel and rocks felt [10:25]. (2) C-2: The field joint at 51' in from the downstream end is 1/4" to 1" wide with protruding sealant. The sealant has cracks over 70% of the length [10:41]. (3) C-2: The culvert overall has spotty loss of bitumen coating and pitting up to 1/64" deep [10:25 to 10:55].	The hole located at 11:00 and 3' in should be plugged and sealed with splash zone epoxy. Monitor the field joint sealant for advanced deterioration. Monitor the culvert metal for advanced corrosion and holes.	The hole may have been caused by mechanical impact, or may have had early coating loss leading to early corrosion from chemical attack of the water. The sealant is showing normal age degradation due to chemical attack from the water. The culvert metal loss of coating and corrosion is due to chemical attack from the water.
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DOWNSTREAM GATES

Finding #	Inspection Item	Rating	Comments	Recommended action	Probable cause
DS151	Structure Gate(s)	3	No deficiencies noted. The gate was open 4" with very strong flow [11:40].	There were no obstructions to prevent gate closure. Review/adjust the gate if it is not closing properly.	If the gate is not closing, the operational components may be damaged.
DS152	Gate Guides and Gate Control	1	No deficiencies noted.		
DS153	Gate Seals & Mating Surface	3	The side seals had moderate flow escaping around them [11:39].	Replace or repair/adjust the seals to stop the leaks.	The inspector did not observe any obvious damage to the seals, so the leaks may be due to general deterioration of the seals.
DS154	Cathodic Protection (entire structure)	NA	Item not present		
DS155	Operator/Actuator Components	3	The gate was open 4"	Refer to DS151.	Refer to DS151
DS156	Emergency Closure Gates	NA	Item not present		
DS157	Navigation Lock Miter Gates	NA	Item not present		
DS1000	Additional Items and Comments	NA	Item not present		

STRUCTURE S-250E
INSPECTION DATE: 2/10/2020



Single Barrel, 72" Diameter x 112' Long

Location:	Jane Green South
	Levee L-74W
Latitude:	27.8225 N
Longitude:	80.8089 W
Type:	Gated Culvert
No. Barrels:	One
Inspection	
Start Date:	2/10/2020
End Date:	2/10/2020

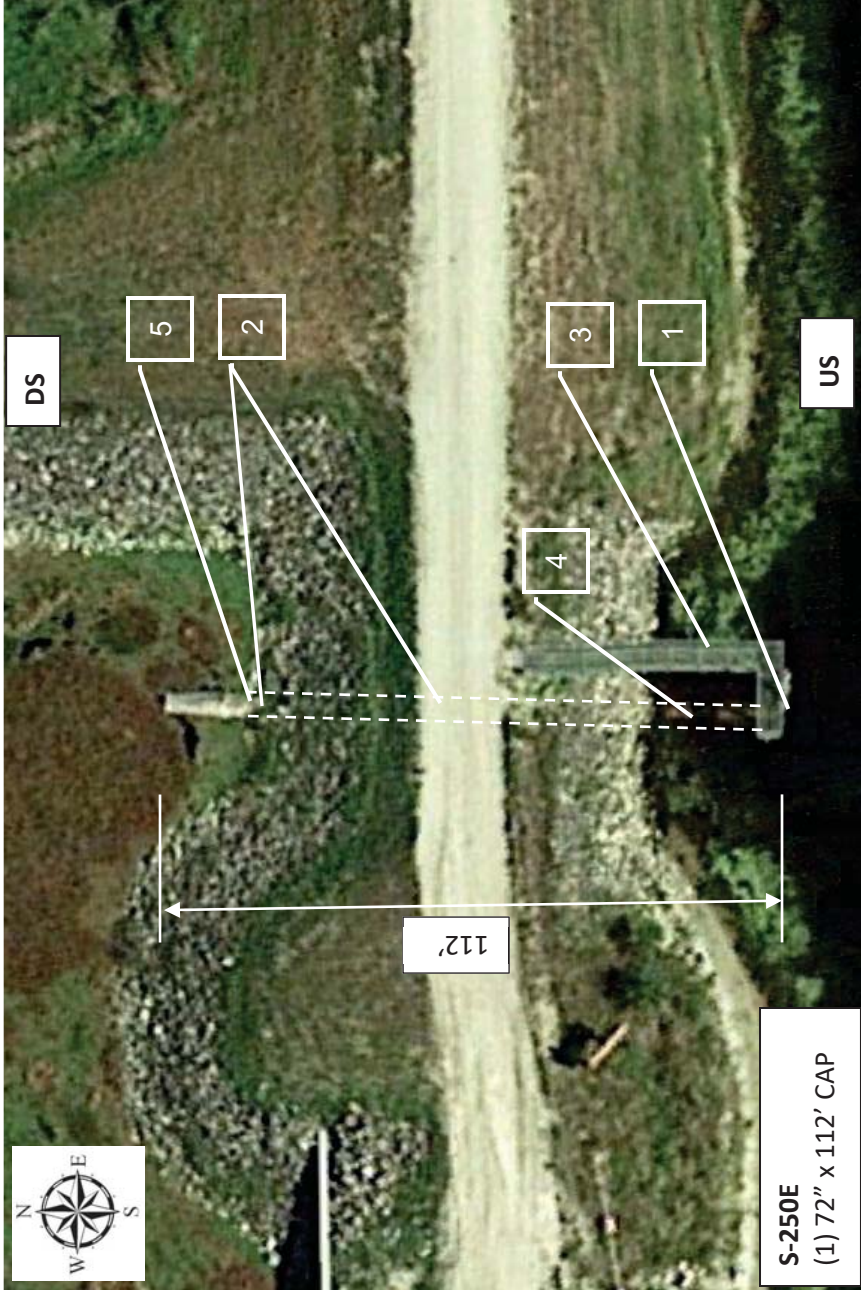
TEAM MEMBERS	
Lead Engineer	Jeffrey O'Connor, P.E.
Dive Supervisor	Jeremiah Duncan
Diver	Natasha Daniel
Diver – Standby	Dillon Sims
Dive Tender	Andre Lorenzo
Dive Tender	
Animal Control	TJ McDonagh
SJRWMD Agent	Steve Turrentine

Respectfully Submitted,
UNDERWATER ENGINEERING SERVICES, INC.
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Jeffrey O'Connor, P.E. (FL 50914)
Vice President
Project Manager



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Aerial View of Structure



No.	Item No.	Inspection Item	Rating	Deficiency
1	US153	Gate Seals & Mating Surfaces	C-4	Bottom seal moderate leak
2	DS115	Culverts	C-4	Loose repair clamp at 52' from downstream end. Corroded bolts on both clamps.
3	US114	Structural Support, Bracing	C-2	The gate access pier piles have minor corrosion; 30% coverage; minimal pitting
4	US115	Culverts	C-2	Exposed exterior of culvert has minor pitting
5	DS115	Culverts	C-2	The exterior of the culvert has broken metal and exposed gasket.

Structure Description and Method of Underwater Inspection

Structure S-250E is a gated culvert comprised of one barrel, extending south (gated end) to north under Levee L-74W. The barrel is a CAP, 72 inches diameter by 112 feet long. The south end has an access pier comprised of steel H-piles and an aluminum superstructure.

The underwater observations were performed by a 5-person dive team. The underwater structural inspection was conducted on February 10, 2020. The dive team worked from a dive trailer, using surface-supplied air, and accessed the structure areas from the bank.

The scope of services included the underwater inspection of the submerged structure components. The area extended 20 feet beyond the structure edges. There were no boat barriers. A Level I (swim-by) inspection was performed over 100% of the area upstream.

The air temperature ranged from 75 to 80 degrees F. and the weather was mostly clear. The underwater visibility ranged from 2 to 4 feet.

Rating System

- C-1: No action needed
- C-2: Monitor condition at next dive inspection (5 years)
- C-3: Schedule repair/replacement (for routine items)
- C-4: Schedule repair/replacement (for safety or operational items)
- C-5: Repair/replace immediately (for structural items)
- C-6: Critical - Repair/replace immediately (for operational items)

Summary of Observations

Items Rated C-5 and Above

There were no items rated C-5 and above.

Items Rated C-4

- Item US153: The bottom seal has a moderate leak with a vertical opening of 1/2", but the seal appears to be intact. There was vegetation in the gap, which may have been causing the opening.
 - Recommended Action: Adjust the gate to fully close.
- Item DS115: The culvert has a loose repair clamp at 52' in from the downstream end. There are three threaded rods for the clamp that have minor to moderate corrosion. The clamp appears to still be functioning. The Clamp at 12' of penetration has minor to moderate corrosion on the threaded rods.
 - Recommended Action: Replace the threaded rods and nuts for both clamps with stainless steel – re-securing both clamps in position.

Items Rated C-3

There were no items rated C-3.

Items Rated C-2

- Item US114: The gate access pier piles have minor corrosion on small isolated scratched areas and on the flange edges; coverage of 30% of the flange edges and less than 5% overall.
 - Recommended Action: Monitor the pier piles for advanced corrosion.
- Item US115: The exposed culvert exterior has minor to moderate corrosion pitting up to 1/64" depth maximum, and an overall coverage of 50%.
 - Recommended Action: Monitor the culvert exterior for advanced corrosion pitting.
- Item DS115: The exterior of the culvert at 12' from the downstream end has broken metal and exposed rubber gasket. The area is approximately 2' x 2'.
 - Recommended Action: Monitor the exterior of the culvert for damage to the exposed rubber gasket.

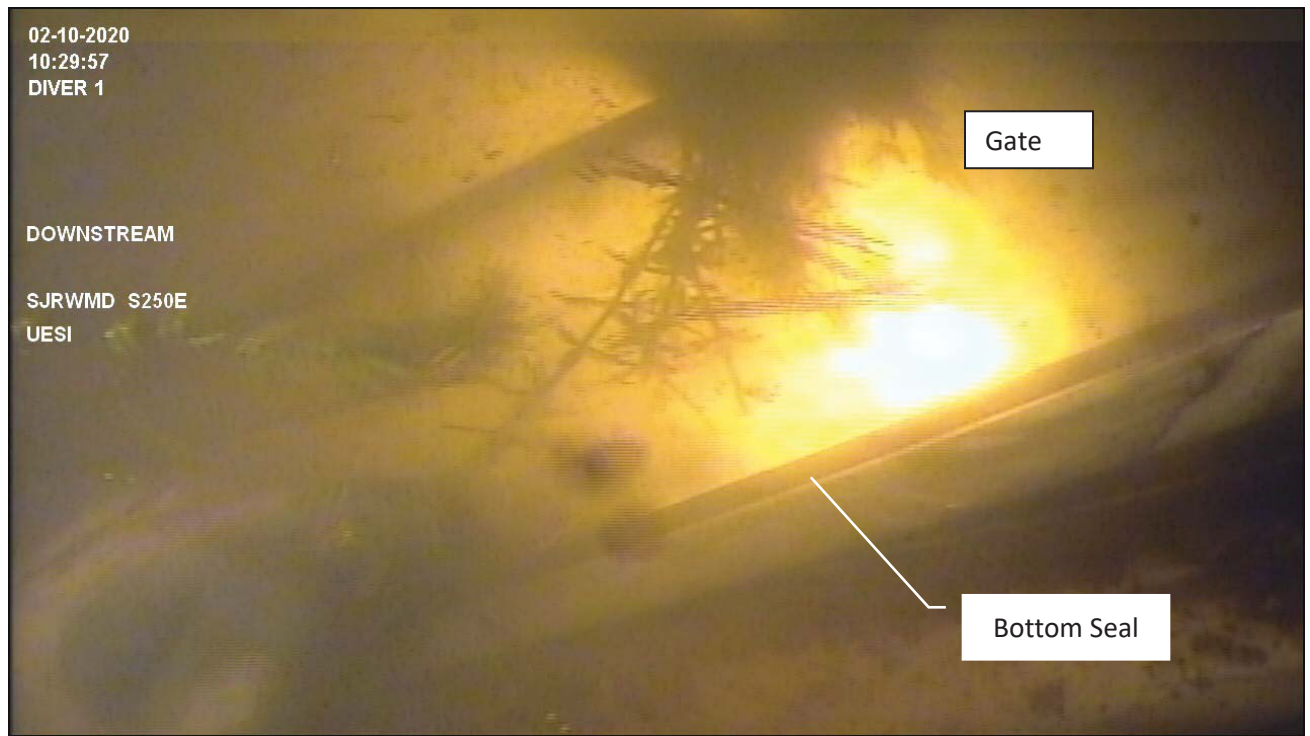
PHOTOGRAPHS

Item No.: US153	Rating: C-4	Photo Description:
Gate Seals & Mating surfaces		Leak along the bottom

Deficiency: The bottom seal has a moderate leak with a vertical opening of 1/2", but the seal appears to be intact.

Probable Cause: Either the gate control is out of adjustment or strong timber debris may have caused the gap.

Recommendation: Adjust the gate to fully close - try to allow full flush of vegetation.



Item No.: DS115 Culvert	Rating: C-4	Photo Description: Loose repair clamp
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Deficiency: The culvert has a loose repair clamp at 52' in from the downstream end. There are three threaded rods for the clamp with minor to moderate corrosion. It appears to still be functioning.

Probable Cause: The loose clamp bolts were either not properly tightened during installation or became loose due to a minor shift in the repaired joint.

Recommendation: Replace the rods with stainless steel and secure the repair clamp at 52' penetration. This will require divers.



APPENDIX

CHECKLISTS

Structure Name/No.: S-250E

UPSTREAM EROSION CONTROL

Finding #	Inspection Item	Rating	Comments	Recommended action	Probable cause
US1	Slope/Banks of Channel	1	No deficiencies noted		
US2	Rip Rap	1	No deficiencies noted		
US3	Exposed erosion-Control Fabric	1	No deficiencies noted		
US4	Evidence of stone displacement (bedding stone)	1	No deficiencies noted		
US5	Channel Stabilization and erosion control	1	No deficiencies noted		

UPSTREAM GENERAL

Finding #	Inspection Item	Rating	Comments	Recommended action	Probable cause
US50	Structural - General Concrete Condition	NA	Item not present		
US51	Structural - General Metal Condition	2	Refer to US114 and US115		
US52	Structural - General Timber Condition	NA	Item not present		
US53	Construction Joints (Bolts, Welds)	NA	Item not present		
US54	Channels for Stoplogs or Flashboards	NA	Item not present		
US55	Settlement	1	No deficiencies noted		
US56	Shoaling/Scour	1	No deficiencies noted		
US57	Fouling/Marine Growth	1	No deficiencies noted		
US58	Debris	1	One tire was removed in front of the gate.		
US59	Stilling Wells	NA	Item not present		
US60	Underwater Controls/Instruments	NA	Item not present		
US61	Fenders	NA	Item not present		

UPSTREAM STRUCTURE

Finding #	Inspection Item	Rating	Comments	Recommended action	Probable cause
US100	Wingwalls	NA	Item not present		
US101	Butresses (support arms for wall)	NA	Item not present		
US102	Abutments	NA	Item not present		
US103	Retention Walls	NA	Item not present		
US104	Headwall	NA	Item not present		
US105	Expansion/Construction Joints	NA	Item not present		
US106	Sheetpiles and Bulkheads	NA	Item not present		
US107	Wales/Tiebacks	NA	Item not present		
US108	Intake Bays	NA	Item not present		
US109	Piers	NA	Item not present		
US110	Foundation	NA	Item not present		
US111	Weir/Weir crest	NA	Item not present		
US112	Baffles	NA	Item not present		
US113	Underwater Apron Slabs	NA	Item not present		
US114	Structural Support, Bracing or Frames	2	The gate access pier piles have minor corrosion on small isolated scratched areas and on the flange edges. The corrosion has minimal to no pitting, and an overall coverage of 30% of the flange edges and less than 5% overall [11:11 to 11:17].	Monitor the access pier piles for advanced corrosion.	The corrosion was due to failed coating, by age breakdown, mechanical damage or poor application, and chemical attack from the water.
US115	Culverts	2	The exposed culvert exterior has minor corrosion pitting up to 1/64" depth maximum, and an overall coverage of 50% [11:37].	Monitor the exterior culvert for advanced corrosion pitting.	The corrosion was due to chemical attack from the water.

Structure Name/No.: S-250E

US116	Risers	NA	Item not present		
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UPSTREAM GATES

Finding #	Inspection Item	Rating	Comments	Recommended action	Probable cause
US151	Structure Gate(s)	1	No deficiencies noted		
US152	Gate Guides and Gate Control	1	No deficiencies noted		
US153	Gate Seals & Mating Surface	4	The bottom seal has a moderate leak with a vertical opening of 1/2", but the seal appears to be intact. There was vegetation in the gap, which may have been causing the opening. [1.1:19]	Adjust the gate to fully close - try to allow full flush of vegetation.	Either the gate control is out of adjustment or strong timber debris may have caused the gap.
US154	Cathodic Protection (entire structure)	NA	Item not present		
US155	Operator/Actuator Components	NA	Item not present		
US156	Emergency Closure Gates	NA	Item not present		
US306	Navigation Lock Miter Gates	NA	Item not present		

Structure Name/No.: S-250E

DOWNSTREAM EROSION CONTROL

Finding #	Inspection Item	Rating	Comments	Recommended action	Probable cause
DS1	Slope/Banks of Channel	1	No deficiencies noted		
DS2	Rip Rap	1	No deficiencies noted		
DS3	Exposed erosion-Control Fabric	1	No deficiencies noted		
DS4	Evidence of stone displacement (bedding stone)	1	No deficiencies noted		
DS5	Channel Stabilization and erosion control	1	No deficiencies noted		

DOWNSTREAM GENERAL

Finding #	Inspection Item	Rating	Comments	Recommended action	Probable cause
DS50	Structural - General Concrete Condition	NA	Item not present		
DS51	Structural - General Metal Condition	4	Refer to DS115		
DS52	Structural - General Timber Condition	NA	Item not present		
DS53	Construction Joints (Bolts, Welds)	NA	Item not present		
DS54	Channels for Stoplogs or Flashboards	NA	Item not present		
DS55	Settlement	1	No deficiencies noted		
DS56	Shoaling/Scour	1	No deficiencies noted		
DS57	Fouling/Marine Growth	1	No deficiencies noted		
DS58	Debris	1	No deficiencies noted		
DS59	Stilling Wells	NA	Item not present		
DS60	Underwater Controls/Instruments	NA	Item not present		
DS61	Fenders	NA	Item not present		

DOWNSTREAM STRUCTURE

Finding #	Inspection Item	Rating	Comments	Recommended action	Probable cause
DS100	Wingwalls	NA	Item not present		
DS101	Buttresses (support arms for wall)	NA	Item not present		
DS102	Abutments	NA	Item not present		
DS103	Retention Walls	NA	Item not present		
DS104	Headwall	NA	Item not present		
DS105	Expansion/Construction Joints	NA	Item not present		
DS106	Sheetpiles and Bulkheads	NA	Item not present		
DS107	Wales/Tiebacks	NA	Item not present		
DS108	Intake Bays	NA	Item not present		
DS109	Piers	NA	Item not present		
DS110	Foundation	NA	Item not present		
DS111	Weir/Weir crest	NA	Item not present		
DS112	Baffles	NA	Item not present		
DS113	Underwater Apron Slabs	NA	Item not present		
DS114	Structural Support, Bracing or Frames	NA	Item not present		

Structure Name/No.: S-250E

DS115	Culverts	4	(1) C-4: The culvert has a loose repair clamp at 52' in from the downstream end. There are three threaded rods for the clamp with minor to moderate corrosion. It appears to still be functioning [10:14-10:20]. (2) C-4: The culvert has a repair clamp located 12' in from the downstream end. The threaded rods have minor to moderate corrosion with no measurable section loss [10:00 to 10:05]. (3) C-2: The exterior of the culvert at this location has broken metal and exposed rubber gasket. The area is approximately 2' x 2'.	Replace all of the threaded rods with stainless steel for the clamps at 52' and 12' penetration - re-securing the clamps. (3) Monitor the exterior of the culvert for damage to the exposed rubber gasket.	The loose clamp bolts were either not properly tightened during installation or became loose due to a minor shift in the repaired joint. The corrosion is due to chemical attack from the water. The cause of the damaged area on the culvert exterior is unknown.
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DOWNSTREAM GATES

Finding #	Inspection Item	Rating	Comments	Recommended action	Probable cause
DS151	Structure Gate(s)	1	No deficiencies noted		
DS152	Gate Guides and Gate Control	1	No deficiencies noted		
DS153	Gate Seals & Mating Surface	4	Refer to US153		
DS154	Cathodic Protection (entire structure)	NA	Item not present		
DS155	Operator/Actuator Components	NA	Item not present		
DS156	Emergency Closure Gates	NA	Item not present		
DS157	Navigation Lock Miter Gates	NA	Item not present		
DS1000	Additional Items and Comments	NA	Item not present		

STRUCTURE S-252E
INSPECTION DATE: 7/15/2020



Five Barrels, 60" Diameter x 145' Long

Location:	USJRB South
	Levee L-78
Latitude:	27.6326 N
Longitude:	80.7658 W
Type:	Culvert (Flap Gates)
No. Barrels:	Five
Inspection	
Start Date:	7/15/2020
End Date:	7/15/2020

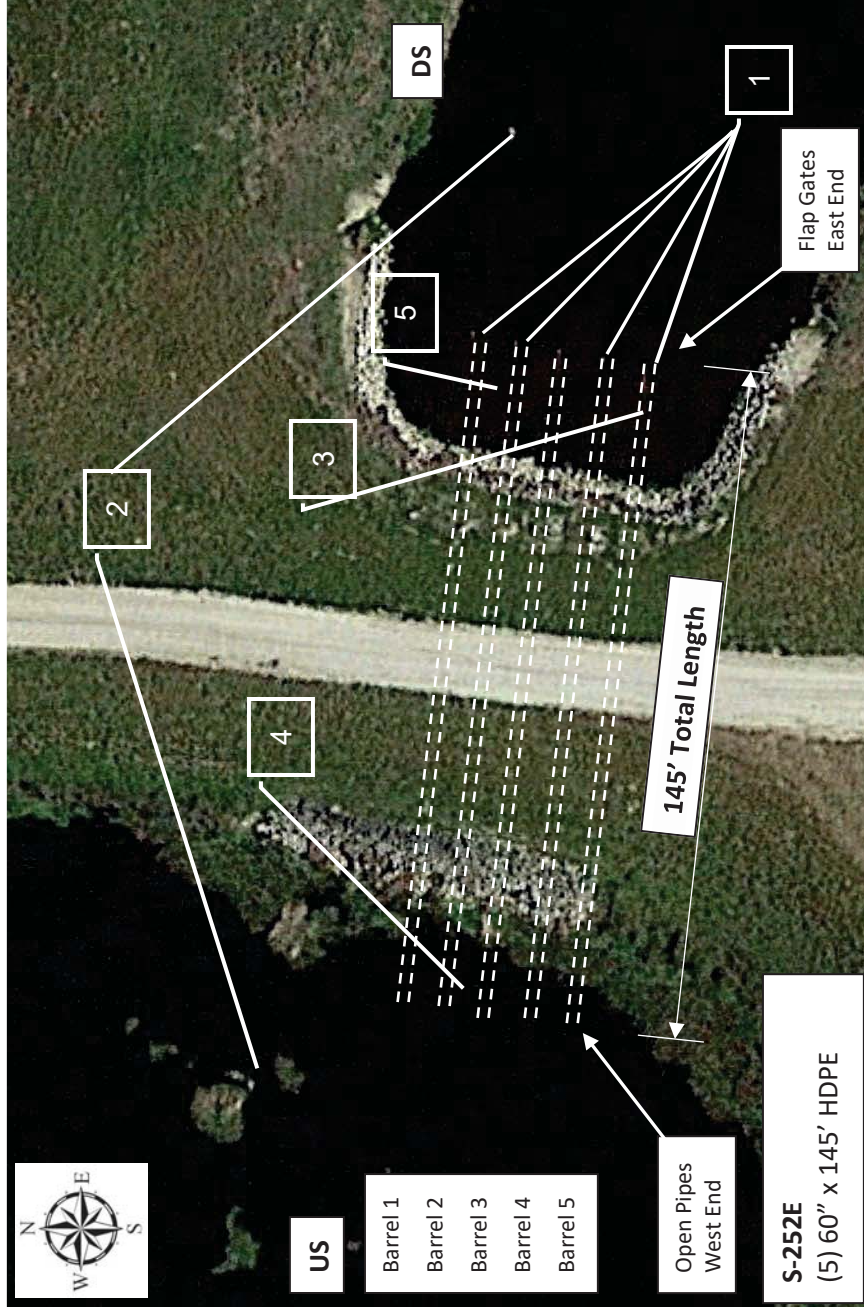
TEAM MEMBERS	
Lead Engineer	Jeffrey O'Connor, P.E.
Dive Supervisor	Jordan Klingler
Diver	Natasha Daniel
Diver – Standby	Mike Orth
Dive Tender	Brian Kilburn
Dive Tender	
Animal Control	Charlie Lowe
SJRWMD Agent	

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Aerial View of Structure



No.	Item No.	Inspection Item	Rating	Deficiency
1	DS152	Gate Guides and Gate Control	C-3	Loose bolts on the flap gate flange on Gates 1, 2, 4 and 5.
2	DS1000	Additional Items	C-3	Both staff gauges have missing numbers and decayed timber board.
3	US56	Shoaling/Scour	C-2	Barrel 5 has a minor pile of sediment in the barrel near the gate.
4	US58	Debris	C-2	Threaded rod debris between Barrels 2 and 3.
5	DS115	Culverts	C-2	Saddles not in contact with barrels and loose post bolts – All barrels

Structure Description and Method of Underwater Inspection

Structure S-252E is discharge culvert comprised of five barrels, extending west to east under Levee L-78. The barrel has been relined with HDPE with flap gates on the east end. The barrels are 145' long each.

The underwater inspection was performed by a 5-person dive team on July 15, 2020. The dive team worked from a dive trailer, using surface-supplied air, and accessed the structure areas from the bank.

The scope of services included the underwater inspection of the submerged structure components. The area extended 20 feet beyond the structure edges. There were no boat barriers.

The air temperature was 83 degrees F. and the weather was mostly clear. The underwater visibility ranged from 1 to 2 ft. Each side has a staff gauge. The water level was approximately 23.8 Ft per the staff gauges (gauge marks were missing below 25').

Rating System

- C-1: No action needed
- C-2: Monitor condition at next dive inspection (5 years)
- C-3: Schedule repair/replacement (for routine items)
- C-4: Schedule repair/replacement (for safety or operational items)
- C-5: Repair/replace immediately (for structural items)
- C-6: Critical - Repair/replace immediately (for operational items)

Summary of Observations

Items Rated C-5 and Above

There were no items rated C-5 and above.

Items Rated C-4

There were no items rated C-4.

Items Rated C-3

- Item DS152: The flap gates are bolted to the HDPE liners via a flange and bolts. There are 3, 1, 0, 2 and 4 loose bolts on Flap Gate No's. 1, 2, 3, 4 and 5, respectively. Gate No. 1 is the north gate.
 - Recommended Action: Tighten the bolts from the flap gate flanges to the HDPE liners.
- Item DS1000: Both staff gauges (upstream and downstream) are missing the metal gauge below the 25' mark. The 2x12 boards have moderate checking. The downstream board has a broken section.
 - Recommended Action: Replace the staff gauge boards and gauge plates.

Items Rated C-2

- Item US56: Barrel 5 has a pile of sediment up to 1' thick at 7' from the gate.
 - Recommended Action: Monitor the sediment pile and remove it if it gets up to 24" thick and is not washing away.
- Item US58: There is threaded rod debris embedded in the channel bottom between Barrel No's 2 and 3.
 - Recommended Action: Monitor the rods and remove if they become dislodged and interfere with flow.
- Item DS115: Each barrel has three saddles across the tops secured to posts. (1) Several of the saddles are not in contact with the barrels as listed: Barrel 1, middle saddle has 1/2" to 1" gap; Barrel 2, all saddles have 2" to 4" gap; Barrel 3, east saddle has 1" gap; Barrel 4, has contact on all saddles; Barrel 5, east saddle has 3" gap. (2) Several of the posts have loose bolts as listed: East post between Barrels 3-4 has one of three loose bolts; East post between Barrels 4-5 has one of three loose bolts.
 - Recommended Action: Monitor the saddles for increasing gaps or barrel movement. Monitor the bolts for future loosening. Tighten the bolts as necessary.

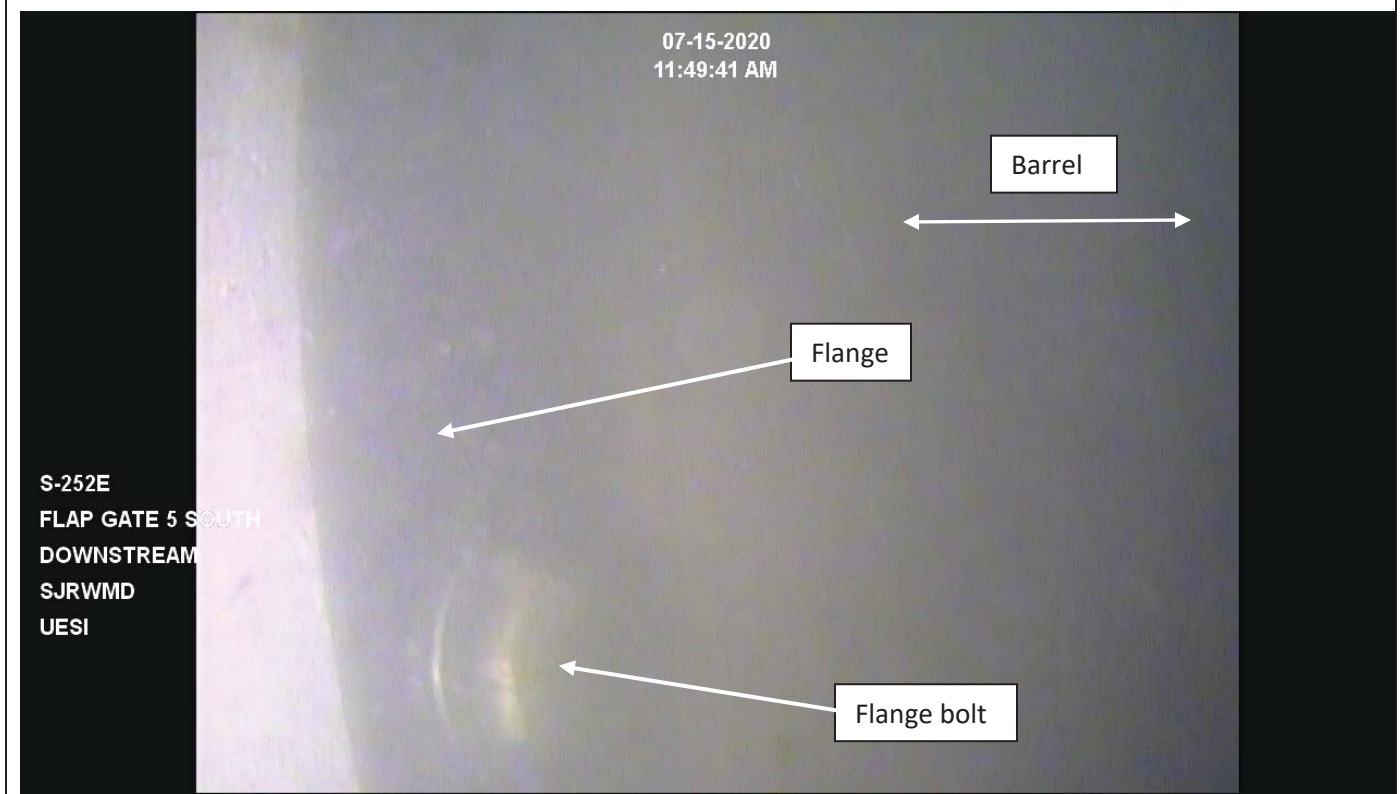
PHOTOGRAPHS

Item No.: US152 Gate Guides and Gate Control	Rating: C-3	Photo Description: Loose bolts between the flap gate flanges and the HDPE liners.
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Deficiency: The flap gates are bolted to the HDPE liners via a flange and bolts. There are 3, 1, 0, 2 and 4 loose bolts on Flap Gate No's. 1, 2, 3, 4 and 5, respectively. Gate No. 1 is the north gate.

Probable Cause: The bolts were not tightened properly during relining construction.

Recommendation: Tighten the bolts from the flap gate flanges to the HDPE liners.

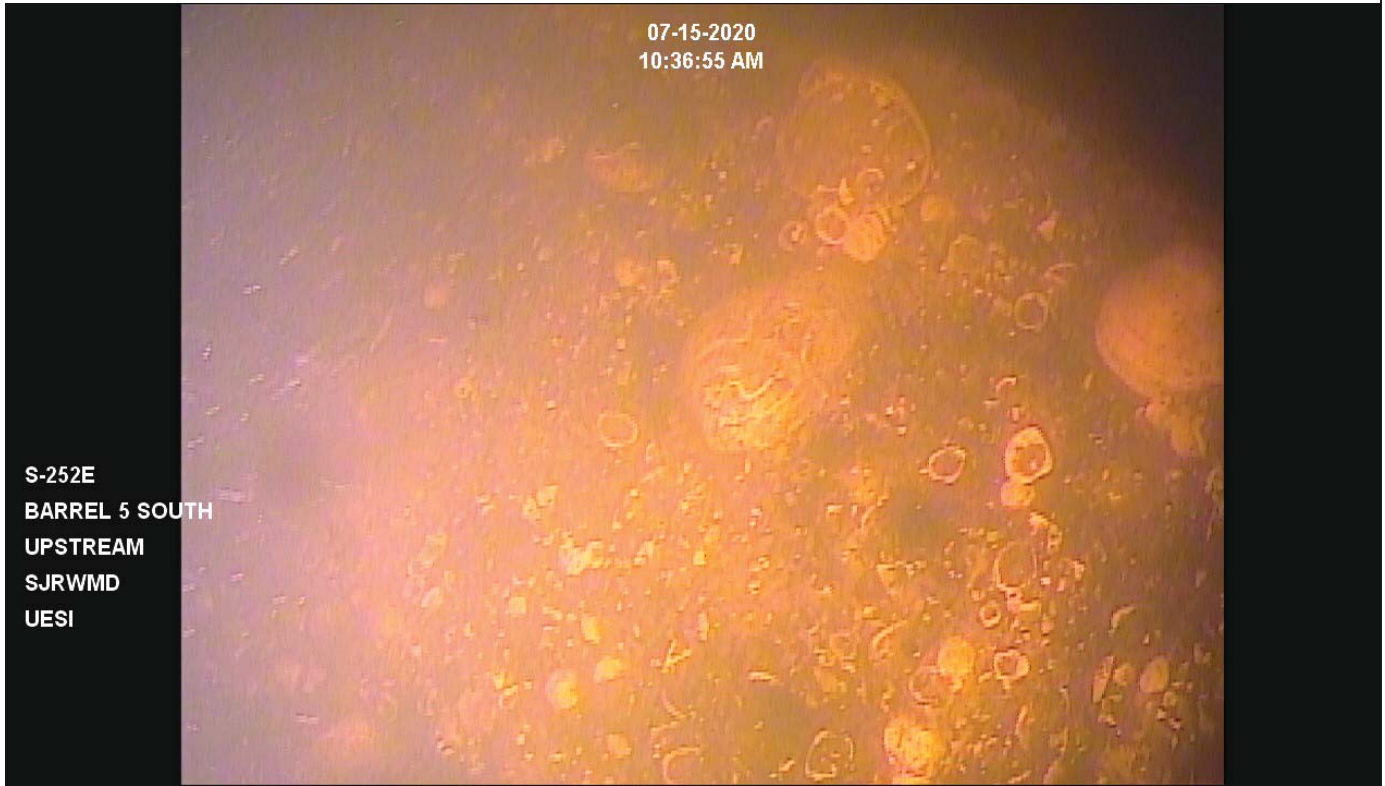


Item No.: DS1000 Additional Items	Rating: C-3	Photo Description: Missing gauge numbers on US staff gauge
Deficiency: Both staff gauges (upstream and downstream) are missing the metal gauge below the 25' mark. The 2x12 boards have moderate checking. The downstream board has a broken section.		
Probable Cause: The corrosion and decay are due to chemical attack from the water.		
Recommendation: Replace the metal staff gauges below the 25' mark and replace the timber boards.		



Item No.: US56 Shoaling/Scour	Rating: C-2	Photo Description: Minor buildup of sediment in Barrel 5 near the gate.
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Deficiency: Barrel 5 has a pile of sediment up to 1' thick at 7' from the gate.
 Probable Cause: The pile may have started from stones in the barrel.
 Recommendation: Monitor the sediment pile and remove it if it gets up to 24" thick and is not washing away.



Item No.: US58 Debris	Rating: C-2	Photo Description: Threaded rod debris embedded in channel bottom between Barrels 2 and 3.
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Deficiency: There is threaded rod debris embedded in the channel bottom between Barrel No's 2 and 3.

Probable Cause: Debris left from construction.

Recommendation: Monitor the rods and remove if they become dislodged and interfere with flow.

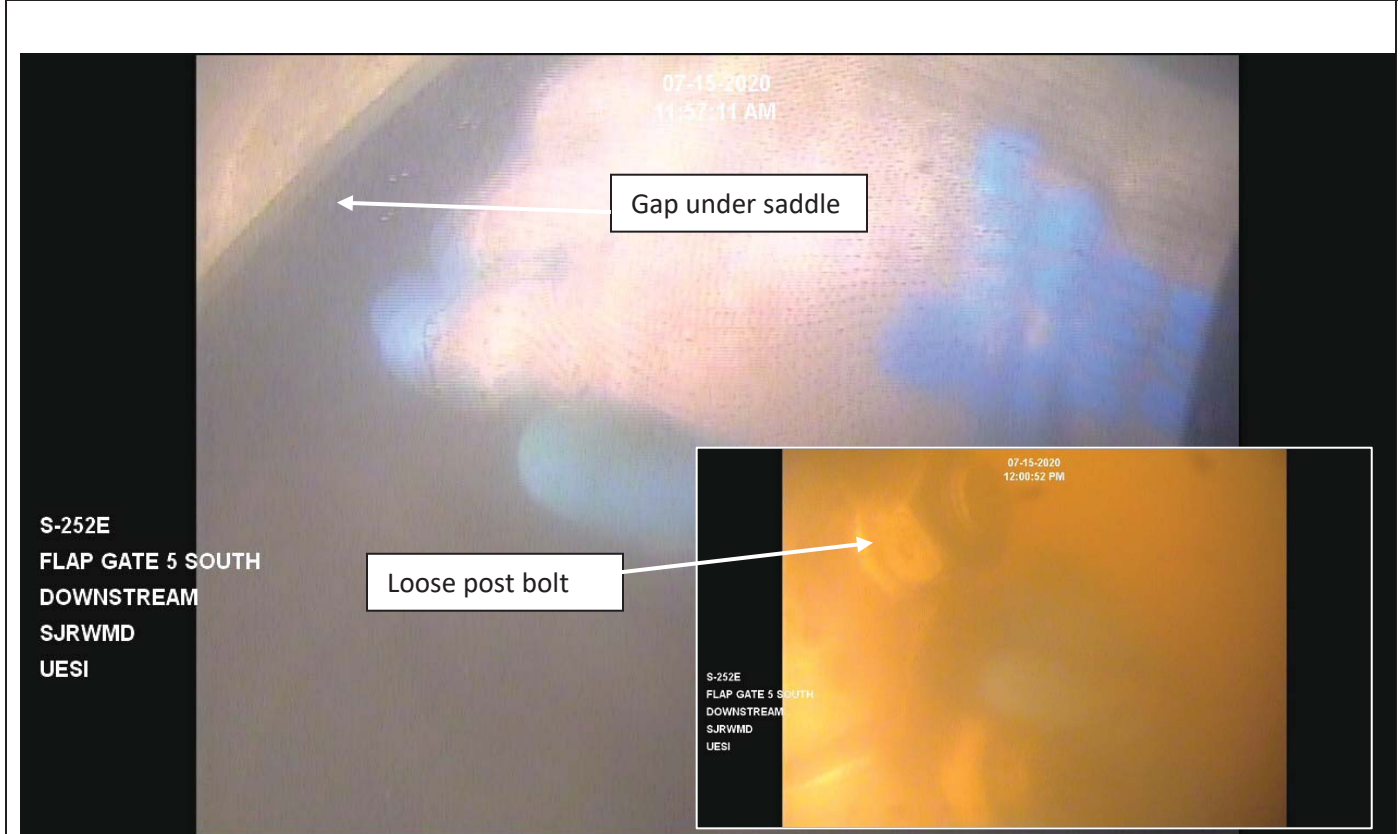


Item No.: DS115 Culverts	Rating: C-2	Photo Description: Gap between saddles and barrels. Loose post bolt
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Deficiency: Each barrel has three saddles across the tops secured to posts. (1) Several of the saddles are not in contact with the barrels as listed: Barrel 1, middle saddle has 1/2" to 1" gap; Barrel 2, all saddles have 2" to 4" gap; Barrel 3, east saddle has 1" gap; Barrel 4, has contact on all saddles; Barrel 5, east saddle has 3" gap. (2) Several of the posts have loose bolts as listed: East post between Barrels 3-4 has one of three loose bolts; East post between Barrels 4-5 has one of three loose bolts.

Probable Cause: The saddles were not positioned properly during relining construction. The bolts were not tightened properly during relining construction.

Recommendation: Monitor the saddles for increasing gaps or barrel movement. Monitor the bolts for future loosening. Tighten as necessary.



APPENDIX

CHECKLISTS

Structure Name/No.: S-252E

UPSTREAM EROSION CONTROL

Finding #	Inspection Item	Rating	Comments	Recommended action	Probable cause
US1	Slope/Banks of Channel	1	No deficiencies observed		
US2	Rip Rap	1	No deficiencies observed		
US3	Exposed erosion-Control Fabric	1	No deficiencies observed		
US4	Evidence of stone displacement (bedding stone)	1	No deficiencies observed		
US5	Channel Stabilization and erosion control	1	No deficiencies observed		

UPSTREAM GENERAL

Finding #	Inspection Item	Rating	Comments	Recommended action	Probable cause
US50	Structural - General Concrete Condition	NA	Item not present		
US51	Structural - General Metal Condition	1	No deficiencies observed		
US52	Structural - General Timber Condition	NA	Item not present		
US53	Construction Joints (Bolts, Welds)	NA	Item not present		
US54	Channels for Stoplogs or Flashboards	NA	Item not present		
US55	Settlement	1	No deficiencies observed		
US56	Shoaling/Scour	2	Barrel 5 has a pile of sediment up to 1' thick at 7' from the gate [10:36].	Monitor the sediment pile and remove it if it gets up to 24" thick and is not washing away.	The pile may have started from stones in the barrel.
US57	Fouling/Marine Growth	1	No deficiencies observed		
US58	Debris	2	There is threaded rod debris embedded in the channel bottom between Barrel No's 2 and 3.	Monitor the rods and remove if they become dislodged and interfere with flow.	Debris left from construction.
US59	Stilling Wells	NA	Item not present		
US60	Underwater Controls/Instruments	NA	Item not present		
US61	Fenders	NA	Item not present		

UPSTREAM STRUCTURE

Finding #	Inspection Item	Rating	Comments	Recommended action	Probable cause
US100	Wingwalls	NA	Item not present		
US101	Buttresses (support arms for wall)	NA	Item not present		
US102	Abutments	NA	Item not present		
US103	Retention Walls	NA	Item not present		
US104	Headwall	NA	Item not present		
US105	Expansion/Construction Joints	NA	Item not present		
US106	Sheetpiles and Bulkheads	NA	Item not present		
US107	Wales/Tiebacks	NA	Item not present		
US108	Intake Bays	NA	Item not present		
US109	Piers	NA	Item not present		
US110	Foundation	NA	Item not present		
US111	Weir/Weir crest	NA	Item not present		
US112	Baffles	NA	Item not present		

US113	Underwater Apron Slabs	NA	Item not present		
US114	Structural Support, Bracing or Frames	NA	Item not present		
US115	Culverts	1	No deficiencies observed		
US116	Risers	NA	Item not present		

UPSTREAM GATES

Finding #	Inspection Item	Rating	Comments	Recommended action	Probable cause
US151	Structure Gate(s)	1	No deficiencies observed		
US152	Gate Guides and Gate Control	NA	Item no present		
US153	Gate Seals & Mating Surface	1	No deficiencies observed		
US154	Cathodic Protection (entire structure)	NA	Item not present		
US155	Operator/Actuator Components	NA	Item not present		
US156	Emergency Closure Gates	NA	Item not present		
US306	Navigation Lock Miter Gates	NA	Item not present		

Structure Name/No.: S-252E

DOWNSTREAM EROSION CONTROL

Finding #	Inspection Item	Rating	Comments	Recommended action	Probable cause
DS1	Slope/Banks of Channel	1	No deficiencies observed		
DS2	Rip Rap	1	No deficiencies observed		
DS3	Exposed erosion-Control Fabric	1	No deficiencies observed		
DS4	Evidence of stone displacement (bedding stone)	1	No deficiencies observed		
DS5	Channel Stabilization and erosion control	1	No deficiencies observed		

DOWNSTREAM GENERAL

Finding #	Inspection Item	Rating	Comments	Recommended action	Probable cause
DS50	Structural - General Concrete Condition	NA	Item not present		
DS51	Structural - General Metal Condition	2	Refer to DS115 and DS152		
DS52	Structural - General Timber Condition	NA	Item not present		
DS53	Construction Joints (Bolts, Welds)	NA	Item not present		
DS54	Channels for Stoplogs or Flashboards	NA	Item not present		
DS55	Settlement	1	No deficiencies observed		
DS56	Shoaling/Scour	1	No deficiencies observed		
DS57	Fouling/Marine Growth	1	No deficiencies observed		
DS58	Debris	NA	Item not present		
DS59	Stilling Wells	NA	Item not present		
DS60	Underwater Controls/Instruments	NA	Item not present		
DS61	Fenders	NA	Item not present		

DOWNSTREAM STRUCTURE

Finding #	Inspection Item	Rating	Comments	Recommended action	Probable cause
DS100	Wingwalls	NA	Item not present		
DS101	Buttresses (support arms for wall)	NA	Item not present		
DS102	Abutments	NA	Item not present		
DS103	Retention Walls	NA	Item not present		
DS104	Headwall	NA	Item not present		
DS105	Expansion/Construction Joints	NA	Item not present		
DS106	Sheetpiles and Bulkheads	NA	Item not present		
DS107	Wales/Tiebacks	NA	Item not present		
DS108	Intake Bays	NA	Item not present		
DS109	Piers	NA	Item not present		
DS110	Foundation	NA	Item not present		
DS111	Weir/Weir crest	NA	Item not present		
DS112	Baffles	NA	Item not present		
DS113	Underwater Apron Slabs	NA	Item not present		
DS114	Structural Support, Bracing or Frames	NA	Item not present		

DS115	Culverts	2	<p>Each barrel has three saddles across the tops secured to posts. (1) Several of the saddles are not in contact with the barrels as listed: Barrel 1, middle saddle has 1/2" to 1" gap; Barrel 2, all saddles have 2" to 4" gap; Barrel 3, east saddle has 1" gap; Barrel 4, has contact on all saddles; Barrel 5, east saddle has 3" gap [12:31, 12:23, 12:17, 12:07, 11:55]. (2) Several of the posts have loose bolts as listed: East post between Barrels 3-4 has one of three loose bolts; East post between Barrels 4-5 has one of three loose bolts.</p>	<p>Monitor the saddles for increasing gaps or barrel movement. Monitor the bolts for future loosening. Tighten as necessary.</p> <p>The saddles were not positioned properly during relining construction. The bolts were not tightened properly during relining construction.</p>
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DOWNSTREAM GATES

Finding #	Inspection Item	Rating	Comments	Recommended action	Probable cause
DS151	Structure Gate(s)	1	No deficiencies noted		
			The flap gates are bolted to the HDPE liners via a flange and bolts. There are 3, 1, 0, 2 and 4 loose bolts on Flap Gate No's. 1, 2, 3, 4 and 5, respectively [12:33, 12:25, 12:08, 11:47]. Gate No. 1 is the north gate.	Tighten the bolts from the flap gate flanges to the HDPE liners	The bolts were not tightened properly during relining construction.
DS152	Gate Guides and Gate Control	3	No deficiencies noted		
DS153	Gate Seals & Mating Surface	1	No deficiencies noted		
DS154	Cathodic Protection (entire structure)	NA	Item not present		
DS155	Operator/Actuator Components	NA	Item not present		
DS156	Emergency Closure Gates	NA	Item not present		
DS157	Navigation Lock Miter Gates	NA	Item not present		
			(1) C-3: Both staff gauges (upstream and downstream) are missing the metal gauge below the 25' mark. The 2x12 boards have moderate checking. The downstream board has a broken section [11:21, 11:29].	Replace the metal staff gauges below the 25' mark, and replace the timber boards.	The corrosion and decay is due to chemical attack from the water.
DS1000	Additional Items and Comments	3			

STRUCTURE S-252F
INSPECTION DATE: 7/14/2020



Two Barrels, 60" Diameter x 100' Long

Location:	USJRB South
	Levee L-78
Latitude:	27.6333 N
Longitude:	80.7661 W
Type:	Gated Culvert
No. Barrels:	Two
Inspection	
Start Date:	7/14/2020
End Date:	7/14/2020

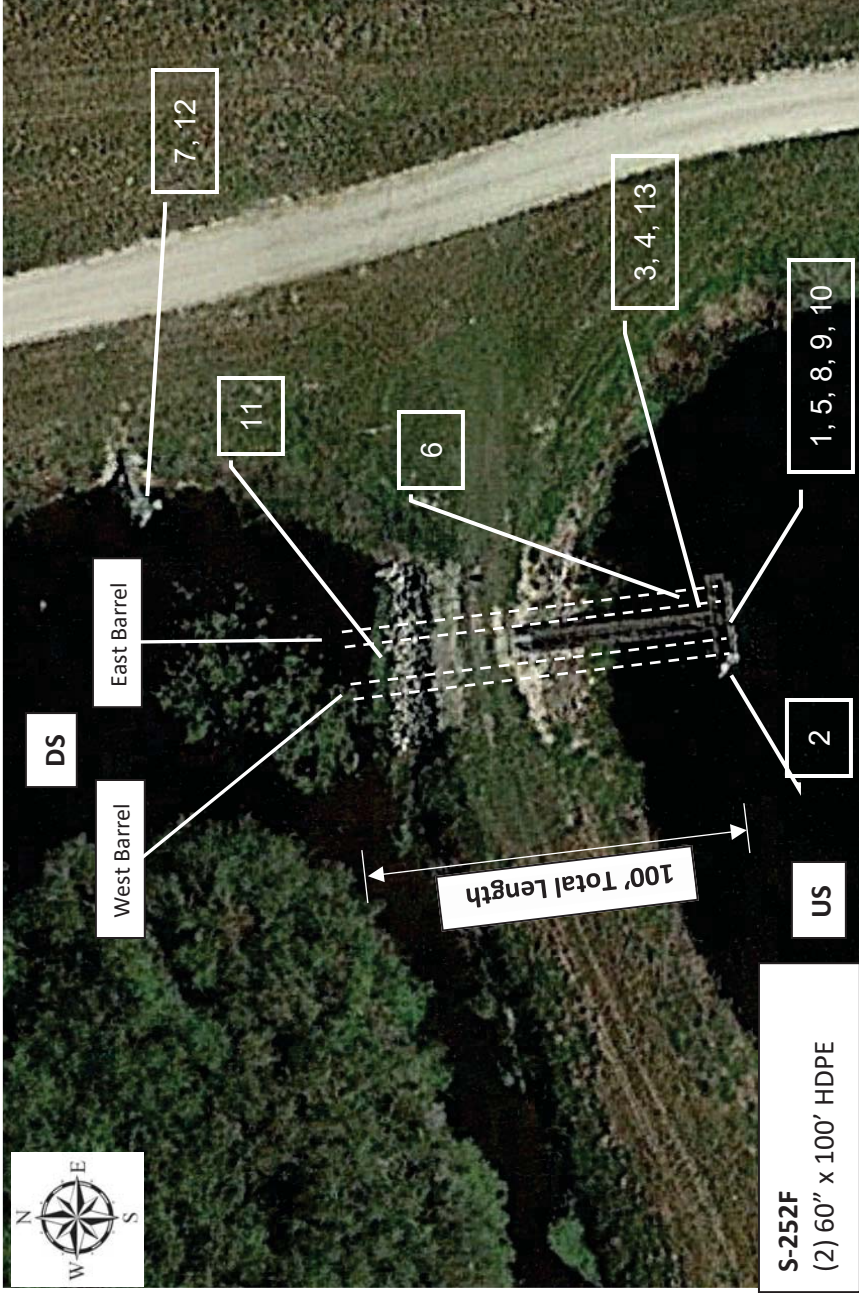
TEAM MEMBERS	
Lead Engineer	Jeffrey O'Connor, P.E.
Dive Supervisor	Brian Kilburn
Diver	Jordan Klingler
Diver – Standby	Mike Orth
Dive Tender	Natasha Daniel
Dive Tender	
Animal Control	Charlie Lowe
SJRWMD Agent	

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Vice President
Project Manager



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Aerial View of Structure



No.	Item No.	Inspection Item	Rating	Deficiency
1	US152	Gate Guides and Gate Control	C-4	The aluminum bracket at the east pile was broken
2	US60	Underwater Controls	C-3	Broken strap for the large diameter PVC downpipe.
3	US114	Structural Support Bracing	C-3	The timber pier hardware for the piles and braces have corrosion.
4	US115	Culverts	C-3	The clamps for the reducer on the exterior of the barrels have loose bolts.
5	US152	Gate Guides and Gate Control	C-3	Moderate corrosion on the bolts for the aluminum brackets to the piles.
6	DS56	Shoaling/Scour	C-3	The east barrel has a pile of riprap, sand and silt up to 12" high near the gate.
7	DS1000	Additional Items	C-3	The downstream staff gauge has missing gauge below the 24' mark.
8	US151/DS151	Structure Gates	C-2	The lower 12" of the gate has corrosion pitting.
9	US152	Gate Guides and Gate Control	C-2	The gate guides and aluminum brackets for the gates have pitting corrosion.



10	US153/DS153	Gate Seals and Mating Surfaces	C-2	Both gates have gaps between the gate surfaces and the seals.
11	DS58	Debris	C-2	The area between the barrels has threaded rod debris.
12	DS59	Stilling Wells	C-2	The stilling well pier piles have corrosion and the grounding rod is loose
13	DS115	Culverts	C-2	Small gaps and missing sealant between the HDPE liner and the aluminum reducer

Structure Description and Method of Underwater Inspection

Structure S-252F is a gated culvert comprised of two barrels, extending south to north under Levee L-78. The barrels have been relined with HDPE. The barrels are 100 ft long each.

The underwater inspection was performed by a 5-person dive team on July 14, 2020. The dive team worked from a dive trailer, using surface-supplied air, and accessed the structure areas from the bank.

The scope of services included the underwater inspection of the submerged structure components. The area extended 20 feet beyond the structure edges. There were no boat barriers.

The air temperature was 83 degrees F. and the weather was mostly clear. The underwater visibility ranged from 1 to 2 ft. The downstream side has a staff gauge. The water level was approximately 23.5 Ft per the staff gauges (gauge marks were missing below 24').

Rating System

- C-1: No action needed
- C-2: Monitor condition at next dive inspection (5 years)
- C-3: Schedule repair/replacement (for routine items)
- C-4: Schedule repair/replacement (for safety or operational items)
- C-5: Repair/replace immediately (for structural items)
- C-6: Critical - Repair/replace immediately (for operational items)

Summary of Observations

Items Rated C-5 and Above

There were no items rated C-5 and above.

Items Rated C-4

- Item US152: The gate guides are secured to the timber piles by threaded rods. Aluminum brackets are welded to the gates guides and bolted to the piles. Threaded rods extend between the two brackets. The aluminum bracket bolted to the east pile is broken.
 - Recommended Action: Replace the broken aluminum bracket attached to the east pile.

Items Rated C-3

- Item US60: The large diameter PVC pipe on the pier has no slots on the tube and has a cap on the bottom (unsure if this is a stilling well downpipe). The tube has a broken strap.
 - Recommended Action: Replace the broken strap for the large diameter PVC pipe.
- Item US114: The bolts connecting the battered piles and the cross bracing to the piles have moderate corrosion with up to 30% section loss
 - Recommended Action: Replace the bolts on the timber piles with stainless steel.

Items Rated C-3 (Continued)

- Item US115: The barrels have two clamps behind the gates connecting the new liner section to the existing CMP. One is larger and connects the CMP to the larger end of the reducer. The other clamp is smaller and connects the smaller end of the reducer to the HDPE. The larger clamp nearer the gate is made of two halves that are clamped at the 3:00 and 9:00 positions. The smaller clamp has only one set of bolts on the west side of the west barrel and the east side of the east barrel. (1) The larger clamp on the west barrel has three of four bolts for the clamp loose on each side of the barrel. (2) The second (smaller) clamp on the west barrel has one missing bolt and one loose bolt (out of four) and the clamp has slight movement. (3) The larger clamp on the east barrel is at the 12:00 position and has one of four bolts for the clamp loose on the east side of the barrel.
 - Recommended Action: Tighten all of the clamp bolts for both barrels.
- Item US152: The bolts securing the aluminum brackets to the timber piles are carbon steel and have moderate corrosion with up to 20% section loss.
 - Recommended Action: Replace all of the bolts securing the aluminum brackets to the piles.
- Item DS56: The east barrel has a pile of riprap, sand and silt up to 12" high within 4' of the gate.
 - Recommended Action: Remove the riprap, sand, and silt from the east barrel near the gate.
- Item DS1000: The downstream staff gauge is missing the gauge board below the 24' mark.
 - Recommended Action: Replace the downstream metal gauge board below the 24' mark and replace other screws, as necessary.

Items Rated C-2

- Item US151/DS151: The two gates were in a 75% open position with approximately 12" of the gates in the water. This lower portion has pitting corrosion. The pitting depth on the downstream side has up to 1/16" and has a coverage of 20 to 30%. The lower 12" of the upstream faces of the gates have minor corrosion - not as deep pitting as on the downstream faces.
 - Recommended Action: Monitor the gates for advanced pitting.
- Item US152: The aluminum brackets typically have moderate pitting corrosion (the threaded rods are stainless steel). The gate guides have minor pitting corrosion covering 15% of the area.
 - Recommended Action: Monitor the aluminum brackets and guides for advanced corrosion.
- Item US153/DS153: The west gate has gaps at the seal from 1/2" to 1". The east gate has gaps at the seal up to 1/2".
 - Recommended Action: Monitor the gates for proper sealing when lowered in position. The gate position may need to be adjusted, or a new wider seal may need to be installed.
- Item DS58: The area between the two barrels has threaded rod debris.
 - Recommended Action: Monitor the debris for obstruction.
- Item DS59: The grounding rod for the electrical system on the stilling well pier was loose in the ground. The posts for the stilling well pier have minor corrosion with pitting up to 1/64" deep.
 - Recommended Action: Monitor the electrical system and reinstall a longer ground rod if necessary. Monitor the stilling well pier piles for advanced corrosion.

- Item DS115: The east barrel interface between the HDPE liner and the aluminum reducer has loose sealant from the 3:00 to the 5:00 position. The west barrel at the interface between the HDPE liner and the aluminum reducer has a 1/4" gap with no ramneck sealant, but does have joint sheet sealing material along the exterior of the barrel. No soil intrusion noted.
 - Recommended Action: Monitor the barrels for soil intrusion in the future.

PHOTOGRAPHS

Item No.: US152 Gate Guides and Gate Control	Rating: C-3	Photo Description: Broken aluminum bracket at the east pile
Deficiency: The gate guides are secured to the timber piles by threaded rods. Aluminum brackets are welded to the gates guides and bolted to the piles. Threaded rods extend between the two brackets. The aluminum bracket bolted to the east pile is broken.		
Probable Cause: The bracket may have broken from a poor weld, overtightening the threaded rods, or impact damage during relining.		
Recommendation: Replace the broken aluminum bracket attached to the east pile.		



Item No.: US60 Underwater Controls/Instruments	Rating: C-3	Photo Description: Broken pipe strap
Deficiency: The large diameter PVC pipe on the pier has no slots on the tube and has a cap on the bottom (unsure if this is a stilling well downpipe). The tube has a broken strap.		
Probable Cause: The strap was either too small or had failed hardware.		
Recommendation: Replace the broken strap for the large diameter PVC pipe.		



Item No.: US114 Structural Support Bracing or Frames	Rating: C-3	Photo Description: Corroded bolts for piles
Deficiency: The bolts connecting the battered piles and the cross bracing to the piles have moderate corrosion with up to 30% section loss.		
Probable Cause: The corrosion is due to chemical attack from the water and possible galvanic corrosion from contact of dissimilar metals.		
Recommendation: Replace the bolts on the timber piles with stainless steel.		

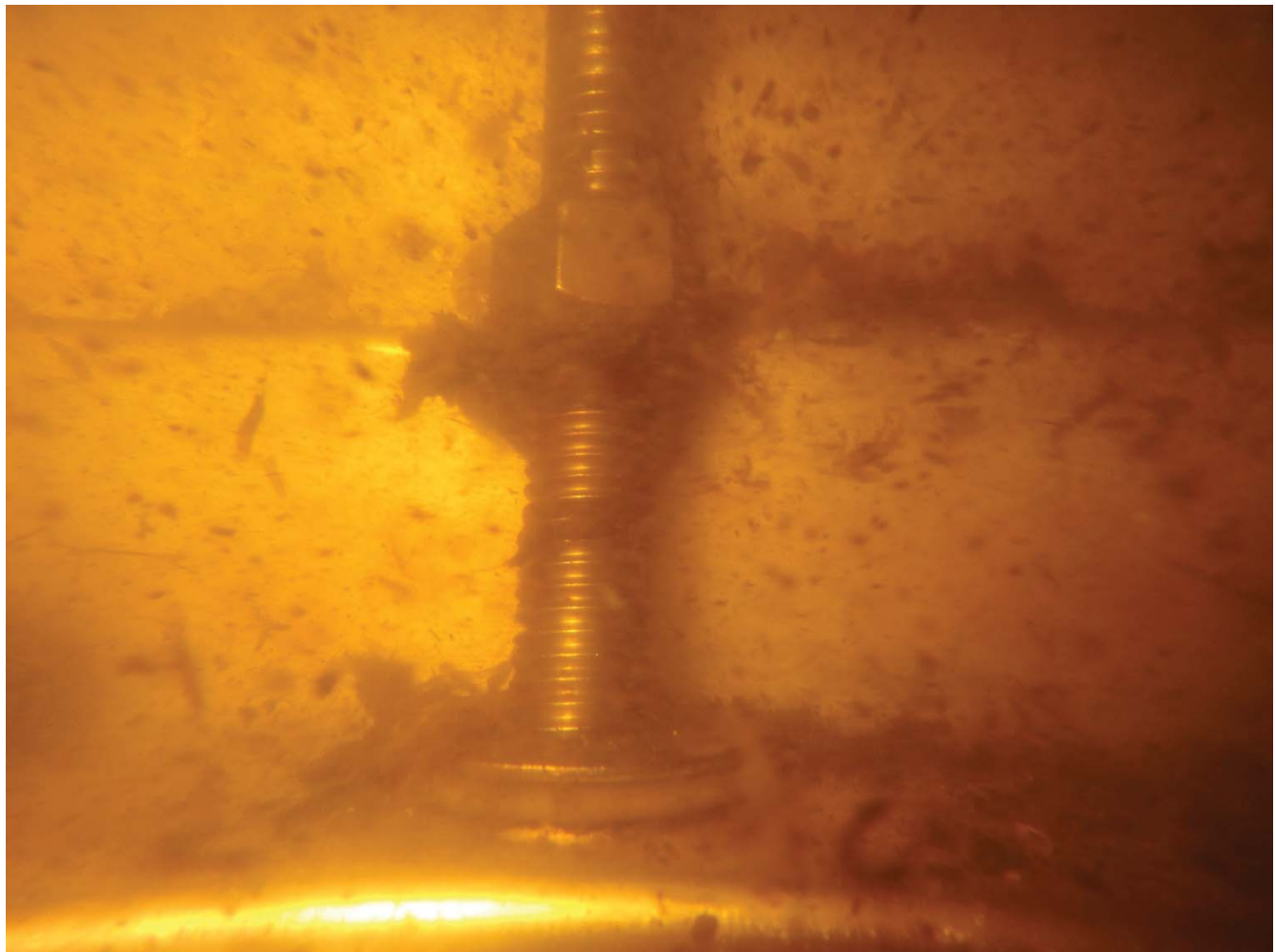


Item No.: US115 Culverts	Rating: C-3	Photo Description: Loose clamp bolts
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Deficiency: The barrels have two clamps behind the gates connecting the new liner section to the existing CMP. One is larger and connects the CMP to the larger end of the reducer. The other clamp is smaller and connects the smaller end of the reducer to the HDPE. The larger clamp nearer the gate is made of two halves that are clamped at the 3:00 and 9:00 positions. The smaller clamp has only one set of bolts on the west side of the west barrel and the east side of the east barrel. (1) The larger clamp on the west barrel has three of four bolts for the clamp loose on each side of the barrel. (2) The second (smaller) clamp on the west barrel has one missing bolt and one loose bolt (out of four) and the clamp has slight movement. (3) The larger clamp on the east barrel is at the 12:00 position and has one of four bolts for the clamp loose on the east side of the barrel.

Probable Cause: The clamps may not have been tightened properly during the relining.

Recommendation: Tighten all of the clamp bolts for both barrels.



Item No.: US152 Gate Guides and Gate Control	Rating: C-3	Photo Description: Corrosion on bolts
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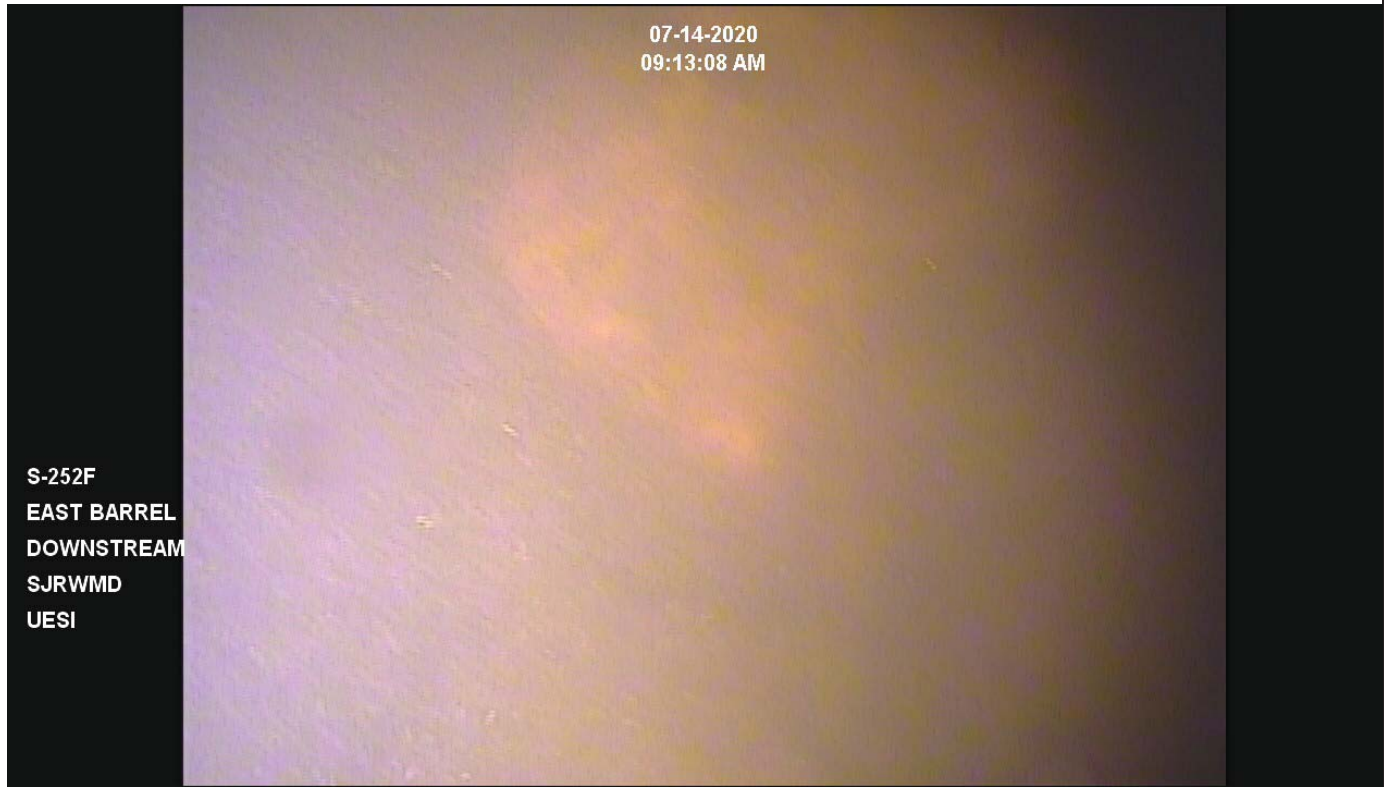
Deficiency: The bolts securing the aluminum brackets to the timber piles are carbon steel and have moderate corrosion with up to 20% section loss

Probable Cause: The corrosion is due to chemical attack from the water.

Recommendation: Replace all of the bolts securing the aluminum brackets to the piles.



Item No.: DS56 Shoaling/Scour	Rating: C-3	Photo Description: Pile of riprap and silt in east barrel
Deficiency: The east barrel has a pile of riprap, sand and silt up to 12" high within 4' of the gate.		
Probable Cause: The riprap, sand and silt were left from construction or operation.		
Recommendation: Remove the riprap, sand, and silt from the east barrel near the gate.		



Item No.: DS1000	Rating: C-3	Photo Description:
Additional Items		Missing gauge board below 24'
Deficiency: The downstream staff gauge is missing the gauge board below the 24' mark		
Probable Cause: The corrosion was due to chemical attack from the water.		
Recommendation: Replace the downstream metal gauge board below the 24' mark and replace other screws, as necessary.		

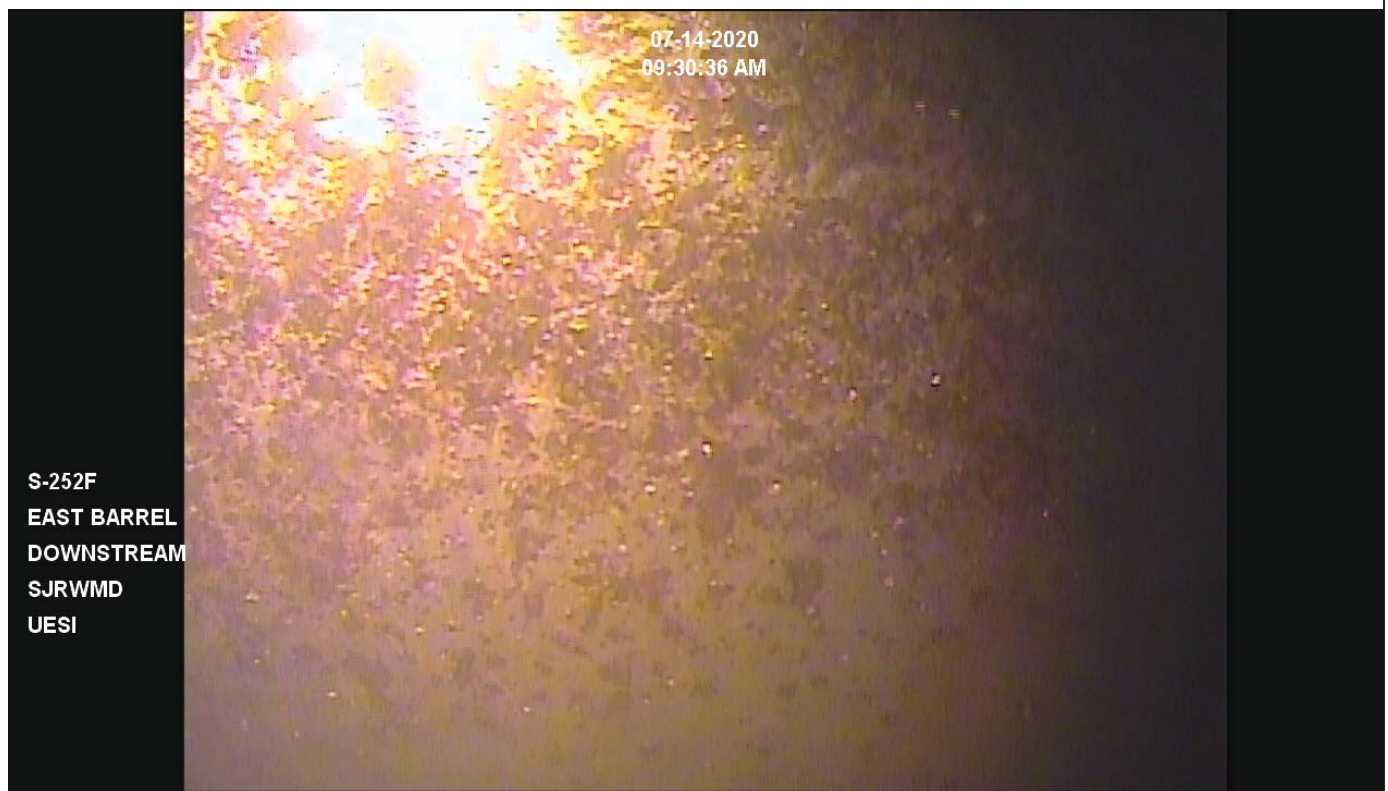


Item No.: US151/DS151 Gates	Rating: C-2	Photo Description: Pitting corrosion on downstream face of gate
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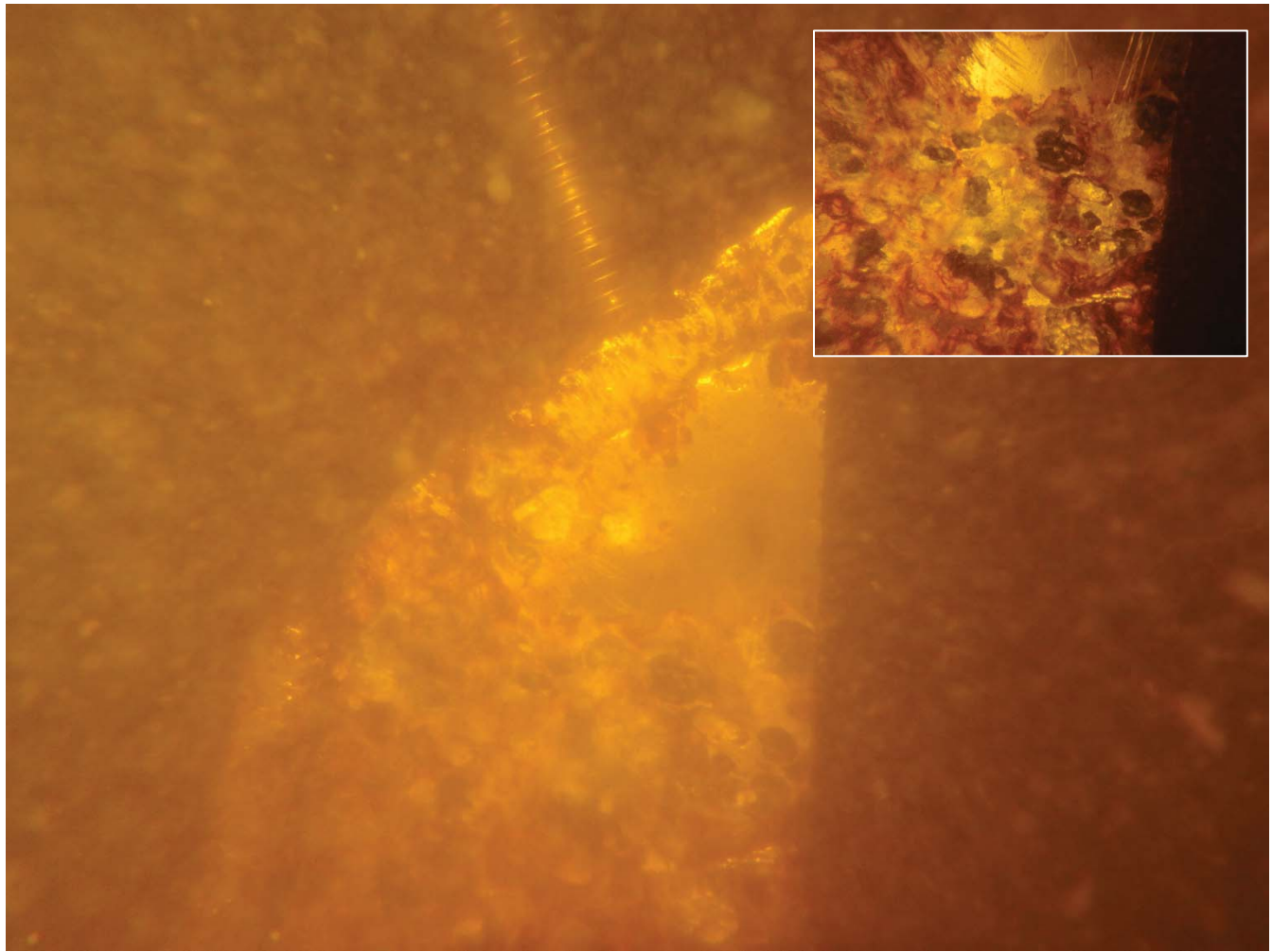
Deficiency: The two gates were in a 75% open position with approximately 12" of the gates in the water. This lower portion has pitting corrosion. The pitting depth on the downstream side has up to 1/16" and has a coverage of 20 to 30%. The lower 12" of the upstream faces of the gates have minor corrosion - not as deep pitting as on the downstream faces.

Probable Cause: The pitting is due to chemical attack from the water.

Recommendation: Monitor the gates for advanced pitting.



Item No.: US152 Gate Guides and Gate Control	Rating: C-2	Photo Description: Corroded aluminum bracket
Deficiency: The aluminum brackets typically have moderate pitting corrosion (the threaded rods are stainless steel). The gate guides have minor pitting corrosion covering 15% of the area.		
Probable Cause: The corrosion is due to chemical attack from the water.		
Recommendation: Monitor the aluminum brackets and guides for advanced corrosion.		



Item No.: US153/DS153 Gate Seals & Mating Surfaces	Rating: C-2	Photo Description: Gap between seal and the gate
Deficiency: The west gate has gaps at the seal from 1/2" to 1". The east gate has gaps at the seal up to 1/2".		
Probable Cause: Unknown if the gaps between the gate and the seal was present prior to liner install.		
Recommendation: Monitor the gates for proper sealing when lowered in position. The gate position may need to be adjusted, or a new wider seal may need to be installed.		



Item No.: DS58 Debris	Rating: C-2	Photo Description: Threaded rod debris
Deficiency: The area between the two barrels has threaded rod debris		
Probable Cause: The debris was left over from construction or relining.		
Recommendation: Monitor the debris for obstruction.		

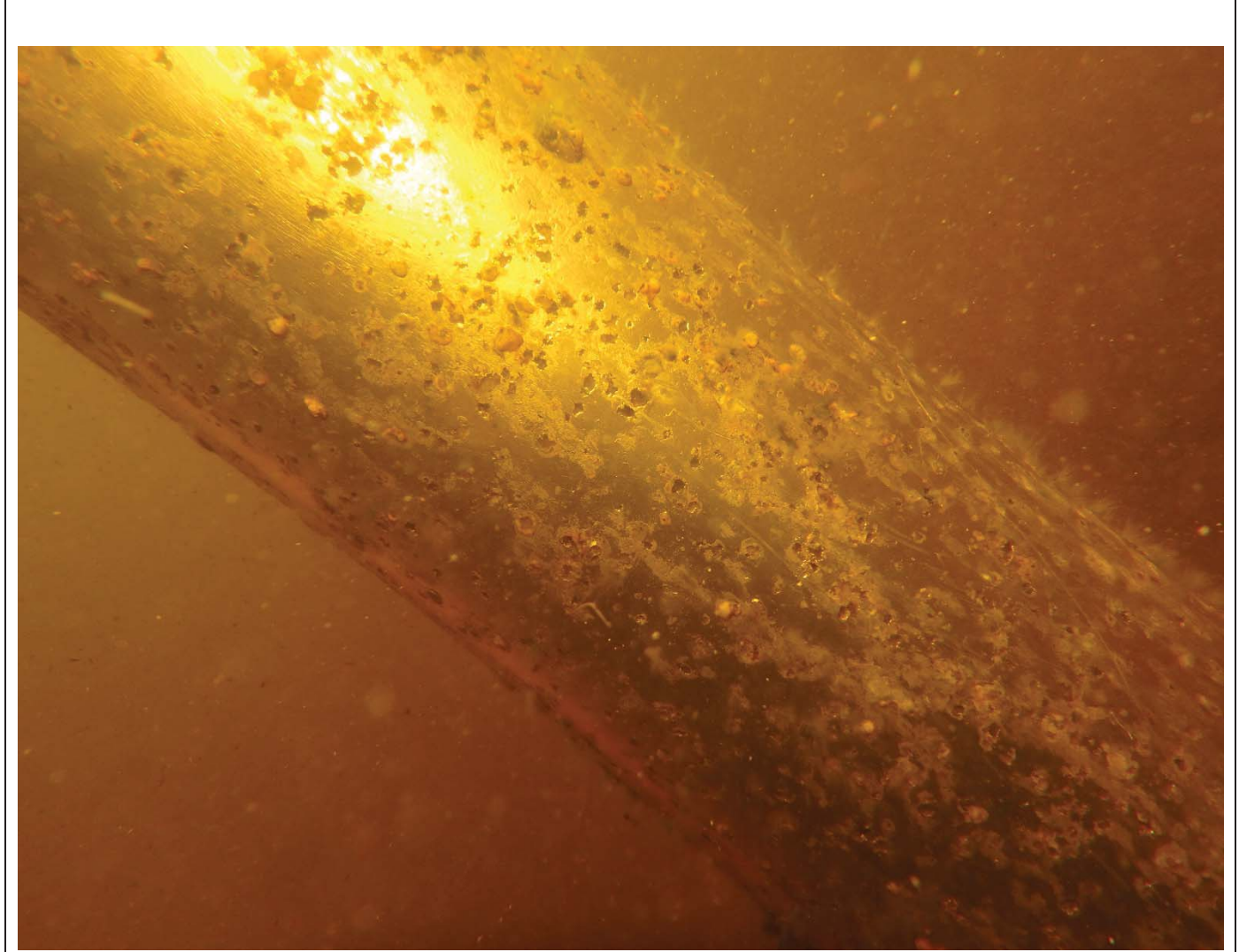


Item No.: DS59 Stilling Wells	Rating: C-2	Photo Description: Pitting corrosion on pier pipe piles
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Deficiency: (1) The grounding rod for the electrical system on the stilling well pier was loose in the ground. (2) The posts for the stilling well pier have minor corrosion with pitting up to 1/64" deep.

Probable Cause: The ground rod length was from construction. The corrosion is due to chemical attack from the water.

Recommendation: Monitor the electrical system and reinstall a longer ground rod if necessary. Monitor the stilling well pier piles for advanced corrosion.



Item No.: DS115 Culverts	Rating: C-2	Photo Description: Loose sealant at reducer in east barrel
Deficiency: The east barrel interface between the HDPE liner and the aluminum reducer has loose sealant from the 3:00 to the 5:00 position. (2) The west barrel at the interface between the HDPE liner and the aluminum reducer has a 1/4" gap with no ramneck sealant, but does have joint sheet sealing material along the exterior of the barrel. No soil intrusion noted.		
Probable Cause: Ramneck sealant may either have fallen out or was not installed during relining.		
Recommendation: Monitor the barrels for soil intrusion in the future.		



APPENDIX

CHECKLISTS

Structure Name/No.: S-252F

UPSTREAM EROSION CONTROL

Finding #	Inspection Item	Rating	Comments	Recommended action	Probable cause
US1	Slope/Banks of Channel	1	No deficiencies observed		
US2	Rip Rap	1	No deficiencies observed		
US3	Exposed erosion-Control Fabric	1	No deficiencies observed		
US4	Evidence of stone displacement (bedding stone)	1	No deficiencies observed		
US5	Channel Stabilization and erosion control	1	No deficiencies observed		

UPSTREAM GENERAL

Finding #	Inspection Item	Rating	Comments	Recommended action	Probable cause
US50	Structural - General Concrete Condition	NA	Item not present		
US51	Structural - General Metal Condition	4	Refer to US152		
US52	Structural - General Timber Condition	NA	Item not present		
US53	Construction Joints (Bolts, Welds)	NA	Item not present		
US54	Channels for Stoplogs or Flashboards	NA	Item not present		
US55	Settlement	1	No deficiencies observed		
US56	Shoaling/Scour	1	No deficiencies observed		
US57	Fouling/Marine Growth	1	No deficiencies observed		
US58	Debris	NA	Condition not present		
US59	Stilling Wells	NA	Item not present		
US60	Underwater Controls/Instruments	3	The large diameter PVC pipe on the pier has no slots on the tube, and has a cap on the bottom (unsure if this is a stilling well downpipe). The tube has a broken strap [11:38].	Replace the broken strap for the large diameter PVC pipe.	The strap was either too small or had failed hardware.
US61	Fenders	NA	Item not present		

UPSTREAM STRUCTURE

Finding #	Inspection Item	Rating	Comments	Recommended action	Probable cause
US100	Wingwalls	NA	Item not present		
US101	Buttresses (support arms for wall)	NA	Item not present		
US102	Abutments	NA	Item not present		
US103	Retention Walls	NA	Item not present		
US104	Headwall	NA	Item not present		
US105	Expansion/Construction Joints	NA	Item not present		
US106	Sheetpiles and Bulkheads	NA	Item not present		
US107	Wales/Tiebacks	NA	Item not present		
US108	Intake Bays	NA	Item not present		
US109	Piers	NA	Item not present		
US110	Foundation	NA	Item not present		
US111	Weir/Weir crest	NA	Item not present		

US112	Baffles	NA	Item not present			
US113	Underwater Apron Slabs	NA	Item not present			
US114	Structural Support, Bracing or Frames	3	The bolts connecting the battered piles and the cross bracing to the piles have moderate corrosion with up to 30% section loss [12:07].	Replace the bolts on the timber piles with stainless steel.	The corrosion is due to chemical attack from the water and possible galvanic corrosion from contact of dissimilar metals.	
US115	Culverts	3	The barrels have two clamps behind the gates connecting the new liner section to the existing CMP. One is larger and connects the CMP to the larger end of the reducer. The other clamp is smaller and connects the smaller end of the reducer to the HDPE. The larger clamp nearer the gate is made of two halves that are clamped at the 3:00 and 9:00 positions. The smaller clamp has only one set of bolts on the west side of the west barrel and the east side of the east barrel. (1) The larger clamp on the west barrel has three of four bolts for the clamp loose on each side of the barrel [11:16]. (2) The second (smaller) clamp on the west barrel has one missing bolt and one loose bolt (out of four) and the clamp has slight movement [11:24]. (3) The larger clamp on the east barrel is at the 12:00 position and has one of four bolts for the clamp loose on the east side of the barrel [11:16].	Tighten all of the clamp bolts for both barrels.	The clamps may not have been tightened properly during the relining.	
US116	Risers	NA	Item not present			

UPSTREAM GATES

Finding #	Inspection Item	Rating	Comments	Recommended action	Probable cause
US151	Structure Gate(s)	2	The lower 12" of the upstream faces of the gates have minor corrosion - not as deep pitting as on the downstream faces [10:59, 11:33]. The gate guides are secured to the timber piles by threaded rods. Aluminum brackets are welded to the gates guides and bolted to the piles. Threaded rods extend between the two brackets. (1) C-4: The aluminum bracket bolted to the east pile is broken [11:25]. (2) C-3: The bolts securing the aluminum brackets to the timber piles are carbon steel and have moderate corrosion with up to 20% section loss [11:08]. (3) C-2: The aluminum brackets typically have moderate pitting corrosion (the threaded rods are stainless steel) [11:03]. (4) C-2: The gate guides have minor pitting corrosion covering 15% of the area [11:02, 11:33].	Monitor the aluminum gate for advanced corrosion.	The corrosion is due to chemical attack from the water.
US152	Gate Guides and Gate Control	4		(1) Replace the broken aluminum bracket attached to the east pile. (2) Replace all of the bolts securing the aluminum brackets to the piles. (3 and 4) Monitor the aluminum brackets and guides for advanced corrosion.	The bracket may have broken from a poor weld, overtightening the threaded rods, or impact damage during relining. The corrosion is due to chemical attack from the water.

US153	Gate Seals & Mating Surface	2	The west gate has gaps at the seal from 1/2" to 1". The east gate has gaps at the seal up to 1/2" [11:35].	Monitor the gates for proper sealing when lowered in position. The gate position may need to be adjusted, or a new wider seal may need to be installed.	Unknown if the gaps between the gate and the seal was present prior to liner install.
US154	Cathodic Protection (entire structure)	NA	Item not present		
US155	Operator/Actuator Components	NA	Item above water		
US156	Emergency Closure Gates	NA	Item not present		
US306	Navigation Lock Miter Gates	NA	Item not present		

Structure Name/No.: S-252F

DOWNSTREAM EROSION CONTROL

Finding #	Inspection Item	Rating	Comments	Recommended action	Probable cause
DS1	Slope/Banks of Channel	1	No deficiencies observed		
DS2	Rip Rap	1	No deficiencies observed		
DS3	Exposed erosion-Control Fabric	1	No deficiencies observed		
DS4	Evidence of stone displacement (bedding stone)	1	No deficiencies observed		
DS5	Channel Stabilization and erosion control	1	No deficiencies observed		

DOWNSTREAM GENERAL

Finding #	Inspection Item	Rating	Comments	Recommended action	Probable cause
DS50	Structural - General Concrete Condition	NA	Item not present		
DS51	Structural - General Metal Condition	2	Refer to DS151		
DS52	Structural - General Timber Condition	NA	Item not present		
DS53	Construction Joints (Bolts, Welds)	NA	Item not present		
DS54	Channels for Stoplogs or Flashboards	NA	Item not present		
DS55	Settlement	1	No deficiencies observed		
DS56	Shoaling/Scour	3	The east barrel has a pile of riprap, sand and silt up to 12" high within 4' of the gate [09:14].	Remove the riprap, sand and silt from the east barrel near the gate.	The riprap, sand and silt was left from construction or operation.
DS57	Fouling/Marine Growth	1	No deficiencies observed		
DS58	Debris	2	The area between the two barrels has threaded rod debris [10:19].	Monitor the debris for obstruction.	The debris was left over from construction or relining.
DS59	Stilling Wells	2	(1) The grounding rod for the electrical system on the stilling well pier was loose in the ground [10:32]. (2) The posts for the stilling well pier have minor corrosion with pitting up to 1/64" deep [10:27].	Monitor the electrical system and reinstall a longer ground rod if necessary. Monitor the stilling well pier piles for advanced corrosion.	The ground rod length was from construction. The corrosion is due to chemical attack from the water.
DS60	Underwater Controls/Instruments	NA	Item not present		
DS61	Fenders	NA	Item not present		

DOWNSTREAM STRUCTURE

Finding #	Inspection Item	Rating	Comments	Recommended action	Probable cause
DS100	Wingwalls	NA	Item not present		
DS101	Buttresses (support arms for wall)	NA	Item not present		
DS102	Abutments	NA	Item not present		
DS103	Retention Walls	NA	Item not present		
DS104	Headwall	NA	Item not present		
DS105	Expansion/Construction Joints	NA	Item not present		
DS106	Sheetpiles and Bulkheads	NA	Item not present		
DS107	Wales/Tiebacks	NA	Item not present		
DS108	Intake Bays	NA	Item not present		

DS109	Piers	NA	Item not present			
DS110	Foundation	NA	Item not present			
DS111	Weir/Weir crest	NA	Item not present			
DS112	Baffles	NA	Item not present			
DS113	Underwater Apron Slabs	NA	Item not present			
DS114	Structural Support, Bracing or Frames	NA	Item not present			
DS115	Culverts	2	(1) The east barrel interface between the HDPE liner and the aluminum reducer has loose sealant from the 3:00 to the 5:00 position [09:16]. (2) The west barrel at the interface between the HDPE liner and the aluminum reducer has a 1/4" gap with no ramneck sealant, but does have joint sheet sealing material along the exterior of the barrel. No soil intrusion noted [09:50].	Monitor the barrels for soil intrusion in the future.	Ramneck sealant may either have fallen out or was not installed during relining.	

DOWNSTREAM GATES

Finding #	Inspection Item	Rating	Comments	Recommended action	Probable cause
DS151	Structure Gate(s)	2	The two gates were in a 75% open position with approximately 12" of the gate in the water. This lower portion has pitting corrosion. The pitting depth is up to 1/16" and has a coverage of 20 to 30% [09:28, 10:08].	Monitor the gates for advanced pitting.	The pitting is due to chemical attack from the water.
DS152	Gate Guides and Gate Control	NA	Item not present		
DS153	Gate Seals & Mating Surface	2	The seal for the west gate is not in contact with the gate. There is a 1/2" to 1" gap all around of the portion below water. The gate may seal properly when it is lowered into final position [10:04]. Refer to US153.	Monitor the west gate for proper sealing when lowered in position. The gate position may need to be moved or a new wider seal may need to be installed.	Unknown if the gap between the gate and the seal was present prior to liner install.
DS154	Cathodic Protection (entire structure)	NA	Item not present		
DS155	Operator/Actuator Components	NA	Item not present		
DS156	Emergency Closure Gates	NA	Item not present		
DS157	Navigation Lock Miter Gates	NA	Item not present		
DS1000	Additional Items and Comments	3	(1) C-3: The downstream staff gauge is missing the gauge board below the 24" mark [10:33]. (2) C-2: The downstream timber gauge board has minor checking [10:33].	Replace the downstream metal gauge board below the 24" mark and replace other screws as necessary. Monitor the downstream timber staff gauge board for advanced decay or damage.	The corrosion was due to chemical attack from the water.

STRUCTURE S-264
INSPECTION DATE: 4/10/2020



Double Barrel, 72" Diameter x 94' Long

Location:	USJRB North
	Levee L-74N Ext
Latitude:	28.0726 N
Longitude:	80.7526 W
Type:	Gated Culvert
No. Barrels:	Two
Inspection	
Start Date:	4/10/2020
End Date:	4/10/2020

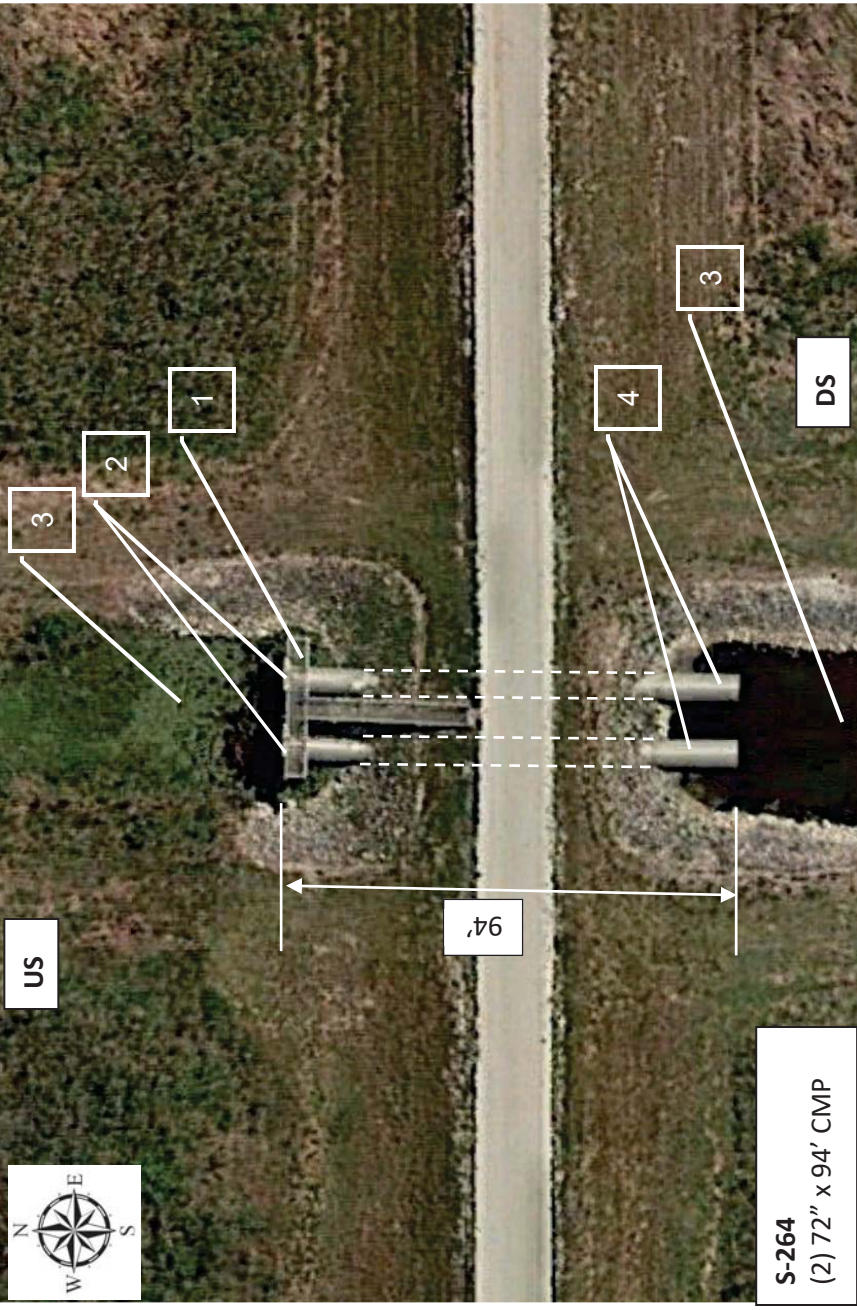
TEAM MEMBERS	
Lead Engineer	Jeffrey O'Connor, P.E.
Dive Supervisor	Jordan Klingler
Diver	Natasha Daniel
Diver – Standby	Brian Kilburn
Dive Tender	Aaron Willard
Dive Tender	Ben Harpel
Animal Control	TJ McDonagh
SJRWMD Agent	

Respectfully Submitted,
UNDERWATER ENGINEERING SERVICES, INC.
3306 Enterprise Road
Fort Pierce, FL 34982
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Jeffrey O'Connor, P.E. (FL 50914)
Vice President
Project Manager



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Aerial View of Structure



No.	Item No.	Inspection Item	Rating	Deficiency
1	US114	Structural Support	C-4	Vertical support columns have moderate corrosion, scaling and metal loss.
2	US152	Gate Guides	C-3	Both gate frame flanges have missing and loose hardware
3	DS1000	Additional Items	C-3	Both staff gauge steel support posts have moderate corrosion and metal loss.
4	DS115	Culverts	C-2	Both culverts have minor spotty corrosion. East barrel has a sediment pile.

Structure Description and Method of Underwater Inspection

Structure S-264 is a gated culvert comprised of two barrels, extending north (gated end) to south under Levee L-74N Ext. The barrels are galvanized CMP, 72 inches diameter by 94 feet long. The north end has an access pier comprised of coated steel H-piles and a metal superstructure. There are lift gates at the upstream end.

The underwater inspection was performed by a 5-person dive team on April 10, 2020. The dive team worked from a dive trailer, using surface-supplied air, and accessed the structure areas from the bank.

The scope of services included the underwater inspection of the submerged structure components. The area extended 20 feet beyond the structure edges. There were no boat barriers.

The air temperature was 80 degrees F. and the weather was mostly clear. The underwater visibility ranged from 0 to 1 foot. The water level in the barrels and outside of the barrels was less than 3 feet, so the inspector waded the structure. The water level gauges read 13.5 Ft upstream and 13.4 Ft downstream, but the gates were open.

Rating System

- C-1: No action needed
- C-2: Monitor condition at next dive inspection (5 years)
- C-3: Schedule repair/replacement (for routine items)
- C-4: Schedule repair/replacement (for safety or operational items)
- C-5: Repair/replace immediately (for structural items)
- C-6: Critical - Repair/replace immediately (for operational items)

Summary of Observations

Items Rated C-5 and Above

There were no items rated C-5 and above.

Items Rated C-4

- Item US114: Vertical support columns have moderate corrosion and scaling, from 2' above waterline to 6" below waterline with 10 to 20% metal loss and pitting up to 1/8" deep. Beyond the corroded area, there is 5% coating loss throughout.
 - Recommended Action: Clean and take ultrasonic thickness measurements of the columns to determine the remaining thickness. Analyze the capacity of the columns to support dead and live loads for the platform. Strengthen the columns, if necessary, with plates bolted to the flanges, and clean and recoat the corroded areas.

Items Rated C-3

- Item US152: East culvert gate bracket flange is missing two bolts and has eight loose bolts. The west culvert gate bracket flange is missing four bolts and has three loose bolts. The inspector tightened several of the bolts, but some were galled and unable to be tightened.

- Recommended Action: Tighten remaining loose hardware and replace missing and galled hardware.
- Item DS1000: Staff Gauges: Both steel channel staff gauge support posts have moderate corrosion from the waterline to 2' above with up to 20% section loss of metal. Beyond the splash zone, the support channel has 10% coating loss and minimal corrosion [11:20, 11:32]. The staff gauge support posts have minor movement when pushed - up to 1' of lateral movement at the top of the post [11:20, 11:32].
 - Recommended Action: Clean and re-coat the splash zone areas of both staff gauges. Consider installation of cathodic protection anode. Monitor the movement of the upstream support post and secure if necessary.

Items Rated C-2

- Item DS115: Both barrels have isolated loss of galvanizing and minor corrosion covering less than 1% of the area. The east barrel has a pile of sediment, 1' high x 3' diameter, at the invert 20' in from the downstream end.
 - Recommended Action: Monitor culvert for advanced corrosion and/or section loss. Monitor the sediment for higher build up and obstruction to flow.

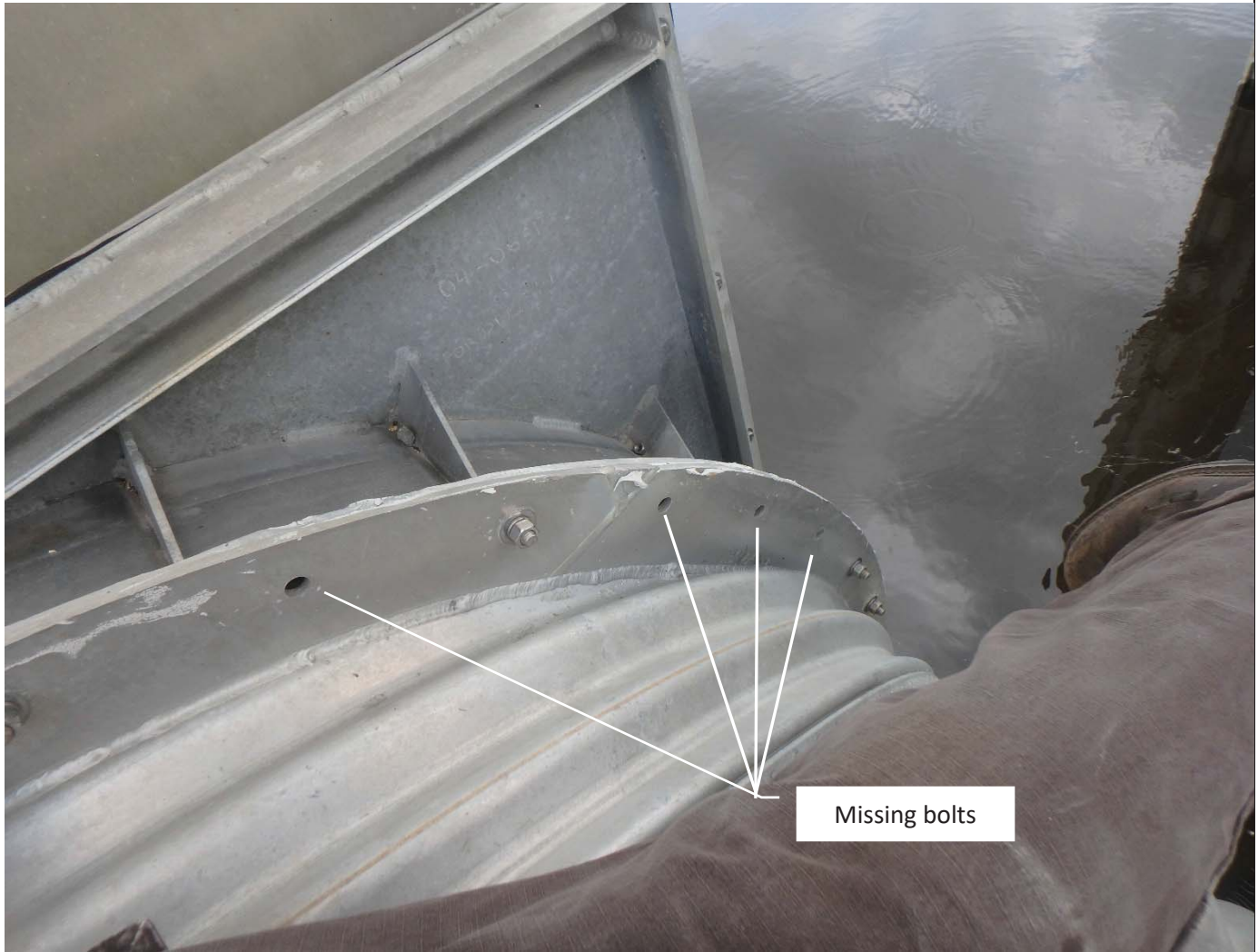
PHOTOGRAPHS

Item No.: US114 Structural Supports	Rating: C-4	Photo Description: Moderate corrosion on support columns
Deficiency: Vertical support columns have moderate corrosion and scaling, from 2' above waterline to 6" below waterline with 10 to 20% metal loss and pitting up to 1/8" deep.		
Probable Cause: The corrosion was due to failed coating and chemical attack from the water.		
Recommendation: Clean and take ultrasonic thickness measurements of the columns to determine the remaining thickness. Analyze the capacity of the columns to support dead and live loads for the platform. Strengthen the columns, if necessary, with plates bolted to the flanges, and clean and recoat the corroded areas.		

Corroded H-pile columns



Item No.: US152 Gate Guides	Rating: C-3	Photo Description: Loose and missing flange bolts
Deficiency: East culvert gate bracket flange is missing two bolts and has eight loose bolts. The west culvert gate bracket flange is missing four bolts and has three loose bolts. The inspector tightened several of the bolts, but some were galled and unable to be tightened.		
Probable Cause: The probable cause was most likely due to poor installation.		
Recommendation: Tighten remaining loose hardware and replace missing and galled hardware.		



Item No.: DS1000 Additional Items	Rating: C-3	Photo Description: Staff gauges have moderate corrosion
Deficiency: Both steel channel staff gauge support posts have moderate corrosion from the waterline to 2' above with up to 20% section loss of metal. Beyond the splash zone, the support channel has 10% coating loss and minimal corrosion.		
Probable Cause: The corrosion is due to failed coating and chemical attack from the water.		
Recommendation: Clean and re-coat the splash zone areas of both staff gauges. Consider installation of cathodic protection anode.		



APPENDIX

CHECKLISTS

Structure No. S-264

UPSTREAM EROSION CONTROL

Finding #	Inspection Item	Rating	Comments	Recommended action	Probable cause
US1	Slope/Banks of Channel	1	No deficiencies noted		
US2	Rip Rap	1	No deficiencies noted		
US3	Exposed erosion-Control Fabric	1	No deficiencies noted		
US4	Evidence of stone displacement (bedding stone)	1	No deficiencies noted		
US5	Channel Stabilization and erosion control	1	No deficiencies noted		

UPSTREAM GENERAL

Finding #	Inspection Item	Rating	Comments	Recommended action	Probable cause
US50	Structural - General Concrete Condition	NA	Item not present		
US51	Structural - General Metal Condition	4	Refer to US114		
US52	Structural - General Timber Condition	NA	Item not present		
US53	Construction Joints (Bolts, Welds)	NA	Item not present		
US54	Channels for Stoplogs or Flashboards	NA	Item not present		
US55	Settlement	1	No deficiencies noted		
US56	Shoaling/Scour	1	No deficiencies noted		
US57	Fouling/Marine Growth	1	No deficiencies noted		
US58	Debris	1	No deficiencies noted		
US59	Stilling Wells	NA	Item not present		
US60	Underwater Controls/Instruments	NA	Item not present		
US61	Fenders	NA	Item not present		

UPSTREAM STRUCTURE

Finding #	Inspection Item	Rating	Comments	Recommended action	Probable cause
US100	Wingwalls	NA	Item not present		
US101	Butresses (support arms for wall)	NA	Item not present		
US102	Abutments	NA	Item not present		
US103	Retention Walls	NA	Item not present		
US104	Headwall	NA	Item not present		
US105	Expansion/Construction Joints	NA	Item not present		
US106	Sheetpiles and Bulkheads	NA	Item not present		
US107	Wales/Tiebacks	NA	Item not present		
US108	Intake Bays	NA	Item not present		
US109	Piers	NA	Item not present		
US110	Foundation	NA	Item not present		
US111	Weir/Weir crest	NA	Item not present		
US112	Baffles	NA	Item not present		
US113	Underwater Apron Slabs	NA	Item not present		
US114	Structural Support, Bracing or Frames	4	Vertical support columns have moderate corrosion and scaling, from 2' above waterline to 6" below waterline with 10 to 20% metal loss and pitting up to 1/8" deep. Beyond the corroded area, there is 5% coating loss throughout [11:37 to 11:50].	Clean and take ultrasonic thickness measurements of the columns to determine the remaining thickness. Analyze the capacity of the columns to support dead and live loads for the platform. Strengthen the columns if necessary with plates bolted to the flanges, and clean and recoat the corroded areas.	The corrosion was due to failed coating and chemical attack from the water.
US115	Culverts	2	Gates were open on upstream side. Refer to DS115.		

Structure No. S-264

US116	Risers	NA	Item not present
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UPSTREAM GATES

Finding #	Inspection Item Structure Gate(s)	Rating	Comments	Recommended action	Probable cause
US151		1	No deficiencies noted		
US152	Gate Guides and Gate Control	3	East culvert gate bracket flange is missing two bolts and has eight loose bolts [11:43]. The west culvert gate bracket flange is missing four bolts and has three loose bolts [11:51]. The inspector tightened several of the bolts, but some were galled and unable to be tightened. Gates were in open position. Could not inspect for leaks. No deficiencies noted.	Tighten remaining loose hardware and replace missing or galled hardware. Monitor seals for leakage when water level rises.	The probable cause was most likely due to poor installation. Gates were open.
US153	Gate Seals & Mating Surface	1			
US154	Cathodic Protection (entire structure)	NA	Item not present		
US155	Operator/Actuator Components	NA	Item not present		
US156	Emergency Closure Gates	NA	Item not present		
US306	Navigation Lock Miter Gates	NA	Item not present		

Structure Name/No.: S-264

DOWNSTREAM EROSION CONTROL

Finding #	Inspection Item	Rating	Comments	Recommended action	Probable cause
DS1	Slope/Banks of Channel	1	No deficiencies noted		
DS2	Rip Rap	1	No deficiencies noted		
DS3	Exposed erosion-Control Fabric	1	No deficiencies noted		
DS4	Evidence of stone displacement (bedding stone)	1	No deficiencies noted		
DS5	Channel Stabilization and erosion control	1	No deficiencies noted		

DOWNSTREAM GENERAL

Finding #	Inspection Item	Rating	Comments	Recommended action	Probable cause
DS50	Structural - General Concrete Condition	NA	Item not present		
DS51	Structural - General Metal Condition	2	See DS115 and DS1000		
DS52	Structural - General Timber Condition	1	No deficiencies noted		
DS53	Construction Joints (Bolts, Welds)	NA	Item not present		
DS54	Channels for Stoplogs or Flashboards	NA	Item not present		
DS55	Settlement	1	No deficiencies noted		
DS56	Shoaling/Scour	1	No deficiencies noted		
DS57	Fouling/Marine Growth	1	No deficiencies noted		
DS58	Debris	NA	Item not present		
DS59	Stilling Wells	NA	Item not present		
DS60	Underwater Controls/Instruments	NA	Item not present		
DS61	Fenders	NA	Item not present		

DOWNSTREAM STRUCTURE

Finding #	Inspection Item	Rating	Comments	Recommended action	Probable cause
DS100	Wingwalls	NA	Item not present		
DS101	Buttresses (support arms for wall)	NA	Item not present		
DS102	Abutments	NA	Item not present		
DS103	Retention Walls	NA	Item not present		
DS104	Headwall	NA	Item not present		
DS105	Expansion/Construction Joints	NA	Item not present		
DS106	Sheetpiles and Bulkheads	NA	Item not present		
DS107	Wales/Tiebacks	NA	Item not present		
DS108	Intake Bays	NA	Item not present		
DS109	Piers	NA	Item not present		
DS110	Foundation	NA	Item not present		
DS111	Weir/Weir crest	NA	Item not present		
DS112	Baffles	NA	Item not present		
DS113	Underwater Apron Slabs	NA	Item not present		
DS114	Structural Support, Bracing or Frames	NA	Item not present		
DS115	Culverts	2	Both barrels have isolated loss of galvanizing and minor corrosion covering less than 1% of the area [10:16 to 10:28 and 10:43 to 11:00]. The east barrel has a pile of sediment, 1' high x 3' diameter, at the invert 20' in from the downstream end [10:18].	Monitor culvert for advanced corrosion and/or section loss. Monitor the sediment for higher build up and obstruction to flow.	The corrosion was due to chemical attack from the water. The cause of the sediment pile is unknown.

Structure Name/No.: S-264

DOWNSTREAM GATES

Finding #	Inspection Item	Rating	Comments	Recommended action	Probable cause
DS151	Structure Gate(s)	1	Gates were in open position. No deficiencies noted.		
DS152	Gate Guides and Gate Control	NA	Item not present		
DS153	Gate Seals & Mating Surface	NA	Item not present		
DS154	Cathodic Protection (entire structure)	NA	Item not present		
DS155	Operator/Actuator Components	NA	Item not present		
DS156	Emergency Closure Gates	NA	Item not present		
DS157	Navigation Lock Miter Gates	NA	Item not present		
DS1000	Additional Items and Comments	3	Staff Gauges: Both steel channel staff gauge support posts have moderate corrosion from the waterline to 2' above with up to 20% section loss of metal. Beyond the splash zone, the support channel has 10% coating loss and minimal corrosion [11:20, 11:32]. The staff gauge support posts have minor movement when pushed - up to 1' of lateral movement at the top of the post [11:20, 11:32].	Clean and re-coat the splash zone areas of both staff gauges. Consider installation of cathodic protection anode. Monitor the movement of the upstream support post and secure if necessary.	The corrosion was due to failed coating and chemical attack from the water. The movement may be due to scour or not enough embedded depth.

ATTACHMENT B — INSURANCE REQUIREMENTS

Contractor shall acquire and maintain until completion of the Work the insurance coverage listed below, which constitutes primary coverage. Contractor shall not commence the Work until the District receives and approves Certificates of Insurance documenting required coverage. Contractor's General Liability policy shall include Endorsement CG 20 10 04 13, or equivalent, naming the St. Johns River Water Management District (the "District") as Additional Insured. All required policies shall include: (1) endorsement that waives any right of subrogation (Endorsement CG 24 04 05 09, or equivalent) against the District for any policy of insurance provided under this requirement or under any state or federal worker's compensation or employer's liability act; (2) endorsement to give the District no less than 30 days' notice in the event of cancellation or material change. Certificates of Insurance must be accompanied by copies of the requested endorsements.

Any deductibles or self-insured retentions above \$100,000 must be declared to and approved by the District. Approval will not be unreasonably withheld. Contractor is responsible for any deductible or self-insured retention. Insurance must be placed with insurers having an A.M. Best rating of A-V or greater. District receipt of insurance certificates providing less than the required coverage does not waive these insurance requirements.

- (a) **Workers' Compensation Insurance.** Workers' compensation and employer's liability coverage, including maritime workers' compensation, if applicable, in not less than the minimum limits required by Florida law. If Contractor claims an exemption from workers' compensation coverage, Contractor must provide a copy of the Certificate of Exemption from the Florida Division of Workers' Compensation for all officers or members of an LLC claiming exemption who will be participating in the Work. In addition, Contractor must provide a completed District "Affidavit (Non-Construction)" for non-construction contracts.
- (b) **General Liability.** Commercial General Liability Insurance on an "Occurrence Basis," with limits of liability for each occurrence of not less than \$1,000,000 for personal injury, bodily injury, and property damage, with a(n) **project** aggregate of \$2,000,000. Coverage shall include: (1) contractual liability, (2) products and completed operations, (3) independent contractors, and (4) property in the care, control, or custody of the Contractor. Extensions shall be added or exclusions deleted to provide the necessary coverage.
- (c) **Automobile Liability.** Minimum limits of \$100,000/\$300,000/\$100,000.
- (d) **Watercraft Liability.** \$1,000,000 (each occurrence) for bodily injury and property damage.

ATTACHMENT C — DISTRICT’S SUPPLEMENTAL INSTRUCTIONS (sample)

DISTRICT SUPPLEMENTAL INSTRUCTIONS #

DATE:

TO: _____

, _____

FROM: James Rider, Project Manager

CONTRACT NUMBER: 37505

CONTRACT TITLE: Underwater Structure Repairs - USJRB

The Work shall be carried out in accordance with the following supplemental instruction issued in accordance with the Contract Documents without change in the Contract Sum or Contract Time. Prior to proceeding in accordance with these instructions, indicate your acceptance of these instructions for minor adjustments to the work as consistent with the Contract Documents and return to the District’s Project Manager.

- 1. CONTRACTOR’S SUPPLEMENTAL INSTRUCTIONS:
- 2. DESCRIPTION OF WORK TO BE CHANGED:
- 3. DESCRIPTION OF SUPPLEMENTAL INSTRUCTION REQUIREMENTS: .

Contractor’s approval: (choose one of the items below):

Approved: _____ Date: _____

(It is agreed that these instructions shall not result in a change in the Total Compensation or the Completion Date.)

Approved: _____ Date: _____

(Contractor agrees to implement the Supplemental Instructions as requested but reserves the right to seek a Change Order in accordance with the requirements of the Agreement.)

Approved: _____ Date: _____
James Rider, District Project Manager

Acknowledged: _____ Date: _____
Amy Lucey, District Senior Procurement Specialist

c: Contract file
Financial Services