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EXHIBIT A

PART 1

CONSULTANT BRIDGE INSPECTION PROGRAM

I. PROJECT OBJECTIVE

Bridges located within Florida Department of Transportation (the Department) District 2 are to be inspected in compliance with federal regulations (National Bridge Inspection Standards, CFR Title 23, Part 650, Subpart C); Section 335.074, Florida Statutes; Safety Inspection of Bridges; and State of Florida Department of Transportation Rules, Chapter 14-48, F.A.C., Bridge Inspection Standards.

II. GENERAL DESCRIPTION

The Consultant shall perform specified bridge inspection services, as described in this scope of work.

For the purpose of this agreement, a structure is considered to be a bridge if it is located on government right-of-way and meets the criteria established in the AASHTO Transportation Glossary and Florida Statutes.

All services to be performed by the Consultant shall conform to the following state and national publications (latest revision) covering bridge inspection standards of practice.

National Bridge Inspection Standards
Code of Federal Regulations 23 - Highways, Part 650, Subpart C.

State of Florida Statute 335.074, Safety Inspection of Bridges

Manual for Condition Evaluation of Bridges
American Association of State Highway & Transportation Officials (AASHTO).

Bridge Inspector's Training Manual 90
U.S. Department of Transportation/Federal Highway Administration.

Bridge Inspector's Manual For Moveable Bridges,
FHWA-IP-77-10 U.S. Department of Transportation/Federal Highway Administration.

Inspection of Fracture Critical Bridge Members,
FHWA-IP-86-26 U.S. Department of Transportation/Federal Highway Administration.

Culvert Inspection Manual,
FHWA-IP-86-2 U.S. Department of Transportation/Federal Highway Administration.

Evaluating Scour At Bridges
FHWA-IP-90-017 Hydraulic Engineering Circular No. HEC-18 Current Edition.

Stream Stability At Highway Structures,
FHWA-IP-90-014 Hydraulic Engineering Circular No. Hec-20 Current Edition.

Dive Manual,
State of Florida Department of Transportation.

Manual for Bridge and Other Structures Inspection and Reporting Procedures - Volume I,

State of Florida Department of Transportation.
Bridge Inventory Database, Users Handbook, Volume II,
State of Florida Department of Transportation.

Bridge Inspectors Field Guide - Structural Elements
State of Florida Department of Transportation

Manual on Uniform Traffic Control Devices,
950-044-0000-4 U.S. Department of Transportation/Federal Highway Administration.

Accident Prevention Procedures Manual,
State of Florida Department of Transportation.

Load Rating and Weight Limit Posting for State Owned Bridge Structures Volume III, State of Florida Department of Transportation.

Monitoring Follow-up Action on Critical Bridge Deficiencies,
State of Florida Department of Transportation Procedure 850-010-020-b.

III. PERSONNEL REQUIREMENTS

A qualified individual must be at the bridge site to supervise inspection activities at all times. To be qualified, an individual must be registered as a Professional Engineer in Florida and experienced in the inspection of bridges according to the National Bridge Inspection Standards or be confirmed officially by the Department as a Florida Certified Bridge Inspector and experienced in the inspection of bridges according to the National Bridge Inspection Standards.

Each final bridge inspection report shall be sealed in accordance with Florida Statutes 471.025 by the Professional Engineer who confirms the accuracy and completeness of all the report contents.

Load rating determinations and the load rating calculations shall be sealed in accordance with Florida Statutes 471.025 by the Professional Engineer who confirms the accuracy and completeness of the load ratings.
Comprehensive Inventory Data Report (CID) included in final bridge inspection reports shall be sealed in accordance with Florida Statutes 471.025 by the Professional Engineer who confirms the accuracy and completeness of all data items.

The Consultant's work shall be directed and performed by the key personnel identified in the technical proposal as presented by the Consultant. Any changes in the indicated personnel in the Consultant's proposal shall be subject to review and approval by the Department's Project Manager.

Due to the nature and scope of the required services, it may be desirable for the Consultant to subcontract portions of the work (i.e.,underwater inspections, mechanical inspections, electrical inspections). The Consultant shall be authorized to subcontract these services under the provisions of this agreement.

Subcontracting firms and the work they will perform shall be identified in the original proposal. The subcontracting firms must be approved in writing and qualified by the Department prior to initiation of any work. The percentage of work performed by the subcontractors shall not exceed fifty percent (50%). Any changes in the subcontracting firms or the work they will perform as indicated in the Consultant's proposal shall be approved by the Department.

IV. WORK ITEMS

A. Field Inspection

Field inspections must be conducted in accordance with the publications listed in Section II. The Florida Registered Professional Engineer or Florida Certified Bridge Inspector on site shall be responsible for the detection of all deficiencies and the determination and recording of the structure's condition which must include the personal inspection of all significant deficiencies. This individual is responsible for assuring the accuracy and completeness of all data and records compiled as a result of the Consultant's field activity. This individual is also responsible for insuring that bridge numbers are in place and legible on each bridge.

Every visible surface of all members of each bridge must be examined. Members that cannot be examined because of debris, vegetation, etc. should be cleaned if the effort involved is not excessive. Excessive effort is that which would require more than two hours for the inspection team to perform. The Department Project Manager should be consulted prior to any major cleaning operation. Bridge members and elements that cannot be inspected prior to report publication must be documented in the report as such, along with the reason for not inspecting.

The inspectors will remove loose rust from reinforcing steel within non-structurally significant spalled areas and paint with cold galvanizing spray. The painting will be limited to a maximum of 2 square feet per spall or 4 separate areas (totaling

less than 2 square feet per bridge). The department will provide cold galvanizing spray.

Where deficiency dimensions are documented, the actual width, length and location on the member should be recorded. In cases where dimensioning every deficiency is impractical, the standard Department Table of Deficiency Dimension Classes, must be used in lieu of undefined general terms, such as narrow, fine, etc.

The Consultant shall not permit any lead bridge inspector to perform consecutive routine inspections on the same bridge. If this occurs, the Consultant shall reinspect the bridge using another inspector at no charge to the Department. If by field observation, deficiencies are sufficiently critical to warrant immediate and substantial traffic restriction or closing of a bridge, the Department Project Manager or designated representative must be immediately verbally notified. Verbal notification must be confirmed with written notification within 24 hours. Critical deficiencies are defined in Section IV (D) of this exhibit.

Traffic control procedures must be in accordance with the FHWA/USDOT Manual on Uniform Traffic Control Devices, the Department's Roadway and Traffic Design Standards.

The consultant shall not use Unmanned Aircraft System (UAS), Unmanned Aerial Vehicle (UAV), drone, or similar system on the project for inspection without prior approval of the Project Manager. Prior to performing inspections and a minimum of 60 days prior to any inspection with an UAS or UAV, an inspection plan identifying locations and technique shall be submitted for approval to the Department Project Manager. The use of any Unmanned Aircraft System (UAS), Unmanned Aerial Vehicle (UAV), drone, or similar system to accomplish contract activities must comply with federal, state, and local laws and regulations.

B. Inspection Reports (BrM/BMS)

The Consultant must develop, publish, and distribute two complete draft bridge reports and 2 electronic reports for each bridge inspection. Each bridge report will contain all documentation specified by this agreement and will consist of three major sections: inspection reports, appendices (if applicable), and CIDR records.

Each bridge report must be submitted to the Department for review no later than 45 working days after completion of the field inspection. The Department will return records that do not conform to the specifications of this agreement or that are in error and these should be resubmitted to the Department within 15 working days. Within 60 working days after completion of each inspection, the Consultant

shall furnish the Department with the original and one copy of each bridge report.

Routine inspection reports for the following bridges only must be submitted to the Department for review within 60 days after completion of the field inspection (720022, 720076, 720107, 720249, 720343 & 720518). The Department will return records that do not conform to the specifications of this agreement or that are in error and these should be resubmitted to the Department within 15 working days. Within 75 working days after completion of each inspection, the Consultant shall furnish the Department with the original and one copy of each bridge report.

Each bridge inspection report shall be a stand-alone document and must include the inspection of any underwater members and identify any members that were not inspected.

Reports must have a closed numbering system, with the total number of pages in the report shown on each page, for example, Page 10 of 17. The Addendum that is described in Section C of this scope shall also have a closed numbering system independent of the main BrM/BMS report, for example A-2 of 10.

Deficiencies described in previous bridge inspection reports must be addressed again in the current report. Terminology not commonly understood by non-inspection personnel should be minimized, and undefined values or ratings shall not be used.

A quality bridge inspection report must provide a comprehensive description of all bridge deficiencies and state probable causes of the deficiencies and specify required corrective action.

C. Report Addendums

The BrM/BMS format limits Element notes to 2,000 characters. Element notes that require more than 2,000 characters will be placed in the Addendum. The referencing note “See addendum for Element Notes” will be placed in the Element notes of the BrM/BMS report corresponding to the appropriate element. For example, Element 12 concrete “Deck Bare”.

The BrM/BMS format limits Structure notes to 2,000 characters. Structure notes that require more than 2,000 characters will be placed in an independent Addendum. The referencing notes “See addendum for Structure Notes” will be placed in the Structure Notes.

Addendums shall be input into the Department’s Bridge Management System. The Structure Notes addendum will be saved independent in the Bridge Management System.

An editable Word version shall be provided to the Department along with submittal of the Final report submittal.

D. Recommended Corrective Action

BrM/BMS allows the inspector to recommend repair of deficiencies, under "Recommended Feasible Action". The choices in the program are brief and sometimes do not adequately describe the recommended repair deficiency. In addition to entering feasible action generated by the BrM/BMS program. The Consultant will enter a more descriptive version of what is recommended for repair under deficiencies in the element notes. Recommendations which exceed the 2,000 character limit of the element notes shall be placed in the addendum with the heading of the name of the element category to which it refers. Also, the bridge inspection cover sheet shall have the statement "This report identifies deficiencies which requires prompt corrective action", marked "Yes". The following items are considered critical deficiencies:

- Cracks or fatigue related deficiencies in fracture critical structural members.

- Scour or hydraulic deficiencies that require corrective action to protect the structural integrity of the bridge and have a numerical condition rating of three or less for BID Items G3.00 (60) Substructure, G5.00 (61) - Channel and Channel Protection.

- *Structural deficiencies that have a numerical condition rating of three or less for BID Items G2.02 (59) - Superstructure, or G3.00 (60) - Substructure.

- *Deficiencies that require immediate attention and are deemed critical by the registered professional engineer that signs the bridge inspection report.

All deficiencies will require a priority number 1 through 3. A number 4 priority will be used for all items noted under Contract Forces. However, during the review process by the Department it may be recommended that those priority numbers be changed.

- PRIORITY 1 - Immediate repair is needed, a potential hazard exists which may affect the safety of the traveling public. The problem could become an emergency situation before the next inspection.

- PRIORITY 2 - Periodic maintenance is needed to protect the

investment and maintain the desirable level of service. (Six months)

- PRIORITY 3 - Work is needed, but not urgent. Routine Maintenance (One year)

- PRIORITY 4 - Contract Forces Only.

All work order recommendations shall be assigned sequential work order numbers per element number.

All work orders shall have the FARC Recommendation BMS field updated to either Approved or Not Approved based on the FARC Meeting minutes.

E. Field Preparation

A Field Preparation form shall be completed for each structure on this contract. The completed form shall be submitted for review and upon approval, uploaded to the Department's EDMS.

Preparation requirements for the field phase on an inspection vary greatly from bridge to bridge. By documenting unique field preparation requirements needless re-inspection can be reduced.

Major areas of preparation should be documented for each bridge in this section. Those areas may include tools and equipment, services, scheduling, site conditions, underwater inspection requirements, and man-hours required for travel and for the inspection. This form will be provided by the Department. It is required as part of the services performed, but is not included as part of the report.

F. Fracture Critical Data

A written fracture critical inspection procedure for each fracture critical bridge listed in this Exhibit will be furnished to the consultant. The Consultant will perform an inspection and provide an updated checklist for each fracture critical inspection. The Consultant will review all of the written procedures, the bridge plans, and any other pertinent data for each fracture critical structure to determine the adequacy and completeness of the procedure for conformance with this scope and the FHWA manual entitled Inspection of Fracture Critical Bridge Members. Any changes or additions needed, as determined by the Florida Professional Engineer reviewing the procedure will be submitted to the Department for approval. Each fracture critical procedure shall be sealed by the confirming engineer in accordance to the Florida Statutes 471.025.

A fracture critical member is a tension member or component whose failure will produce a sudden collapse of the structure. Bridges which contain fracture critical members shall be specifically documented in the inspection report. The Fracture Critical Fatigue Sensitive Checklist will be used for the purpose of documenting what members are fracture critical and that the fracture critical procedures were followed during the inspection of those members. The check off block on the cover sheet shall be marked “Yes”, for “This bridge contains fracture critical components”.

This section of the inspection report will contain only a description of the fracture critical members. The description may include photographs, sketches, reproductions of portions of plan sheets, and narrative descriptions.

Fracture critical bridge inspection begins before the team arrives at the bridge. The team should study the file carefully in the office. It is important for each inspector to understand which members are fracture critical and where the fracture critical zones are located. A qualified structural engineer should identify fracture critical members. The documentation should include critical locations and critical details. Special concerns such as previous damage and repairs should be noted if these areas warrant special attention. Fatigue-prone details should also be identified. In addition to normal access equipment, the team may need special tools such as magnifying glasses, spotlights, or dye-penetrate testing kits. A hands-on inspection must be performed on all of the fracture critical members. It is the team leader’s responsibility to ensure that there are no omissions in inspection of fracture critical members. All details identified as prone to cracking must be checked closely. The inspector’s eye should be within 24 inches of the surfaces. The member is viewed from all sides and angles.

The inspector should use additional light and magnification to evaluate the member if necessary.

The inspection should begin with a general evaluation of the structure and fracture critical member. It is important to look for things such as misalignment of spans, either horizontally or vertically. Unusual movement or noise might also indicate serious problems. During the overall evaluation, inspectors should also look for distortions or damage created by traffic, flooding, and so on. After the overall evaluation, each bridge member and each detail should be checked closely. The inspector should focus on tension zones of fracture critical members and fracture critical connections. Details that create stress concentration should receive special attention. Examples of details that should be checked closely are:

- Intermittent welds between the web and tension flange.

- Areas of sudden changes or cross section near the ends of cover plates.
- Locations of stress risers such as nicks, scars, flaws, and holes that have plug welds, irregular weld profiles, and areas where the base metal has been undercut.
- Locations where stiff bracing members of horizontal connection plates are attached to thin webs and girder flanges.
- The web adjacent to a floor beam connection plate.
- Gusset plates, improperly coped members re-entering corners, and the gap between web stiffeners and flanges.
- Longitudinal and vertical stiffener intersections.
- Longitudinal stiffeners that have been connected together with butt welds.
- Location of welds at gusset-transverse-web intersections.
- Flanges that pass through a web, such as girder flange passing through a box girder pier cap.
- Box-beam-to-column intersection
- Eye bars

Discontinuities resulting from in-service problems should also be scrutinized. Examples of these are corrosion, flaws, and welded repairs. Areas where corrosion is likely to create problems are as follows:

- Under deck joints
- Areas around scuppers and drain pipes
- Under open steel grates
- On flat surfaces where debris accumulates
- On exposed surfaces of fascia members
- On steel in contact with concrete
- At overlapping steel planes

- At corners of steel angles and channels

Other special details that should be given attention during the fracture critical member inspection are:

- Shear connections in the negative moment region
- Pin and Hanger Assemblies
- Tack welds on bolted or riveted connections
- Unfilled holes or holes filled with weld material
- Field welds in tension zones
- Suspicious attachments making tension zones, such as utility attachments

It is important that the inspection of fracture critical bridge members be documented thoroughly and accurately. This must include a narrative description of all fracture critical members, whether there are serious problems or not. Photographs and sketches should be included. In cases where there are many details and findings, table and charts are also necessary. The data should be organized for efficiency in interpreting the report. The report should provide information on why problems occurred. Repairs are not likely to be effective unless they begin with the cause of the problem. The report should also include conclusions and a summary of the findings.

Along with communicating the existing condition, the inspection report should provide an ongoing record of the condition of the bridge and verification of the thoroughness of the inspection activities. Occasionally there will be serious flaws that cannot be seen by the inspector. If a fracture occurs, the report can be used to verify that a proper inspection was made.

It is important that the inspector communicate the findings in a timely manner. Flaws on fracture critical members should be immediately evaluated by an engineer. One example such as a visible crack in a tension flange of a two-girder bridge should be reported immediately. The inspector should go to a phone and call the supervisor. The Consultant shall have a procedure for immediate notification of the Department Project Manager in such a situation. Other, less serious, flaws may be reported when the inspector returns to the office. If there is a question about the significance of a finding, an engineer should be contacted as soon as possible. It is better for the inspector to err on the side of safety.

When problems are identified, it is a good idea to go back and look at similar details throughout the bridges. Often inspectors have found cracks at other locations that had already been inspected after finding the first. This demonstrates that it helps to know exactly where to look and what to look for on the other details. After a flaw or crack has been identified, it may be helpful to do additional evaluation with nondestructive testing such as dye penetrate, magnetic particles, or ultrasonic or radiographic procedure.

The Department will be consulted prior to beginning non-routine NDT (non-destructive testing).

G. Gusset Plate Inspection Data

A Gusset Plate Inspection Policy is written for each bridge with gusset. The Consultant will review all of the written procedures, the bridge plans, and any other pertinent data for each structure to determine the adequacy and completeness of the report for conformance with this scope and inspection policy. The Consultant will perform an inspection and provide an updated condition narrative or sketch as required by the Policy

H. Segmental-Post Tension Inspection Data

A Segmental-Post Tension Inspection Policy is written for each segmental bridge with post tensioning. The Consultant will review all the written procedures, the bridge plans, and any other pertinent data for each structure to determine the adequacy and completeness of the report for conformance with the Engineering and Operations Memorandum Number 21-01, this scope and inspection policy. The Consultant will perform an inspection and provide an updated condition narrative or sketch as required by the Policy.

I. Scour Susceptible Data

Scour is defined as the removal and transportation of material from the bed and banks of rivers and streams as a result of the erosive action of running water. Waterways should be inspected in order to determine whether any condition exists that could cause damage to the bridge or to the area surrounding the bridge.

This section of the inspection report will contain only the scour evaluation. It is important that the inspection be documented thoroughly and accurately. This should include a narrative description of all waterway conditions, whether there are serious problems or not. Photographs, sketches, tables, graphs, soundings, fathometer charts, reproduction sheets, and profiles may be included. The data should be organized for efficiency in interpreting the report. The report should also include conclusions and a summary of the findings including

information on why problems occurred. Any deficiencies found should be recommended for corrective action.

In addition to inspecting the channel, a record should be made of any changes that have taken place in the channel, attributable either to natural or artificial causes. Ground line or channel bottom measurements should be taken along both sides of the bridge. Measurements should be taken at an identifiable location such as from the top of the handrail at measured intervals and shall be included in each report in a table showing the previous inspection measurement with a column identifying the difference.

Existing bank, shore, and bridge protection devices should be checked to observe if they are sound and functioning properly.

Inspect the waterway to ensure it is not obstructed but that it affords free flow of water. Watch for sand, debris, and gravel bars deposited in the channel which may direct stream flow in such a manner as to cause harmful scour at piers and abutments. Investigate the footings for evidence of undercutting. Particular attention should be given to foundations on spread footings where scour or erosion can be much more critical than a foundation of piles. Any suspected movement or settlement should be checked with an engineer's level and compared with previous records.

When significant changes have occurred, an investigation must be made into the probable or potential effects on the bridge. Events which tends to produce local scour, channel degradation, or bank erosion are of primary importance. Stream bed degradation and scour seriously endanger bridges whose foundations are located in erodible river bed deposits and where the foundation does not extend to a depth below that of anticipated scour.

J. Load Rating Analysis

Inventory and operating load ratings for HS-20 or HL 93 design vehicle and operating load ratings for the Florida legal vehicles must be determined for every bridge as specified in the AASHTO Manual for Bridge Evaluation and the Department's Bridge Load Rating Manual. Scope states to use commercial software. Load ratings should be based on the superstructure. The substructure will not be routinely load rated unless it displays damage, deterioration or other conditions that may significantly affect its load carrying capacity and merits an analysis.

Reinforced concrete bridge decks on redundant multi-girder bridges will not normally be load rated unless damage, deterioration or other reasons merit this analysis.

The inventory and operating ratings must be used to code their respective CID items and must be based on AASHTO HS-20 or HL93 trucks. The standard Department maximum legal load cases and rating summary forms must be used for determining and documenting legal vehicle operating ratings for the evaluation of traffic load restrictions.

When plans are not available for concrete bridges that do not display significant deficiencies, an area of reinforcing steel and a load rating based on the AASHTO design specification of the era in which the bridge was constructed should be assumed.

Load ratings have previously been established for all bridges in the contract. The Consultant will be provided with a copy of the load rating summary sheet for each bridge which contains the following: results of the load ratings, and indication of which bridge elements were rated, which member controls the rating, and if any deficiencies were considered in the rating. Upon, completion of the bridge inspection, the summary sheet will be reviewed by the Consultant. If, in the opinion of the Consultant, there is reason to question any rating, the Department Project Manager will be notified in writing.

I. Inspection Schedule Guidelines

Proposed lane closure plans and dates shall be submitted to the Department a minimum of **30 days prior** to desired date for review and approval. Consideration of downtown activities shall be taken when scheduling inspections. Construction activities shall be confirmed and coordination meeting scheduled for any structure with ongoing construction during the time of any inspections.

Lane closure restrictions:

- 720022 US-1 over St. Johns River
  - Single lane closures are allowed one side at a time only. No single lane closures allowed
    - From 6:00 am to 9:00 am & from 4:00 pm to 6:00 pm Monday, Tuesday, and Thursday
    - From 6:00 am to 9:00 am & from 4:00 pm to 9:00 Wednesday, and Friday
    - From 6:00 am to 9:00 pm on Sunday
  - No directional bridge closures allowed
    - 6:00 am to 6:00 pm Monday, Tuesday, and Thursday
    - 6:00 am to 9:00 pm Wednesday, Friday, and Sunday.
- 720076 lane closures are limited to weekend single lane closures.
- 720107 lane closure are limited to weekend single lane closures.
- 720163 lane closure are limited to weekend single lane closures.
- 720518 lane closures are limited to single lane closures between 9:00 am and 3:00 pm.

- o Overland interchange inspection restrictions will be determined on an as needed basis.

K. Comprehensive Inventory Data (CID)

The Department must maintain, for every public bridge in Florida, a computer file referred to as the CID file, which contains data items pertaining to a bridge's identity, condition, and description. The Consultant shall be responsible for coding and updating all CID computer data. It is of utmost importance that CID coding data be accurate and complete.

When records are added to the computer file a report is generated for each bridge and is referred to as a CID sheet. The CID sheet must be verified by the Consultant for accuracy due to the possibility of computer processing errors.

Each bridge report must contain a CID sheet sealed in accordance with the Florida Statue 471.025 by the Professional Engineer who confirms its accuracy and completeness. The CID sheet must follow the bridge inspection report and load rating in the final bound bridge report and is the only allowed legal sized paper in the bridge report.

L. ELECTRONIC DOCUMENT MANAGEMENT SYSTEM (EDMS)

The Consultant must maintain an active VPN connection, which will be used to upload electronic documents into the Department's Electronic Document Management System (EDMS).

The Consultant shall provide personnel proficient in the use of computers and scanner operation to input Bridge Inspection Documents into an Electronic Document Management System (EDMS). This will require familiarity with the Structures Management Documents guidelines for EDMS posted on the Infonet. The Consultant shall scan and attribute all bridge record documents generated as part of this Agreement into the Department's Electronic Document Management System. The Consultant shall comply with the Department's District 2 Structures Management EDMS QA/QC Procedure when scanning, importing and reviewing scanned images.

The Consultant shall provide and have available the hardware and software necessary to import all documents into the Electronic Document Management System (EDMS).

At the request of the Consultant, the Department shall provide instruction on the use of the attribution program and scanning technique.

M. Emergency inspection response

The Consultant, at the request of the department, shall perform an emergency

inspection on the affected bridge component (beam, pile, fender) within **2 hour's notice.**

V. QUALITY CONTROL

The Consultant shall institute quality assurance procedures which shall be provided in written form to the Department for review and approval before work begins. Quality assurance procedures are an integral part of this contract and are not a separate pay item.

A. Quality Reviews

The Consultant shall conduct quality reviews to make certain its own organization is in compliance with the requirements cited in the scope of services.

Quality reviews shall evaluate the adequacy of materials, documentation, processes, procedures, training, guidance, and staffing included in the execution of this contract.

B. Quality Records

The Consultant shall maintain adequate records of the quality assurance actions performed by its organization (including subcontractors and vendors) in providing services and products under this contract. All records shall indicate the nature and number of observations made, the number and type of deficiencies found, and the corrective actions taken. These records shall be kept at the primary office site and shall be available to the Department for audit review during the contract term. The Quality Assurance Program should have a second, peer review level. The peer review can be conducted internally by the Consultant's organization or by subcontracting the review to another consultant firm.

C. Quality Assurance Plan

The Consultant shall include a quality assurance plan in the proposal. The quality assurance plan shall detail the procedures, evaluation criteria, and instructions to its organization to assure conformance with the contract. The Consultant will be eligible for payment upon receipt and approval of the quality assurance plan prior to beginning work. Significant changes to work requirements may require the Consultant to revise its quality assurance plan to keep it current with work requirements. The plan shall include, but not be limited to the following areas:

- Organization - A description of the Consultant's quality control organization and its functional relationship to the part of the organization

performing the work under the contract. The authority, autonomy and responsibilities of the quality assurance organization shall be detailed as well as the names and qualifications of personnel in the quality control organization.

- Quality Reviews - The Consultant's quality assurance methods used to monitor and assure compliance of its organization with the contract requirements for services and products shall be detailed.

- Quality Records - The types of records that will be generated and maintained by the Consultant during the execution of its quality assurance program shall be outlined.

- Quality of Subcontractors and Vendors – The methods use by the consultant to control the quality of its subcontractors and vendors shall be detailed.

- Quality Assurance Certification - An officer of the Consultant firm will be required to sign and seal a certification that will accompany each submittal stating that the bridge inspection reports, load ratings, etc., have been prepared and checked in accordance with the Department's specifications for this contract.

The Department may hold short (1/2 day) training sessions for all bridge inspectors biannually informing them of changes that have been made in inspection and/or reporting procedures. The Consultant's inspectors are required to attend and will be notified of the date, time and place by the Department's Project Manager.

VI. MATERIAL TO BE FURNISHED BY THE DEPARTMENT –at the request of the Consultant.

A. General

- State of Florida Department of Transportation General Highway Bridge Map, for each county

- State of Florida Department of Transportation Urban Area Functional Classification Map, for each urban area.

- BrM/BMS Inspection Reports

- Comprehensive Inventory Database (CID)

- Bridge Plans, when available.

- Bridge Location Maps
- Engineering and Operations Memorandum Number 21-01: Inspection of Segmental Bridges.
- Fracture Critical Inspection Procedures
- Gusset Plate Inspection Policy
- Post Tension Inspection Policy

Other manuals listed in this document may be purchased from the vendors listed below:

FDOT MANUALS
Florida Department of Transportation
Map and Publication Sales
Mail Station 12
Room Number 27
605 Suwannee St.
Tallahassee, FL 32399-0450
(904) 488-9220

BARS Load Rating Manuals
C. W. Beilfuss & Associates, Inc.
P.O. Box 97288
Chicago, Il 60690
(312) 953-1645

AASHTO Publications
American Association of State Highway and Transportation Officials
444 N. Capitol Street, NW Suite 225
Washington, D.C. 20001
(202) 624-5800

FHWA Manuals
U. S. Government Printing Office
Washington D. C. 20402

VII. WORK SCHEDULE AND PROGRESS REPORTS

A. Notice to Proceed Meeting

The Department shall conduct a Notice to Proceed meeting after the Consultant has received the Notice to Proceed letter from the Department. This meeting will include but will not be limited to the following personnel:

- Department District Project Manager
- Department Professional Services Administrator
- Consultant Project Manager
- Consultant Deputy Project Manager

The Department will explain the financial and administrative details of the contract, establish any ground rules upon which the work will be conducted, transfer materials to be furnished by the Department. The Consultant will provide the Department with a written quality control procedure, a proposed work schedule, an organization chart, and a proposed cost flow graph.

B. Work Schedule

A proposed work schedule shall be submitted to the Department for approval. This schedule shall show how the Consultant anticipates the work will progress from month to month through completion of the agreement. The work schedule shall be established in a manner that will insure that bridge inspections will not be delinquent. The Department prefers that bridges be inspected in general conformance with the schedule presented in Attachment A.

A cost flow graph shall be submitted that will show anticipated cost flow by monthly increments.

An organizational chart shall be submitted to the Department for approval. The organizational chart shall include the number and names of people, team sizes, and which people are to be assigned to the various work items. The format for the work schedule and cost flow graph shall comply with Department standards.

C. Progress Reports

The Consultant shall submit monthly progress reports by the 1st working day of the month. The report shall show:

- Work completed as measured against the proposed schedule.
- Describe the work performed on each Financial Number by task.
- Include a listing of work performed and cost by bridge number (MOT, inspection, NDT, etc.).
- Accumulated project cost will also be reported and compared to the proposed project cost.

The Consultant shall meet the Department on a monthly basis as deemed necessary by the Department Project Manager.

Judgment on whether work of sufficient quantity has been accomplished will be made by the Department Project Manager by comparing the actual work accomplished against the proposed schedule.

D. Pre-Inspection Meeting

The Consultant shall schedule and conduct a pre-inspection meeting a minimum 30 days prior to performing the routine on the following (5) bridges: 720022, 720107, 720076, 720163 & 720518. The meeting will include but will not be limited to the following personnel:

- Department District Project Manager
- Consultant Project Manager
- Lead Bridge Inspector
- Lead Climbing Inspector
- Non-Destructive Testing Team (when applicable)

The Department will review previous inspection reports and discuss inspection process and recording requirements for inspection report.

VIII. COMPENSATION

The fee for these services has been negotiated in accordance with the terms detailed in Exhibit B, Method of Compensation, for a fair, competitive and reasonable cost, considering the scope and complexity of the project(s). Highlighted rows shall have independently negotiated rates. All other structures will have a negotiated rate based on length of bridge.

IX

LIST OF

STATE BRIDGES

TO BE

INSPECTED

Specified bridge inspections shall be performed on the following bridges:

214814-1-72-23 (off interstate system)

Structure	Facility Carried	Feature Intersected	Inspection Type	Date	Underwater Required
720005	SR-211	Ortega River	Mechanical/Electrical/Underwater	May 2023 May 2024 May 2025 May 2026	Y
720022	US-1	St. John's River (Main St. Bridge)	Interim moveable/mechanical/electrical	August 2023 August 2025	Y
			Routine bridge inspection	August 2022 August 2024	Y
720076	SR-115	St. Johns River (Mathews Bridge)	Routine Bridge Inspection	April 2024 April 2026	Y
720107	US-1A	St. Johns River (Hart Bridge)	Routine Bridge Inspection	June 2023 June 2025	Y
780074	SR A1A	ICWW (Bridge of Lions)	Mechanical/electrical/Underwater	February 2023 February 2025 February 2026	Y Y
			Routine bridge inspection	August 2022 August 2024	Y
780090	SR-206	ICWW (Crescent Beach)	Routine bridge inspection	October 2022	Y
			Mechanical/electrical/Underwater	October 2023 October 2024 October 2025	Y
780089	SR-312 EB	Matanzas River	Level III Underwater Interim Inspection	May 2023 Even piles May 2025 Odd piles	Y

Routine Bridge Inspection:

	Structure	Facility Carried	Feature Intersected	Quantity	Design	Underwater Required	Length
1	740087	SR-A1A WB	Amelia River	2	4	Y	3156
2	740088	SR-A1A EB	Amelia River	2	4	Y	3156

Bridge Culvert Penetration Dive Routine Inspection

	Structure	Facility Carried	Feature Intersected	Quantity	Design	Underwater Required	Length
1	380019	US-19 SB (SR-55)	Flat Branch	2	19	Y	2- 10'x3'x53' CBC
2	780118	SR-207	Madison Branch	2	19	Y	2- 7'x31"x117' CBC
3	784087	CR-2209	Trout Creek	2	19	Y	3- 12'x10'x290' CBC

214814-2-72-23 (on interstate system)

	Structure	Facility Carried	Feature Intersected	Quantity	Design	Underwater Required	Length
3	720126	I-295 NB	US-17 & CSXRR	2	2	N	284
4	720163	I-95 (SR-9)	MYRTLE AVE/I-95/I-10 RMP	2	12	N	1430
5	720164	I-95 NB (SR-9)	ADAMS ST.	2	2	N	185
6	720165	I-95 SB (SR-9)	CHURCH ST.	2	2	N	181
7	720169	I-95 NB (SR-9)	W. ASHLEY ST.	2	2	N	122
8	720170	I-95 SB (SR-9)	US-90 (SR-10) BEAVER ST.	2	2	N	316
9	720171	I-95 SB (SR-9)	UNION ST.	2	2	N	152
10	720172	I-95 NB (SR-9)	KINGS RD.	2	2	N	126
11	720173	I-95 (SR-9)	5th ST.	2	2	N	151
12	720174	I-95 (SR-9)	8th ST. (SR-114)	2	2	N	133
13	720175	I-95 (SR-9)	13th ST.	2	2	N	213
14	720176	I-95 (SR-9)	CSXRR	2	2	N	88
15	720177	I-95 (SR-9)	20TH ST. (US-1 & SR-15)	2	2	N	164
16	720178	I-95 (SR-9)	GOLFAIR BLVD.	2	2	N	134
17	720179	I-95 SB (SR-9)	SCLRR	2	2	N	122
18	720180	I-95 SB (SR-9)	CRESTWOOD AVE.	2	2	N	122
19	720181	I-95 SB (SR-9)	MONCRIEF CREEK	2	2	N	159
20	720182	I-95 SB (SR-9)	LEM TURNER RD.	2	2	N	196
21	720213	I-295 NB (SR-9A)	MELVIN RD.	2	2	N	133
22	720214	I-295 NB (SR-9A)	WILSON BLVD.	2	2	N	169
23	720215	I-95 SB (SR-9)	FECRR	2	2	N	214
24	720216	I-95 SB (SR-9)	US-1 (SR-5)	2	2	N	263
25	720218	I-95 SB (SR-9)	NASSAU RIVER	2	2	Y	624
26	720219	I-95 SB (SR-9)	BAYMEADOWS RD.	2	2	N	209
27	720229	I-95 SB (SR-9)	DUNN AVE. (SR-104)	2	2	N	157
28	720230	I-95 SB (SR-9)	CEDAR CREEK	2	1	Y	224
29	720231	I-95 SB (SR-9)	LITTLE CEDAR CREEK	2	1	Y	224
30	720232	I-295 SB (SR-9A)	I-95 (SR-9)	2	2	N	240
31	720234	I-95 SB (SR-9)	AIRPORT RD.	2	2	N	154

	Structure	Facility Carried	Feature Intersected	Quantity	Design	Underwater Required	Length
32	720237	I-95 SB (SR-9)	PECAN PARK RD. (SR-243)	2	2	N	138
33	720238	I-295 SB TO I-95SB	I-295 NB (SR-9A)	2	2	N	167
34	720239	I-295 SB TO I-95NB	I-295 NB (SR-9A)	2	2	N	161
35	720241	I-295 SB (SR-9A)	OLD ST. AUGUSTINE RD.	2	2	N	229
36	720242	I-295 SB (SR-9A)	SR-13	2	2	N	282
37	720243	I-295 SB (SR-9A)	SCOTT MILL RD.	2	2	N	133
38	720244	I-295 NB (SR-9A)	OLD ST. AUGUSTINE RD.	2	2	N	229
39	720245	I-295 SB (SR-9A)	US-17 (SR-15)	2	2	N	244
40	720246	I-295 SB (SR-9A)	CSXRR	2	2	N	133
41	720247	I-295 SB (SR-9A)	ORTEGA RIVER	2	1	Y	108
42	720248	I-295 SB (SR-9A)	SR-21	2	2	N	255
43	720249	I-295 SB (BUCKMAN)	ST. JOHNS RIVER	2	2	Y	16300
44	720252	I-295 SB (SR-9A)	WHEAT RD.	2	2	N	126
45	720253	I-295 SB (SR-9A)	103rd ST.	2	2	N	183
46	720256	I-295 SB (SR-9A)	I-10 (SR-8)	2	2	N	254
47	720257	I-10 WB	I-295 SB	2	2	N	262
48	720259	I-295 SB (SR-9A)	SR-228 (NORMANDY BLVD.)	2	2	N	410
49	720260	I-295 SB (SR-9A)	MEMORIAL PARK RD.	2	2	N	201
50	720261	I-295 SB (SR-9A)	MELVIN RD.	2	2	N	126
51	720263	I-295 SB (SR-9A)	WILSON BLVD.	2	2	N	169
52	720286	I-295 SB	US-17 (SR-15) & CSXRR	2	2	N	284
53	720290	SR-202 (JTB)	I-295	2	2	N	220
54	720297	I-95 NB (SR-9)	CHURCH ST.	2	2	N	86
55	720299	I-95 NB (SR-9)	US-90 (SR-10) BEAVER ST.	2	2	N	87
56	720300	I-95 NB (SR-9)	UNION ST.	2	2	N	88
57	720301	I-95 SB (SR-9)	KINGS RD.	2	2	N	67
58	720302	I-95 NB (SR-9)	SCLRR	2	2	N	122
59	720303	I-95 NB (SR-9)	CRESTWOOD AVE.	2	2	N	122
60	720304	I-95 NB (SR-9)	MONCRIEF CREEK	2	2	N	159
61	720305	I-95 NB (SR-9)	LEM TURNER RD.	2	2	N	196
62	720306	I-95 (SR-9)	EDGEWOOD AVE.	2	2	N	168

	Structure	Facility Carried	Feature Intersected	Quantity	Design	Underwater Required	Length
63	720315	I-295 NB (SR-9A)	SR-13	2	2	N	282
64	720316	I-295 NB (SR-9A)	SCOTT MILL RD.	2	2	N	133
65	720317	I-295 NB (SR-9A)	US-17 (SR-15)	2	2	N	244
66	720318	I-295 NB (SR-9A)	CSXRR	2	2	N	133
67	720319	I-295 NB (SR-9A)	ORTEGA RIVER	2	1	Y	108
68	720320	I-295 NB (SR-9A)	SR-21	2	2	N	255
69	720327	I-95 NB (SR-9)	FECRR	2	2	N	214
70	720328	I-95 NB (SR-9)	US-1 (SR-5)	2	2	N	263
71	720329	I-95 NB (SR-9)	BAYMEADOWS RD.	2	2	N	209
72	720331	I-95 (SR-9)	BOWDEN RD.	2	2	N	168
73	720332	I-95 (SR-9)	SR-109 UNIVERSITY BLVD.	2	2	N	166
74	720333	I-95 (SR-9)	SPRING GLEN RD.	2	2	N	178
75	720334	I-95 (SR-9)	EMERSON ST.	2	2	N	180
76	720335	I-95 (SR-9)	SAN DIEGO RD.	2	2	N	178
77	720336	I-95 NB (SR-9)	NASSAU RIVER	2	2	Y	624
78	720337	I-95 NB (SR-9)	DUNN AVE. (SR-104)	2	2	N	157
79	720338	I-95 NB (SR-9)	CEDAR CREEK	2	1	Y	224
80	720339	I-95 NB (SR-9)	LITTLE CEDAR CREEK	2	1	Y	224
81	720340	I-95 NB (SR-9)	AIRPORT RD.	2	2	N	154
82	720341	I-95 NB (SR-9)	PECAN PARK RD. (SR-243)	2	2	N	138
83	720342	I-295 NB (SR-9A)	I-95 (SR-9)	2	2	N	239
84	720343	I-295 NB (BUCKMAN)	ST. JOHNS RIVER	2	2	Y	16300
85	720345	I-295 NB (SR-9A)	WHEAT RD.	2	2	N	134
86	720346	I-295 NB (SR-9A)	103rd ST.	2	2	N	183
87	720347	I-295 NB (SR-9A)	I-10 (SR-8)	2	2	N	252
88	720348	I-295 NB (SR-9A)	SR-228 (NORMANDY BLVD.)	2	2	N	492
89	720349	I-295 NB (SR-9A)	MEMORIAL PARK RD.	2	2	N	201
90	720367	I-295 SB (SR-9A)	US-1 (SR-15)	2	2	N	220
91	720368	I-295 NB (SR-9A)	US-1 (SR-15)	2	2	N	220
92	720370	I-295 SB (SR-9A)	TROUT RIVER	2	2	Y	1105
93	720371	I-295 NB (SR-9A)	TROUT RIVER	2	2	Y	1105

	Structure	Facility Carried	Feature Intersected	Quantity	Design	Underwater Required	Length
94	720372	I-295 SB (SR-9A)	CSXRR	2	2	N	192
95	720373	I-295 NB (SR-9A)	CSXRR	2	2	N	192
96	720385	I-295 SB (SR-9A)	DUNN AVE.	2	2	N	276
97	720386	I-295 NB (SR-9A)	DUNN AVE. (SR-104)	2	2	N	276
100	720387	I-295 SB (SR-9A)	SR-115 LEM TURNER RD.	2	2	N	232
101	720388	I-295 NB (SR-9A)	SR-115 LEM TURNER RD.	2	2	N	232
102	720389	I-295 SB (SR-9A)	DUVAL RD.	2	2	N	238
103	720390	I-295 NB (SR-9A)	DUVAL RD.	2	2	N	238
104	720392	I-295 SB (SR-9A)	CSXRR	2	2	N	140
105	720393	I-295 NB (SR-9A)	CSXRR	2	2	N	140
106	720394	I-295 SB (SR-9A)	PICKETTVILLE RD.	2	2	N	132
107	720395	I-295 NB (SR-9A)	PICKETTVILLE RD.	2	2	N	132
108	720396	I-295 SB (SR-9A)	PRITCHARD RD.	2	2	N	165
109	720397	I-295 NB (SR-9A)	PRITCHARD RD.	2	2	N	165
110	720398	I-295 SB (SR-9A)	GS & F RR	2	2	N	198
111	720399	I-295 NB (SR-9A)	GS & F RR	2	2	N	198
112	720408	I-295 SB (SR-9A)	US-90 (SR-10) & CSXRR	2	2	N	488
113	720409	I-295 NB (SR-9A)	US-90 (SR-10) & CSXRR	2	2	N	488
114	720410	I-295 SB (SR-9A)	CSXRR	2	2	N	139
115	720411	I-295 NB (SR-9A)	CSXRR	2	2	N	139
116	720412	I-295 SB (SR-9A)	COMMONWEALTH AVE.	2	2	N	166
117	720413	I-295 NB (SR-9A)	COMMONWEALTH AVE.	2	2	N	166
118	720473	I-295 SB (SR-9A)	DUNN CREEK & CSXRR	2	2	Y	1648
119	720474	I-295 NB (SR-9A)	DUNN CREEK & CSXRR	2	2	Y	1405
120	720475	I-295 SB (SR-9A)	TERRAPIN CREEK	2	2	N	400
121	720476	I-295 (SR-9A) NB	TERRAPIN CREEK	2	2	N	401
122	720477	I-295 SB (SR-9A)	DUNN CREEK RD.	2	2	N	136
123	720478	I-295 NB (SR-9A)	DUNN CREEK RD.	2	2	N	136
124	720480	I-295 SB (SR-9A)	DAVIS RD.	2	2	N	203
125	720481	I-295 NB (SR-9A)	DAVIS RD.	2	2	N	193
126	720482	I-295 SB (SR-9A)	PULASKI RD.	2	2	N	228
127	720483	I-295 NB (SR-9A)	PULASKI RD.	2	2	N	228

	Structure	Facility Carried	Feature Intersected	Quantity	Design	Underwater Required	Length
128	720484	I-295 SB (SR-9A)	ALTA DR.	2	2	N	257
129	720485	I-295 NB (SR-9A)	ALTA DR.	2	2	N	257
130	720486	I-295 SB (SR-9A)	NEW BERLIN RD. & CSXRR	2	2	N	322
131	720487	I-295 NB (SR-9A)	NEW BERLIN RD. & CSXRR	2	2	N	318
132	720518	I-295(9A) DAME PT.	ST.JOHNS RIV.& MILL COVE	2	14	Y	10646
133	720521	I-295 SB (SR-9A)	BROOKVIEW DR.	2	2	N	251
134	720522	I-295 NB (SR-9A)	BROOKVIEW DR.	2	2	N	251
135	720525	I-295 NB	MONUMENT RD.	2	2	N	201
136	720526	I-295 SB	MONUMENT RD.	2	2	N	201
137	720527	I-295 NB (9A)	SR-113 (SOUTHSIDE CONN.)	2	2	N	340
138	720528	I-295 SB	SR-113 (SOUTHSIDE CONN.)	2	2	N	340
139	720529	I-95 SB RAMP(SR-9)	HENDRICKS/KINGS/MONTANA	2	2	N	1352
140	720533	I-295 SB (SR-9A)	MERRILL RD.	2	2	N	195
141	720534	I-295 NB (SR-9A)	MERRILL RD.	2	2	N	195
142	720536	I-295 SB (SR-9A)	NEW BERLIN RD. & CSXRR	2	2	N	335
143	720537	I-295 NB (SR-9A)	NEW BERLIN RD. & CSXRR	2	2	N	335
144	720538	I-295 SB (SR-9A)	SR-105 HECKSCHER DR.	2	2	N	210
145	720539	I-295 NB (SR-9A)	SR-105 HECKSCHER DR.	2	2	N	210
146	720542	I-295 SB (SR-9A)	THERESA DR.	2	2	N	146
147	720543	I-295 NB (SR-9A)	THERESA DR.	2	2	N	146
148	720545	I-295 NB (SR-9A)	SR-10 (ATLANTIC BLVD.)	2	2	N	210
149	720546	I-295 SB (SR-9A)	SR-10 (ATLANTIC BLVD.)	2	2	N	210
150	720552	I-95 NB RAMP(SR-9)	BAY ST. & I-95 SB RAMP	2	2	N	518
151	720553	I-95 NB (SR-9)	CITY STREETS & CSXRR	2	2	N	1459
152	720554	I-95 SB (SR-9)	CITY STREETS & CSXRR	2	2	N	1456
153	720555	I-95 SB RAMP(SR-9)	CITY STREETS & CSXRR	2	2	N	775
154	720556	I-295 NB (SR-9A)	US-90(SR-212) BEACH BLVD	2	2	N	213
155	720557	I-295 SB (SR-9A)	US-90 (SR-212) BCH BLVD	2	2	N	213
156	720558	I-295 NB (SR-9A)	SAINTS RD.	2	2	N	120
157	720559	I-295 SB (SR-9A)	SAINTS RD.	2	2	N	120
158	720560	I-295 NB (SR-9A)	ALDEN RD.	2	2	N	184
159	720561	I-295 SB (SR-9A)	ALDEN RD.	2	2	N	184

	Structure	Facility Carried	Feature Intersected	Quantity	Design	Underwater Required	Length
160	720562	I-295 NB (SR-9A)	LOST PINE DRIVE	2	2	N	117
161	720563	I-295 SB (SR-9A)	LOST PINE DRIVE	2	2	N	117
162	720564	I-295 NB (SR-9A)	ST. JOHNS BLUFF RD.	2	2	N	360
163	720565	I-295 SB (SR-9A)	ST. JOHNS BLUFF RD.	2	2	N	413
164	720603	I-295 NB (SR-9A)	BAYMEADOWS RD.	2	2	N	16
165	720604	I-295 SB (SR-9A)	BAYMEADOWS RD.	2	2	N	140
166	720605	I-295 (SR-9A)	GATE PARKWAY	2	2	N	140
167	720616	I-295 SB	SAWMILL SLOUGH	2	2	N	2072
168	720617	I-295 NB	SAWMILL SLOUGH	2	2	N	2072
169	720618	I-295 NB (SR-9A)	UNF ROAD	2	2	N	215
170	720619	I-295 SB (SR-9A)	UNF ROAD	2	2	N	215
171	720627	I-95 (SR-9)NB & SB	SAN MARCO/PALM/ST J RIV.	2	2	Y	2140
172	720628	I-95 NB ON RAMP	ST. JOHNS RIVER	2	2	Y	821
173	720629	I-95 (SR-9)	ST. JOHNS RIVER	2	2	Y	2533
174	720630	I-95 (SR-9)	RIVERSIDE AVE/ST J RIVER	2	2	N	2395
175	720631	I-95 NB OFF RAMP	RIVERSIDE AVE.	2	2	N	423
176	720632	I-95 SB ON RAMP	RIVERSIDE AVE/ST J RIVER	2	2	N	921
177	720633	I-95 SB OFF RAMP	ST. JOHNS RIVER	2	2	Y	868
178	720635	I-295/SR-9A NB	I-95 (SR-9)	2	6	N	591
179	720636	I-295/SR-9A SB	I-95 (SR-9)	2	6	N	591
180	720637	I-295 S.B.	JULINGTON CREEK	2	2	N	961
181	720638	I-295 N.B.	JULINGTON CREEK	2	2	N	764
182	720639	I-95SB to I-295 NB	I-95 & I-295	2	21	N	2010
183	720640	I-95NB TO I-295NB	I-95 & I-295	2	21	N	2570
184	720641	I-295 SB TO I-95NB	I-95/I-295/RAMPS	2	21	N	3574
185	720644	I-10 EB TO FOREST	I-95 NB & SB & I-10 EB	2	2	N	1425
186	720645	I-10WB FROM I-95NB	I-95 NB & SB (SR-9)	2	2	N	2585
187	720647	I-10EB TO I-95NB	I-95 & FOREST ST.	2	2	N	1470
188	720649	I-95 SB	RAMP FROM FOREST ST	2	2	N	422
189	720650	I-95 SB TO I-10 WB	FOREST STREET	2	2	N	1493
190	720651	I-95 SB	FOREST STREET	2	2	N	152
191	720652	I-95 NB (SR-9)	FOREST STREET	2	2	N	152

	Structure	Facility Carried	Feature Intersected	Quantity	Design	Underwater Required	Length
192	720654	I-95 NB	FOREST STREET	2	2	N	152
193	720655	I-95 NB CD	FOREST STREET	2	2	N	154
194	720656	I-95 NB OFF RAMP	ADAMS STREET	2	2	N	74
195	720657	I-95 SB (SR-9)	MCCOYS CREEK	2	2	N	368
196	720658	I-95 NB (SR-9)	MCCOYS CREEK	2	2	N	368
197	720659	I-95 NB	MCCOYS CREEK	2	2	N	366
197	720668	I-295 SB (SR-9A)	US-1 AND FECRR	2	2	N	894
199	720669	I-295 NB (9A)	US-1 AND FECRR	2	2	N	895
200	720684	I-95 (SR-9)	TROUT RIVER	2	2	Y	2380
201	720701	I-295 SB TO SR-202	SR-202 (JTB)	2	6	N	354
202	720702	I-295 SB	I-295	2	6	N	347
203	720704	SR-202 EB RAMP B2	I-295 (SR-9A)/SR-202	2	6	N	1715
204	720705	I-295 NB TO SR-202	SR-202 (JTB)	2	6	N	353
205	720706	I-295 (SR-9A) NB	I-295 (SR-9A)	2	6	N	326
206	720707	SR-202 WB TO I-295	I-295/SR-202	2	6	N	1778
207	720708	I-295 (SR-9A) NB	ORTEGA RIVER	2	2	N	560
208	720751	I-295 SB CD(SR-9A)	ORTEGA RIVER	2	2	N	280
209	720752	I-295 NB (SR-9A)	ORTEGA RIVER	2	2	N	280
210	720753	I-295 SB (SR-9A)	(SR-21) BLANDING BLVD.	2	2	N	255
211	720754	I-295 NB (SR-9A)	SR-21 (BLANDING BLVD.)	2	2	N	254
212	720761	I-95 SB Ramp I-295E	I-95 / I-295	2	21	N	2256
213	720781	I-95 NB/COLLECTOR	HENDRICKS/KING/MONTANA	2	2	N	1384
214	720782	I-95 SB	HEND/KINGS/MONTANA AVE.	2	2	N	1384
215	720783	I-95 NB	ATLANTIC BLVD	2	2	N	150
216	720784	I-95 SB	ATLANTIC BLVD	2	2	N	150
217	720785	I-95 NB (SR-9)	US-1 (SR-5)	2	2	N	156
218	720786	I-95 SB	RAMPS N & P	2	2	N	155
219	720787	I-95 SB RAMP/ US-1	ATLANTIC BLVD.	2	2	N	150
220	720788	I-95 NB (SR-9) COL	ATLANTIC BLVD.	2	2	N	189
221	720789	RAMP K TO ATLANTIC	I-95 Ramp to Atlantic	2	2	N	1060
222	720790	RAMP J	I-95 NB CD	2	2	N	973
223	720791	US-90 NB RAMP H	BARBARA AVE	2	2	N	441

	Structure	Facility Carried	Feature Intersected	Quantity	Design	Underwater Required	Length
224	720792	I-95 (SR-9)	US-1	2	2	N	441
225	720801	I-295 (SR-9A)	NEW BERLIN RD & CSXRR	2	2	N	444
226	720814	I-95 (SR-9)	JTB (SR-202)	2	2	N	171
227	720815	I-95 SB (SR-9)COLL	SR-202 (JTB)	2	2	N	173
228	720816	I-95 SB Ramp	I-95/SR-202 WB	2	21	N	1342
229	720824	I-10 EB	CSXRR	2	2	N	321
230	720825	I-10 WB	CSXRR	2	2	N	321
231	720826	I-10 WB Ramp	CSXRR	2	2	N	321
232	720827	I-10 EB RAMP	CSXRR	2	2	N	395
233	720828	I-10 EB	US-301 (SR-200)	2	2	N	156
234	720829	I-10 WB	US-301 (SR-200)	2	2	N	156
235	720830	I-10 EB RAMP	US-301 (SR-200)	2	2	N	156
236	720831	I-10 WB (SR-8)	US-301 (SR-200)	2	2	N	156
237	720833	I-295 SB to SR-9BSB	I-295 NB	2	2	N	59
238	720835	I-10 WB TO IRENE ST	I-10 WB RAMP FROM I-95 SB	2	2	N	558

Mechanical/electrical inspections- Inspections of the movable bridge mechanical, hydraulic and electrical components including, the submarine cable (this is the 500 series in BrM/BMS)

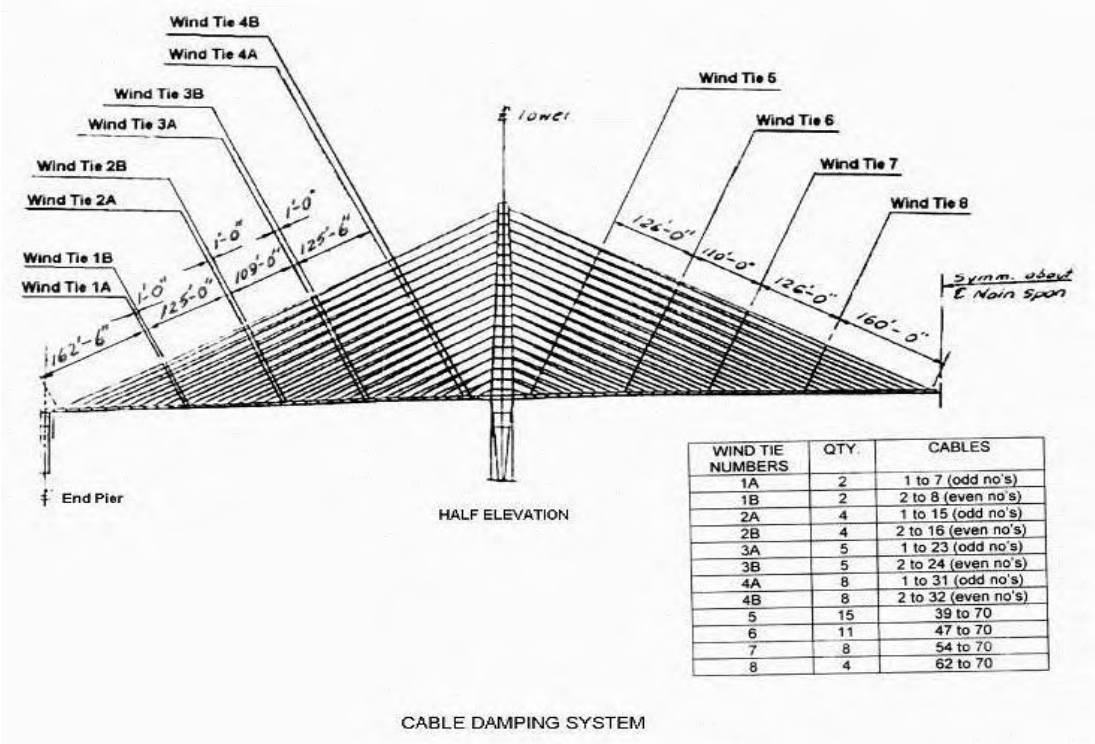
Bridge Culvert Penetration Dive Routine Inspection

	Structure	Facility Carried	Feature Intersected	Quantity	Design	Underwater Required	Length
1	270046	I-10 (SR-8)	Turkey Creek	2	19	Y	3- 8’x10’x164’ CBC
2	290075	I-10 (SR-8)	Falling Creek	2	19	Y	3 -12’x5’x187’ CBC
3	270060	I-10 (SR-8)	Cypress Branch	2	19	Y	2- 10’x3’x187.5 CBC
4	350042	I-10 (SR-8)	Cedar Creek	2	19	Y	6- 11’x4’x176.5 CBC
5	350047	I-10 (SR-8)	Piddlin Creek	2	19	Y	3- 7’x4’x177’ CBC

6	350046	I-10 (SR-8)	Piddlin Creek	2	19	Y	6- 11’x4’x170’ CBC
7	290074	I-10 (SR-8)	Falling Creek	2	19	Y	2- 12’x5’x187’ CBC

Bridge # 720518

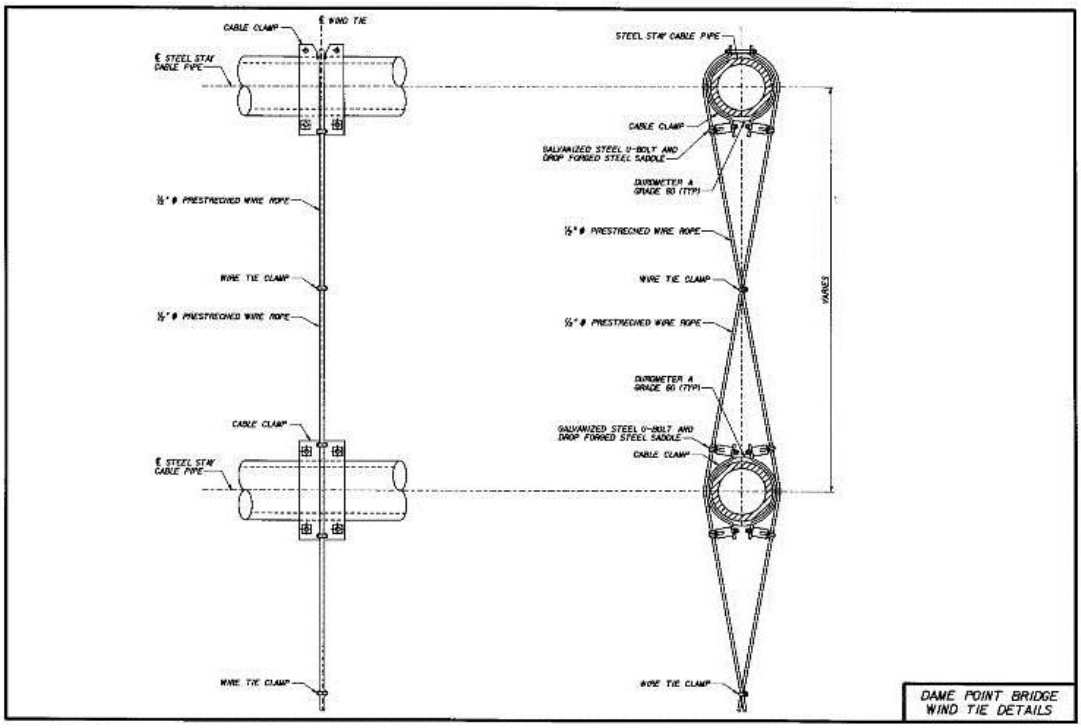
(1) The cables shall be inspected by climbing methods. The inspection process will require a minimum of 36 vertical descents be made along the vertical plane of each tower and wind tie (see drawing 1 for typical locations). The inspector shall visually examine cables and wind ties throughout descent for deficiencies. Wind ties shall be checked for movement (see drawing 2 for wind tie details). Should the tie exhibit movement, the inspector shall tighten.



WIND TIE NUMBERS	QTY.	CABLES
1A	2	1 to 7 (odd no's)
1B	2	2 to 8 (even no's)
2A	4	1 to 15 (odd no's)
2B	4	2 to 16 (even no's)
3A	5	1 to 23 (odd no's)
3B	5	2 to 24 (even no's)
4A	8	1 to 31 (odd no's)
4B	8	2 to 32 (even no's)
5	15	39 to 70
6	11	47 to 70
7	8	54 to 70
8	4	62 to 70

CABLE DAMPING SYSTEM

Drawing 1


CABLE CLAMP
℄ WIND TIE
℄ STEEL STAY CABLE PIPE
½" ø PRESTRESSED WIRE ROPE
WIRE TIE CLAMP
½" ø PRESTRESSED WIRE ROPE
CABLE CLAMP
℄ STEEL STAY CABLE PIPE
WIRE TIE CLAMP
STEEL STAY CABLE PIPE
CABLE CLAMP
GALVANIZED STEEL U-BOLT AND DROP FORGED STEEL SADDLE
DIAMETER A GRADE 60 (TYP)
½" ø PRESTRESSED WIRE ROPE
WIRE TIE CLAMP
VARIES
½" ø PRESTRESSED WIRE ROPE
DIAMETER A GRADE 60 (TYP)
GALVANIZED STEEL U-BOLT AND DROP FORGED STEEL SADDLE
CABLE CLAMP
WIRE TIE CLAMP
DAME POINT BRIDGE
WIND TIE DETAILS

Drawing 2

EXHIBIT A
PART 2

NONDESTRUCTIVE TESTING

I. PROJECT OBJECTIVE

The Florida Department of Transportation, hereinafter called the Department, desires to obtain assistance for the performance of Nondestructive Testing (NDT) of structural members on the structures identified by their numbers as outlined in these Specifications. The nondestructive testing shall be done by compressive wave ultrasonic (UT), and/or magnetic particle testing (MT). All tests shall be performed by competent personnel with results incorporated into engineering documents and recommendations provided to the Department.

II. SERVICES

The Consultant will perform nondestructive testing on the following bridges:

330009 - HAL ADAMS BRIDGE - Pins and other members as directed by the Engineer.

720022 - MAIN STREET BRIDGE - Lift span trunnion shafts and other members as directed by the Engineer.

720076 - MATHEWS BRIDGE - Pins and Hangers and other members as directed by the Engineer.

720107 - HART BRIDGE - Pins and Hangers and other members as directed by the Engineer.

III. GENERAL DESCRIPTION

A. The Consultant shall perform nondestructive testing on the components as listed above. Gaskets shall be replaced upon cover removal. Coordination with FDOT personnel shall be made in order to obtain gaskets for reinstallation after testing is complete. Generalized descriptions are as follows:

330009 - HAL ADAMS BRIDGE - Ultrasonic Testing shall be used on the pins.

720022 - MAIN STREET BRIDGE –

- **Routine Inspection-** Ultrasonic Testing shall be performed on the four main sheave shafts, four rope deflector shafts, four drive shafts, and 4 sheave trunniouns (8 filet region, 1 @ each end of

trunnion) w/5" borescope as well as wet magnetic particle inspection contained within the lifting mechanism.

- **Interim inspections**-UT on 4 main sheave shafts, 4 rope defl shafts, & 4 drive shafts within lifting mechanism (16 shafts need to be tested.
- The Consultant is required to determine if any internal discontinuities exist within the shafts. The ultrasonic testing is to be performed in place without having to remove them from service.

720076 - MATHEWS BRIDGE - Ultrasonic Testing shall be used on the pins.

720107 - HART BRIDGE - Ultrasonic Testing shall be used on the pins.

The Consultant shall furnish the Department with records and reports covering the various work inspected, sampled and tested. Such record shall be furnished at a frequency and be of type and form directed by the Department's Structures and Facilities Engineer.

IV. CONSULTANT RESPONSIBILITIES

The Consultant will submit to the Department, for approval, a detailed description of the following:

* Access to all locations to be inspected and tested (reach equipment, etc.).

* Inspection sequence on a per bridge basis; method to access components for inspection and method of replacing all components removed.

* Removing and replacing components, and parts thereof, in order to facilitate testing and inspection.

* Grinding and cleaning shaft ends and pins to facilitate coupling of the ultrasonic transducers. Consultant shall also repair the paint coating after completion of the test.

* All required Maintenance of Traffic will be furnished by the Consultant to perform testing.

V. DEPARTMENT RESPONSIBILITIES

The Department will be responsible for the following items:

- Access to as-built plans, if available.

VI. PERSONNEL REQUIREMENTS

The minimum qualifications for individuals preparing inspection plans and procedures shall be American Society for Nondestructive Testing (ASNT) certified as a Level III NDT inspector. Minimum qualifications for the field inspectors shall be (ASNT) certified as a Level II inspector.

VII. WORK ITEMS

The work items of this project consist of reviewing and verifying as-built plans of the structures listed previously. In addition, work items consist of performing an inspection plan; performing the NDT; and submitting documentation of the findings.

VIII. PROCEDURE FOR NONDESTRUCTIVE TESTING

The following procedures should be followed to complete this inspection:

- Review as-built plans to determine the exact dimensions of components to be inspected. If as-built plans do not exist, review the contract plans. If there are no plans, sketches of critical details should be developed from on-site measurements.

- Verify, on-site, all dimensions taken from the bridge plans.

- Prepare a written inspection plan denoting complete equipment calibration, inspection procedures, and written report contents.

- Submit the inspection plan along with a copy of personnel qualifications to the Department’s Project Manager for approval.

- Before proceeding with the nondestructive testing, all shaft ends and pin ends shall be ground, smoothed and cleaned to facilitate coupling of the ultrasonic transducers.

IX. DOCUMENTATION

The Consultant shall provide written documentation and supplemental drawings as required to fully support its findings, recommendations and conclusions. Each document shall be type written on 8" x 11" paper and enclosed in a bound binder with foldout drawings.

X. QUALITY CONTROL

The Consultant shall institute quality assurance procedures that shall be provided in written form to the Department for review and approval before work begins. Quality assurance procedures are an integral part of this contract and are not a separate pay item.

A. Quality Reviews

The Consultant shall conduct quality reviews to make certain its own organization is in compliance with the requirements cited in the scope of services. Quality reviews shall evaluate the adequacy of materials, documentation, processes, procedures, training, guidance, and staffing included in the execution of this contract.

B. Quality Records

The Consultant shall maintain adequate records of the quality assurance actions performed by its organization (including subcontractors and vendors) in providing services and products under this contract. All records shall indicate the nature and number of observations made, the number and type of deficiencies found, and the corrective actions taken. These records shall be kept at the primary office site and shall be available to the Department for audit review during the contract term. The Quality Assurance Program should have a second, peer review level. The peer review can be conducted internally by the consultant's organization or by subcontracting the review to another consultant firm.

C. Quality Assurance Plan

The Consultant shall include a quality assurance plan in the proposal. The quality assurance plan shall detail the procedures, evaluation criteria, and instructions to its organization to assure conformance with the contract. Unless specifically waived, no payment shall be made until the consultant's quality assurance plan is approved by the Department. Significant changes to the work requirements may require the consultant to revise its quality assurance plan to keep it current with the work requirements. The plan shall include, but not be limited to the following areas:

- Organization - A description of the Consultant's quality control organization and its functional relationship to the part of the organization performing the work under the contract. The authority, autonomy and responsibilities of the quality assurance organization shall be detailed as well as the names and qualifications of personnel in the quality control organization.

- Quality Reviews - The Consultant's quality assurance methods used to monitor and assure compliance of its organization with the contract requirements of services and products shall be detailed.

- Quality Records - The types of records that will be generated and maintained by the consultant during the execution of its quality assurance program shall be outlined.

- Quality of Subcontractors and Vendors - The methods used by the Consultant to control the quality of its subcontractors and vendors shall be detailed.

- Quality Assurance Certification - An officer of the consultant firm will be required to sign and seal a certification that will accompany each submittal stating that the bridge inspection reports, load ratings, etc., have been prepared and checked in accordance with the Department's specifications for this contract.

LIST OF

STRUCTURES

FOR

NONDESTRUCTIVE

TESTING

Structure #	Location	Date
330009	SR-51 over Suwannee River (Hal Adams)	October 2023 October 2025
720022	US-1 over St. Johns River (Main St. Bridge)	September 2022 September 2023 September 2024 September 2025
720076	SR-115 over St. Johns River (Mathews Bridge)	May 2023 May 2025
720107	SR-228 over St. Johns River (Hart Bridge)	June 2023 June 2025

EXHIBIT A

PART 3

POST STORM ASSESSMENT INSPECTIONS

I. PROJECT OBJECTIVE

Perform post storm damage assessment inspections for state owned bridges in District 2.

II. SERVICES

The consultant shall provide up to four inspection teams within 24 hours of notification from the Department to perform post storm damage assessment inspections. These inspections may include the following:

- Visually inspect around the abutments or end bent areas for washouts, signs of settlement, exposed footings, exposed piles, undermining, and other effects of flood water flow.
- Measure and record the freeboard measurement under the end spans.
- Visually site along the top of each bridge railing, checking for signs of settlement at each end bent or abutment and at each intermediate bent.
- Observe the alignment of each deck joint looking for elevation differences between adjacent decks which may indicate rotation or settlement of the substructure units.
- Inspect the waterway to ensure it is not obstructed but that it affords free flow of water. Watch for sand, debris, and gravel bars deposited in the channel which may direct stream flow in such a manner as to cause harmful scour at piers and abutments.
- Perform channel bottom soundings at each side of each bent in the water.
- Perform underwater inspections of substructure units to determine conditions due to scouring of the channel bottom. This includes noting exposed footings, footing undermining, localized scour cones, signs of settlement, etc.

These inspections are intended to be “cursory” in nature unless deficiencies dictate a more in depth inspection. The Department will dictate the level of detail using the above mentioned methods as well as which bridges to be assessed at the time of notification.

The quantities for this type of inspection have been estimated below:

Interstate

Post Storm Assessment Inspections 5

Underwater Post Storm Scour Assessment Inspection	5
Non-Interstate	
Post Storm Assessment Inspections	5
Underwater Post Storm Scour Assessment Inspection	5

III. PERSONNEL REQUIREMENTS

A qualified individual must be at the bridge site to supervise inspection activities at all times. To be qualified, an individual must be registered as a Professional Engineer in Florida and experienced in the inspection of bridges according to the National Bridge Inspection Standards or be confirmed officially by the department as a Florida Certified Bridge Inspector.

Each final bridge inspection report shall be sealed in accordance with Florida Statutes 471.025 by the Professional Engineer who confirms the accuracy and completeness of all the report contents.

IV. DOCUMENTATION

Each inspection will be documented in a “Special Scour Report” format and all underwater inspection will be documented in BRM/BMS format.

A Post Storm Inspection Report shall be submitted along with a Soundings Profile within 24 hours of inspection.

All soundings will be recorded showing the original, current and previous channel bottom measurements for the left and right side of each intermediate bent. Current soundings will be compared to the original channel bottom measurements and aggregation and degradation provided in a chart comparison type format. The soundings information will be attached to the Special Scour Inspection Report.

If by field observation, deficiencies are sufficiently critical to warrant immediate and substantial traffic restriction or closing of a bridge, the Department Project Manager or designated representative must be immediately verbally notified. Verbal notification must be confirmed with written notification within 48 hours.

Each bridge inspection report shall be sealed in accordance with Florida Statutes 471.025 by the Professional Engineer who confirms the accuracy and completeness of all the report contents.

Each bridge report must be submitted to the Department for review no later than 45 working days after completion of the field inspection.

V. COMPENSATION

The fee for these services has been negotiated in accordance with the terms detailed in Exhibit B, Method of Compensation, for a fair, competitive and reasonable cost, considering the scope and complexity of the project(s).

EXHIBIT A

PART 4

BRIDGE LOAD RATING EVALUATIONS

I. OBJECTIVE:

The scope of this project is for the CONSULTANT to provide a complete load rating analysis of the following structure types based on need as determined by the DEPARTMENT.

- Prestressed Concrete AASHTO girder or Florida I Beam, simple span with multiple span lengths.
  - Estimated need = 2
- Steel Plate or Steel Rolled Girder, simple span with multiple span lengths and possible combination of Prestressed girders.
  - Estimated Need = 2
- Steel Multi-span Continuous girder with possible combination of Prestressed girders.
  - Estimated need = 1
- T-Beam or Flat slab, simple span with multiple span lengths with possible combination of T-beams and Flat slabs.
  - Estimated Need = 2

II. SERVICES:

The CONSULTANT shall provide the following services:

1. The CONSULTANT shall provide a LUMP SUM unit price for the load rating of each bridge type.

2. The CONSULTANT shall perform the load ratings using the Load Resistance and Factor Rating (LRFR) method and in accordance with all current AASHTO and FDOT guidelines.

3. The CONSULTANT shall review and analyze all spans of the structure.

4. The CONSULTANT shall review as-built plans and bridge inspection reports for any new dead load and or structural changes when developing the load rating.

5. The CONSULTANT shall consider deficiencies within the load rating calculations based on the most recent bridge inspection reports.

6. Documentation and identification of controlling members shall be provided with the calculations to the DEPARTMENT for review.

7. The CONSULTANT shall use commercial software. Any custom programs shall be submitted to the DEPARTMENT for approval.

III. DEPARTMENT RESPONSIBILITIES:

The DEPARTMENT shall provide the following:

1. Access to all existing original and or reconstruction plans.

2. Copies of bridge inspection reports.

IV. PERSONNEL REQUIREMENTS:

1. Load rating determinations and load rating calculations shall be signed and sealed in accordance with Section 471.025, F.S. by the Professional Engineer which confirms the accuracy and completeness of the engineering service.

V. DOCUMENTATION:

1. The CONSULTANT shall provide the DEPARTMENT with a signed and sealed original and electronic copy of the summary sheet and calculations upon final approval of each bridge. The electronic files shall be in adobe format with 300 dpi resolution.

VI. COMPENSATION:

1. The fee for these services has been negotiated in accordance with the terms detailed in Exhibit B, Method of Compensation, for a fair, competitive and reasonable cost, considering the scope and complexity of the project(s).

VII. BEGINNING AND LENGTH OF SERVICES:

1. Upon notification of need, the CONSULTANT shall complete and submit a load rating analysis to the DEPARTMENT within 30 days for review and a complete final signed and sealed report within 60 days from notification.

EXHIBIT A

PART 5

BRIDGE HYDROGRAPHIC SURVEY EVALUATIONS

I. OBJECTIVE:

The scope of this project involves performing hydrographic multi-beam swath surveys on the structures identified by their numbers.

II. SERVICES:

The Consultant shall provide the following services:

1. The Consultant shall provide all equipment and labor resources necessary to research and locate the existing primary control monuments, acquire hydrographic multi-beam swath data along and around the bridge.

    a. The Consultant shall confirm and utilize as the horizontal datum the Florida State Plane Coordinate System, East Zone, North American Datum of 1983 (NAD83). ARC shall confirm and utilize as the vertical datum the North American Vertical Datum of 1988 (NAVD88). The horizontal precision of the GPS control shall conform to Federal Geographic Data Committee, Geospatial Positioning Accuracy Standards – part 4: Standards for A/E/C and Facility Management (FGDC-STD-007.4-2002), Second-Order, Class I for all control points. The vertical accuracy of the control points shall conform to FGDC-STD-007.4-2002 standards for Second-Order, Class II elevation difference accuracy standards for relative positioning techniques.

    b. Hydrographic data collected will conform to the horizontal and vertical precision requirements outline in Federal Geographic Data Committee, Geospatial Positioning Accuracy Standards – PART 4: Standards for A/E/C and Facility Management (FGDC-STD-007.4-2002). The Consultant shall follow the guidelines for collecting field data as outlined in the U.S. Army Corps of Engineers manual EM 1 110-2-1003 – Engineering and Design, HYDRAPHIC SURVEYING

        (i) Hydrographic Data Collection – Hydrographic Multibeam Swath data acquisition will occur along and around the existing bridge including all supporting foundation structures. Data will be acquired for an area encompassing the piers, pile bents, and dolphins for the full bridge length crossings

        (2) Multibeam swath data will be collected using a Reson 8124 Multibeam swath sonar sounder operating at a transducer frequency of 200 KHZ. Data will be collected continuously to identify bottom conditions around each pile, pier, dolphin and fender system as water depths permit. Surveys in shallow water areas will be performed at high tide periods, where practical. Swaths, collected at a width of three times the water depth, will overlap adjacent sweeps by at least five feet. Calibration procedures will be performed and recorded according to USACE Hydrographic Surveying Manual EM-1110-2-1003. Positioning

will be accomplished utilizing a Trimble DSM132 using differential Global Positioning Systems (DGPS). Tide levels will be recorded at 5-minute intervals, collected from a monitoring staff established during control work. All work will be supervised by Florida Professional Surveyor and Mapper as well as a ACSM Certified hydrographer.

2. Perform laser survey of the bridge attributes including all features above mean sea level including the fender system. Establish drawings to correlate above water features to the hydrographic survey.
3. At the conclusion of surveying, field and office Quality Control, the Consultant shall deliver digital and hard copy drawings, graphically illustrating the results of the survey. Graphic images will be color coded at various elevation changes and contoured.
4. The hydrographic vertical survey shall document the mean high and mean low water at each location for the low member above the fender or adjacent to pier and center of span.
5. The final survey shall be incorporated into the Routine Inspection Report as the channel profile for each structure surveyed.

III. DEPARTMENT RESPONSIBILITIES:

The DEPARTMENT shall provide the following:

1. Access to bridge plans and shop drawings.

2. Access to the bridge.

LIST OF STRUCTURES FOR HYDROGRAPHIC SURVEY

Structure #	Location	Survey Type	Date
720076	SR-115 over St. Johns River (Mathews Bridge)	Hydrographic	April 2024 April 2026
720107	SR-228 over St. Johns River (Hart Bridge)	Hydrographic	June 2023 June 2025
720022	US-1 over St. Johns River (Main St. Bridge)	Hydrographic	August 2022 August 2024
720005	SR-211 over Ortega River	Hydrographic	May 2023 May 2025
720518	I-295 over Intracoastal Waterway	Hydrographic	October 2023* October 2025*
720442 720509	SR-202 over Intracoastal Waterway	Hydrographic	September 2023 September 2025

- 720518-Survey should be limited to the 2 main piers (Piers 76 & 77).

EXHIBIT A

PART 6

UNDERWATER DIVE INSPECTIONS

I. PROJECT OBJECTIVE

Perform underwater inspections for state owned bridges in District 2.

II. SERVICES

The consultant shall provide certified underwater inspection team(s) to perform underwater inspections of substructure units to determine conditions. This includes the evaluating the entire fender system, noting exposed footings, footing undermining, localized scour cones, signs of settlement, etc. The areas of inspection shall include portions of the bridge from the high-water mark down to the groundline on all members touched by water. The inspections shall be performed 1 month prior to the routine topside inspection.

III. PERSONNEL REQUIREMENTS

A qualified individual must be at the bridge site to supervise inspection activities at all times. To be qualified, an individual must be registered as a Professional Engineer in Florida and experienced in the inspection of bridges according to the National Bridge Inspection Standards or be confirmed officially by the department as a Florida Certified Bridge Inspector.

Each final bridge inspection report shall be sealed in accordance with Florida Statutes 471.025 by the Professional Engineer who confirms the accuracy and completeness of all the report contents.

IV. DOCUMENTATION

Each inspection will be documented in the Underwater Inspection Report template format.

All soundings will be recorded showing the original, current, and previous channel bottom measurements for the left and right side of each intermediate bent. This may include the use of a fathometer device. Current soundings will be compared to the original channel bottom measurements and aggregation and degradation provided in a chart comparison type format. The soundings information will be attached to the Inspection Report.

If by field observation, deficiencies are sufficiently critical to warrant immediate and substantial traffic restriction or closing of a bridge, the Department Project Manager or designated representative must be immediately verbally notified. Verbal notification must be confirmed with written notification within 24 hours.

Each bridge inspection report shall be sealed in accordance with Florida Statutes 471.025 by the Professional Engineer who confirms the accuracy and completeness of all the report contents.

A draft of the underwater inspection report shall be provided to the Department no later than the 25th of the month the inspection is performed in.

V. COMPENSATION

The fee for these services has been negotiated in accordance with the terms detailed in Exhibit B, Method of Compensation, for a fair, competitive and reasonable cost, considering the scope and complexity of the project(s).

LIST OF

STRUCTURES

FOR

UNDERWATER

INSPECTION

	Bridge #	Facility Carried	Feature Intersected	Quantity	Bents	Length
1	290030	SR-136	SUWANNEE RIVER	2	4	297
2	300031	US-19 NB (SR-55)	SUWANNEE RIVER	2	15	815
3	300061	US-19 SB (SR-55)	SUWANNEE RIVER	2	10	806
4	310005	US-129 (SR-49)	SANTA FE RIVER	2	12	480
5	310007	SR-47	SANTA FE RIVER	2	10	315
6	330027	US-27 (SR-20)	SUWANNEE RIVER	2	12	867
7	340053	SR-24	HAVENS CREEK (#4 CHANNEL)	2	20	950
8	350062	US-90 (SR-10)	SUWANNEE RIVER	2	11	761
9	380095	US-98 (SR-30)	AUCILLA RIVER	2	14	1365
10	710006	US-17 (SR-15)	GOVERNORS CREEK	2	11	330
11	710009	US-17 SB (SR-15)	BLACK CREEK	2	18	1465
12	710049	US-17 (SR-15)	DOCTORS INLET	2	23	1875
13	710050	US-17 NB (SR-15)	BLACK CREEK	2	18	1465
14	720011	US-17 (SR-5)	TROUT RIVER	2	27	1143
15	720016	US-1 SB (SR-15)	RIBAULT RIVER	2	8	196
16	720027	SR-13 SB	GOODBYS LAKE	2	11	355
17	720032	SR-115 SB	RIBAULT RIVER	2	19	747
18	720033	SR-115	TROUT RIVER	2	21	742
19	720042	SR-10 (ATLANTIC)	BIG POTTSBURG CREEK	2	10	284
20	720044	SR-10 E.B.	SAN PABLO RIVER (IWW)	2	26	2351
21	720052	US-17 SB (SR-15)	ORTEGA RIVER & RD.	2	20	1491
22	720053	US-17 NB (SR-15)	ORTEGA RIVER & RD.	2	20	1491
23	720059	SR-105 (HECKSCHER)	BROWNS CREEK	2	20	760
24	720060	SR-105	CLAPBOARD CREEK	2	26	912
25	720063	SR-105	HAULOVER CREEK	2	14	222
26	720066	US-90 (SR-212)	BIG POTTSBURG CREEK	2	7	210
27	720072	SR-105 (SIMPSON)	SIMPSON CREEK	2	6	100
28	720077	SR-A1A	SHERMAN CREEK	2	8	175
29	720218	I-95 SB (SR-9)	NASSAU RIVER	2	14	624
30	720230	I-95 SB (SR-9)	CEDAR CREEK	2	8	224
31	720231	I-95 SB (SR-9)	LITTLE CEDAR CREEK	2	8	224
32	720247	I-295 SB (SR-9A)	ORTEGA RIVER	2	3	108
33	720249	I-295 SB (BUCKMAN)	ST. JOHNS RIVER	2	216	16300
34	720264	SR-109A (CESERY)	ARLINGTON RIVER	2	24	968

35	720271	SR-13 NB	GOODBYS LAKE	2	11	355
36	720272	SR-115 NB	RIBAULT RIVER	2	19	747
37	720319	I-295 NB (SR-9A)	ORTEGA RIVER	2	4	108
38	720326	SR-21 NB	CEDAR RIVER	2	21	660
39	720336	I-95 NB (SR-9)	NASSAU RIVER	2	14	624
40	720338	I-95 NB (SR-9)	CEDAR CREEK	2	8	224
41	720339	I-95 NB (SR-9)	LITTLE CEDAR CREEK	2	8	224
42	720343	I-295 NB (BUCKMAN)	ST. JOHNS RIVER	2	216	16300
43	720366	SERVICE RD.	SAN PABLO RIVER	2	7	201
44	720370	I-295 SB (SR-9A)	TROUT RIVER	2	19	1105
45	720371	I-295 NB (SR-9A)	TROUT RIVER	2	19	1105
46	720435	SR-128 (SAN JUAN)	CEDAR CREEK	2	9	336
47	720442	SR-202 WB (JTB)	INTRACOASTAL WATERWAY	2	67	4600
48	720457	SR-21	MCGIRTS CREEK	2	6	199
49	720473	I-295 SB (SR-9A)	DUNN CREEK & CSXRR	2	18	1648
50	720474	I-295 NB (SR-9A)	DUNN CREEK & CSXRR	2	16	1405
51	720509	SR-202 EB (JTB)	INTRACOASTAL WATERWAY	2	67	4600
52	720515	SR-116 W.B.	MT. PLEASANT CREEK	2	13	456
53	720518	I-295(9A) DAME PT.	ST.JOHN'S RIV.& MILL COVE	2	98	10646
54	720568	SR-105 NB	SAN CARLOS CREEK	2	12	870
55	720569	SR-105 SB	SAN CARLOS CREEK	2	11	772
56	720570	SR-13 SB (ACOSTA)	ST. JOHNS RIVER	2	6	1645
57	720571	SR-13 NB (ACOSTA)	ST. JOHNS RIVER	2	6	1645
58	720627	I-95 (SR-9)NB & SB	SAN MARCO/PALM/ST J RIV.	2	17	2140
59	720628	I-95 NB ON RAMP	ST. JOHNS RIVER	2	7	821
60	720629	I-95 (SR-9)	ST. JOHNS RIVER	2	17	2533
61	720633	I-95 SB OFF RAMP	ST. JOHNS RIVER	2	7	868
62	720660	US-1 NB (SR-15)	RIBAULT RIVER	2	8	198
63	720670	SR-21 S.B.	CEDAR RIVER	2	11	660
64	720675	SR-116 E.B. & W.B.	GREENFIELD CREEK	2	11	1400
65	720677	SR-116 E.B. & W.B.	INTRACOASTAL WATERWAY	2	25	3585
66	720684	I-95 (SR-9)	TROUT RIVER	2	18	2380

67	720688	US-17 (SR-5)	NASSAU RIVER	2	9	637
68	720689	SR-116 EB	MT. PLEASANT CREEK	2	15	1064
69	720692	SR-105 (FT GEORGE)	FT. GEORGE INLET	2	18	2040
70	720699	SR-105	SISTERS CREEK	2	23	3288
71	720729	US-90 WB (SR-212)	INTRACOASTAL WATERWAY	2	18	2299
72	720730	US-90 EB (SR-212)	INTRACOASTAL WATERWAY	2	16	2100
73	720743	SR-105 & SR-A1A	SHAD CREEK	2	5	237
74	720757	SR-105 SB	BROWARD RIVER	2	12	1228
75	720758	SR-105 NB	BROWARD RIVER	2	12	1228
76	720759	SR-105 SB	DUNN CREEK	2	11	1140
77	720760	SR-105 NB	DUNN CREEK	2	11	1140
78	720857	SR-105	MYRTLE CREEK	2	4	114
79	740008	US-17 (SR-5)	ST. MARY'S RIVER	4	11	563
80	740018	US-1 SB (SR-15)	ST. MARY'S RIVER	2	6	382
81	740031	US-1 NB (SR-15)	ST. MARY'S RIVER	2	6	382
82	740105	SR-105 & SR-A1A	NASSAU SOUND	2	55	6129
83	740138	SR-200 and A1A	LOFTON CREEK	2	4	216
84	760035	SR-19	OKLAWAHA RIVER	2	32	1386
85	760036	SR-19	OKLAWAHA - N. CHANNEL	2	8	294
86	760043	US 17 (SR 15)	ST JOHNS RIVER	2	49	4020
87	760044	US-17 SB (SR-15)	RICE CREEK	2	22	1959
88	760045	US-17 NB (SR-15)	RICE CREEK	2	22	1959
89	760046	US-17 (SR-15)	DUNNS CREEK	2	31	2699
90	760065	US 17 (SR15) SB	DUNNS CREEK	2	19	2808
91	780003	US-1 BUS. & SR-5A	SAN SEBASTIAN RIVER	2	8	238
92	780042	SR-13	TROUT CREEK	2	11	420
93	780055	SR-13 SB	JULINGTON CREEK	2	61	2415
94	780056	SR-16(SHANDS BDG.)	ST. JOHNS RIVER	2	125	6662
95	780089	SR-312 EB	MATANZAS RIVER	2	38	3575
96	780090	SR-206 CRESCENT	MATANZAS RIVER IWW	4	46	2980
97	780097	SR-A1A	MATANZAS INLET	2	31	2132
98	780098	SR-13 NB	JULINGTON CREEK	2	33	2415
99	780099	SR-A1A (VILANO)	TOLOMATO RIV. IWW/VILANO	2	28	3839
100	780100	SR-312 WB	MATANZAS RIVER	2	25	3575
101	780109	SR-16	SAN SEBASTIAN RIVER	2	11	330

102	780111	SR-207 S.B.	DEEP CREEK	2	10	711
103	780112	SR-207 N.B.	DEEP CREEK	2	10	711
104	780129	US-1 (SR-5)	SAN SEBASTIAN RIVER	2	11	761

THIS COMPLETES THE SCOPE OF SERVICES