

Advertise Date: Wednesday, November 27, 2024

Lee County Board of County Commissioners DEPARTMENT OF PROCUREMENT MANAGEMENT

Invitation to Bid (B) **DOT Construction Only**

 ${\it Solicitation\ No.:}\ B240509LND$

Solicitation

Name: Hurricane Ian Matlacha Drawbridge M&E Repairs - LAP

Open Date/Time: Thursday, January 09, 2025 Time: 2:30 PM

Lee County Procurement Management Location:

2115 Second Street, 1st Floor

Fort Myers, FL 33901

Procurement

Contact: Lilla Davis Title Procurement Analyst

Phone: (239) 533-8857 Ldavis2@leegov.com Email:

Requesting Dept. Transportation

Pre-Bid Conference:

Type: Mandatory - Proposers are only required to attend ONE of the following dates

Date/Time of 1st Meeting: Wednesday, December 11, 2024, at 11:30am

Date/Time of 2nd Meeting: Thursday, December 19, 2024, at 2:00pm

Lee County Procurement Management

2115 Second Street, 1st Floor

Location: Fort Myers, FL 33901

All solicitation documents are available for download at www.leegov.com/procurement

FUNDED IN PART OR IN WHOLE BY: The Florida Department of Transportation (FDOT) FDOT Project #: 453997-1-58-01



Advertisement Date: Wednesday, November 27, 2024

INTRODUCTIONS AND BACKGROUND

Notice to Bidder

Invitation to Bid (B) Construction

Lee County, Florida, is requesting bids from qualified individuals/firms for

B240509LND – Hurricane Ian Matlacha Drawbridge M&E Repairs – LAP

Then and there to be publicly opened and read aloud for the purpose of selecting a vendor to furnish all necessary labor, services, materials, equipment, tools, consumables, transportation, skills, and incidentals required for Lee County, Florida, in conformance with the Solicitation Documents, which include technical Specifications and/or a Scope of Work.

Those individuals/firms interested in being considered for this Solicitation are instructed to submit, in accordance with the Specifications, their Bids, pertinent to this project prior to

2:30 PM Thursday, January 09, 2025

to the office of the **Procurement Management Director**, 2115 Second Street, 1st Floor, Fort Myers, Florida 33901. The Invitation to Bid shall be received in a sealed envelope, prior to the time scheduled to receive Bid(s), and shall be clearly marked with the Solicitation name, Solicitation number, Bidder name, and contact information as identified in these Solicitation Documents.

The Scope of Work/Specifications for this solicitation is available from www.leegov.com/procurement
Bidders who obtain Scope of Work/Specifications from sources other than www.leegov.com/procurement are cautioned that the solicitation package may be incomplete. The County's official bidders list, addendum(s) and information must be obtained from www.leegov.com/procurement. It is the bidder's responsibility to check for posted information. The County may not accept incomplete Bids.

The County is seeking a CONTRACTOR to provide construction services to repair and replace several electrical, mechanical, and structural components of the Matlacha Drawbridge. This project is funded in part or in whole by: The Florida Department of Transportation (FDOT) as a Local Agency Program (LAP) project. FDOT Project #:453997-1-58-01

Two Mandatory Pre-Bid Meetings have been scheduled for this project. Proposers are only required to attend ONE of the following dates:

Date/Time of 1st Meeting: Wednesday, December 11, 2024, at 11:30am Date/Time of 2nd Meeting: Thursday, December 19, 2024, at 2:00pm

Located at Lee County Procurement Management 2115 Second Street, 1st Floor, Fort Myers, FL 33901

Meetings are scheduled for the purpose of discussing the proposed project. Prospective bidders shall attend one of the meetings. All prospective bidders are encouraged to obtain and review plans, specifications, and scope of work for this bid before the pre-bid conference so that they may be prepared to discuss any question or concerns they have regarding this project. A site visit may follow the pre-bid conference. Questions regarding this solicitation are to be directed, in writing, to the individual listed below using the email address listed below or faxed to (239) 485 8383 during normal working hours.

Lilla Davis at Ldavis2@leegov.com

Rebin Dennard CPPB

Sincerely

Procurement Manager

*WWW.leegov.Com/Procurement is the County's official posting site

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Terms and Conditions

INVITATION TO BID (B) CONSTRUCTION

- 1. DEFINITIONS. Additional definitions may be found in the Draft Construction Agreement attached hereto.
 - **1.1. Addendum/Addenda**: A written document used to modify the terms of a procurement instrument (such as an Invitation to Bid or Request for Proposals). An addendum is not to be confused with a contract "amendment."
 - **1.2. Approved Alternate**: Solicitation documents may make reference of specific manufacturer(s) or product(s). These references serve only as a recommendation and a guide to minimum quality and performance. The references are not intended to exclude Approved Alternatives of other manufacturer(s) or product(s).
 - **1.3. Award**: The determination of a successful Bidder(s) in response to this Solicitation.
 - **1.4. Bid/Proposal Package**: An offer specifically given to the County in response to an informal or competitive procurement invitation issued by the County. This is also referred to as a "Response."
 - **1.5. Bid Bond/Security:** Security in the form and amount required by the County pledging that the Bidder shall enter into a Contract with the County in accordance with the terms stated in its Bid.
 - **1.6. Bidder:** Any individual, firm, partnership, joint venture, or corporation submitting a Bid for this project, acting directly or through an authorized representative.
 - **1.7. County**: The Board of County Commissioners of Lee County, Florida, a political subdivision of the State of Florida, its successors, and assigns.
 - **1.8. Contract/Agreement:** The written contract between the County and a successful Bidder pursuant to this Solicitation, a draft copy of which is attached hereto.
 - **1.9. Contract Documents:** The documents listed in Section1 of the attached draft Agreement.
 - **1.10. Department of Procurement Management**: Shall mean the Lee County Department of Procurement Management.
 - **1.11. Due Date and Time/Opening**: The date and time upon which a Bid or Proposal shall be submitted to, and actually received by, the Lee County Department of Procurement Management. Only Bids or Proposals received prior to the established date and time shall be considered.
 - **1.12.** Liquidated Damages: Damages, usually in the form of monetary payment, agreed to by the parties to a contract which are due and payable as damages in the event of a breach of all or part of such contract. Liquidated Damages may be applied on a daily basis for as long as the breach is in effect.
 - **1.13.** Local Bidder: Any Vendor whose physical business address, in the sole opinion of the County, is located within the boundaries of Lee County, Florida; at least two (2) fulltime employees in Lee County; and a Local Business Tax Receipt issued by Lee County at least one year prior to solicitation opening.
 - **1.14. Responsible Bidder**: A Bidder submitting a Response who has the capability in all respects to perform fully the Contract requirements and the experience, capacity, facilities, equipment, credit, sufficient qualified personnel, and having the integrity and reliability with a record of timely and acceptable past performance that will ensure good faith performance.
 - **1.15. Responsive Bidder**: A Bidder submitting a Response that substantially conforms with all material respects to the requirements and criteria set forth in this Solicitation.
 - **1.16. Solicitation/Solicitation Documents**: This document, its attachments, and any document hereinafter incorporated by reference.
 - **1.17. Work:** All labor, materials, equipment, and incidentals required to fully, finally, and properly complete the construction project described herein and otherwise fully, finally and properly comply with all terms and conditions of the Contract Documents.

2. ORDER OF PRECEDENCE

- **2.1.** In resolving conflicts, errors, and discrepancies among the provisions of the Contract Documents, the order of precedence shall be as follows
 - **2.1.1.** Florida State Law as applied to County Purchasing
 - **2.1.2.** Lee County Procurement Ordinance 22-06 & 23-21
 - **2.1.3.** Change Orders

- **2.1.4.** Contract/Agreement including amendments and Exhibits
- **2.1.5.** Field Directive Change Orders
- **2.1.6.** The Solicitation Documents, including any Addenda

3. RULES, REGULATIONS, LAWS, ORDINANCES AND LICENSES

- **3.1.** It shall be the responsibility of the Bidder to ensure compliance with all federal, state, or county codes, rules, regulations, or other requirements, as each may apply.
- **3.2. Local Business Tax Account**: As applicable, anyone providing merchandise or services to the public within the jurisdiction of Lee County must obtain a Lee County business tax account to operate unless specifically exempted.
- **3.3.** License(s): Bidder should provide, at the time of the opening of the Bid, licenses required for this product and/or service.

4. PREPARATION OF SUBMITTAL

- **4.1. Sealed Bid:** Submission must be in a sealed envelope/box, and the outside of the submission should be marked with the following information (Sealed Bid Label Form is attached for your use):
 - **4.1.1.** "Sealed Bid"
 - **4.1.2.** Bid number
 - **4.1.3.** Bid title
 - **4.1.4.** Bid due date
 - **4.1.5.** Name of the Bidder submitting the Bid
 - **4.1.6.** Bidder's Contact e-mail and telephone number

4.2. Bid submission shall:

- **4.2.1.** Provide two (2) hard copies. Mark one "Original," one "Copy."
- **4.2.2.** Provide one (1) electronic flash drive set of the entire submission documents.
- **4.2.3.** Provide that the electronic submission document is one single Adobe PDF file <u>in the same order as the original hard copy</u>.
- **4.2.4.** Limit the color and number of images to avoid unmanageable file sizes.
- **4.2.5.** Not lock files.

4.3. Submission Format:

- **4.3.1.** Required Forms: complete and return all required forms. If the form is not applicable, please return with "Not Applicable" or "N/A" in large letters across the form.
- **4.3.2.** Failure to submit required or requested information may result in the Bidder being considered non-responsive.
- **4.3.3.** Execution of Bid: All documents must be signed by a corporate authorized representative, witnessed, and corporate and/or notary seals affixed, where applicable. All Bids shall be typed or printed in ink. The Bidder may not use erasable ink. All corrections made to the Bids shall be initialed.
- **4.3.4.** The County may request specific files be submitted in specialty format (i.e. Microsoft Excel, PowerPoint etc.). Vendor shall accommodate such specialty requests as stated or described herein. Should files not be provide in the format or quantity as requested Bidder may be deemed non-Responsive and therefore ineligible for award.
- **4.3.5.** The submission should not contain links to other web pages.
- **4.3.6.** Include any information requested by the County necessary to analyze your Bid, i.e., required submittals, literature, technical data, or financial statements.
- **4.3.7.** Bid Security/Bond(s), as applicable.
- **4.4. Preparation Cost**: The Bidder is solely responsible for any and all costs associated with responding to this Solicitation. No reimbursement shall be made for any costs associated with the preparation and submittal of any Bid, or for any travel and per diem costs that are incurred by any Bidder.

5. RESPONSES RECEIVED LATE

5.1. It shall be the Bidder's sole responsibility to deliver the Bid submission to the Lee County Department of Procurement Management prior to or on the time and date required. All references to date and time herein reference Lee County, FL local time.

- **5.2.** Any Bids received after the stated time and date shall not be considered. Late Bids shall not be opened at the public opening.
- **5.3.** The Lee County Department of Procurement Management shall not be responsible for delays caused by the method of delivery such as, but not limited to internet, United States Postal Service, overnight express mail service(s), or delays caused by any other occurrence.

6. BIDDER REQUIREMENTS (unless otherwise noted)

- **Responsive and Responsible Bidders**: Only Bids received from Responsive and Responsible Bidders shall be considered. The County reserves the right, before recommending any Award, to inspect the facilities and organization; or to take any other necessary action, such as background checks, to determine if the Bidder is satisfactorily able to perform and reserves the right to reject submission packages where evidence submitted, or investigation and evaluation indicates an inability for the Bidder to perform.
 - **6.1.1.** Additional sources may be utilized to determine credit worthiness and ability to perform.
 - **6.1.2.** Any Bidder or sub-contractor that will have access to County facilities or property may be required to be screened to a level that may include but is not limited to fingerprinting and a statewide criminal background check. There may be fees associated with these procedures. These costs are the responsibility of the Bidder or sub-contractor.
 - **6.1.3.** Bidders are responsible for ensuring that any required background screening are conducted in accordance with Chapter 435. Bidders shall be aware, understand, and ensure compliance with the statutory requirements regarding background checks. FL Statutes Chapter 435 governs required background screenings for any employees, contractors, subcontractors, or agents of the Bidder who will have contact with any vulnerable person, as defined by statute, or who otherwise are required to undergo a Level 1 or Level 2 background screening in accordance with Florida law. Such requirements shall flow down to sub-contractors/consultants of the prime Bidder and prime Bidder shall ensure compliance with Chapter 435 of such parties.
 - **6.1.3.1.** Documentation of such completed background screenings must be maintained for a period of no less than five (5) years and are subject to audit by Lee County at any time during such five (5) year period.
- **6.2. Past Performance**: A Bidder's past performance and prior dealings with Lee County (i.e., failure to meet specifications, poor workmanship, late delivery, etc.) may be reviewed. Poor or unacceptable past performance may result in Bidder disqualification.
- **Prohibition Against Considering Social, Political Or Ideological Interests in Government Contracting F.S. 287.05701:** Bidders are hereby notified of the provisions of section 287.05701, Florida Statutes, as amended, that the County will not request documentation of or consider a Bidder's social, political, or ideological interests when determining if the Bidder is a responsible Bidder. Bidders are further notified that the County's governing body may not give preference to a Bidder based on the Bidder's social, political, or ideological interests.

7. PRE-BID CONFERENCE

- 7.1. A pre-bid conference will be held in the location, date, and time specified on the cover of this Solicitation. The cover will also note if the pre-bid conference is non-mandatory or mandatory. All prospective Bidders are encouraged to obtain and review the Solicitation Documents prior to the pre-bid conference so they may be prepared to discuss any questions or concerns they have concerning this project. All questions must be submitted formally in writing to the procurement staff noted on the first page of the Solicitation Documents. A formal response will be provided in the form of an Addendum (see "County Interpretation/Addendums" for additional information). If appropriate, a site visit may follow the pre-bid conference.
- **7.2. Non-Mandatory**: Pre-bid conferences are generally non-mandatory, but it is highly recommended that prospective Bidders participate.
- **7.3. Mandatory**: In the event a mandatory pre-bid conference is held, no Bids shall be considered by Bidders that fail to attend, and a Bid submitted by any such Bidder shall be considered **non-responsive**.

8. COUNTY INTERPRETATION/ADDENDUMS

- 8.1. Each Bidder shall examine the Solicitation Documents and shall judge all matters relating to the adequacy and accuracy of such documents. Any inquiries, suggestions or requests concerning interpretation, clarification or additional information pertaining to the Bid shall be made in writing, submitted at least eight (8) calendar days prior to the date when the Bid is due.
- **8.2.** Response(s) will be in the form of an Addendum posted on www.leegov.com/procurement. It is solely the Bidder's responsibility to check the website for information. The Lee County Department of Procurement Management will send no notifications regarding postings associated with this solicitation.
- **8.3.** All Addenda shall be incorporated into the Contract Documents.
- **8.4.** The County shall not be responsible for oral interpretations given by any County employee, representative, agent, or other person. Interpretation of the meaning of the plans, Specifications, or any other Contract Document, or for correction of any apparent ambiguity, inconsistency, or error there in, shall be in writing. Issuance of a written Addendum by the County's Department of Procurement Management is the only official method whereby interpretation, clarification or additional information may be given.

9. QUALITY GUARANTEE/WARRANTY (as applicable)

- **9.1.** Bidder will guarantee their work without disclaimers, unless otherwise specifically approved by the County, for a minimum of twelve (12) months from the date of final completion.
- 9.2. Unless otherwise specifically provided in the specifications, all equipment and materials and articles incorporated in the work covered by this contract shall be new, unused and of the most suitable grade for the purpose intended. Refurbished parts or equipment are not acceptable unless otherwise specified in the specifications. All warrantees will begin from the date of final completion.
- **9.3.** Unless otherwise specifically provided in the specifications, the equipment must be warranted for twelve (12) months, shipping, parts, and labor. Should the equipment be taken out of service for more than forty-eight (48) hours to have warranty work performed, a loaner machine of equal capability or better shall be provided for use until the repaired equipment is returned to service at no additional charge to the County.
- **9.4.** If any product does not meet performance representation or other quality assurance representations as published by manufacturers, producers or distributors of such products or the specifications listed, the vendor shall pick up the product from the County at no expense to the County. The County reserves the right to reject any or all materials, if in its judgment the item reflects unsatisfactory workmanship or manufacturing or shipping damage. The vendor shall refund, to the County, any money which has been paid for same.

10. SUBSTITUTION(S)/APPROVED ALTERNATE(S)

- 10.1. Unless otherwise specifically provided in the Specifications, reference to any equipment, material, article or patented process, by trade name, brand name, make or catalog number, shall be regarded as establishing a standard of quality and shall not be construed as limiting competition. If a Bidder wishes to make a substitution in the Specifications, the Bidder shall furnish to the County, no later than ten (10) business days prior to the Bid opening date, the name of the manufacturer, the model number, and other identifying data and information necessary to aid the County in evaluating the substitution. Such information is submitted through the Department of Procurement Management. Any such substitution shall be subject to County approval through the issuance of a written Addendum by the County's Department of Procurement Management. Substitutions shall be approved only if determined by the County to be an Approved Alternate to the prescribed Specifications.
- **10.2.** A Bid containing a substitution is subject to disqualification if the substitution is not approved by the County. Items Bid must be identified by brand name, number, manufacturer, and model, and shall include full descriptive information, brochures, and appropriate attachments. Brand names are used for descriptive purposes only. An **Approved Alternate** product or service may be used.

11. ADDITIONS, REVISONS AND DELETIONS

11.1. Additions, revisions, or deletions to the Terms and Conditions, specifications that change the intent of the solicitation will cause the solicitation to be non-responsive and the proposal will not be considered. The Procurement Management Director shall be the sole judge as to whether or not any addition, revision, or deletion changes the intent of the solicitation.

12. NEGOTIATED ITEMS

- **12.1.** Any item not outlined in the Scope of Work/Specifications may be subject to negotiations between the County and the successful Bidder.
- 12.2. After Award of this Bid, the County reserves the right to add or delete items/services at prices to be negotiated at the time of addition or deletion.
- 12.3. At contract renewal time(s) or in the event of significant industry wide market changes, the County may negotiate justified adjustments such as price, terms, etc., if in its sole judgment, the County considers such adjustments to be in their best interest.

13. CALCULATION ERRORS

13.1. In the event of multiplication/addition error(s), the unit price shall prevail, and the corrected sum shall be considered the bid price. All Bids will be reviewed mathematically and corrected, if necessary, using these standards, prior to further evaluation.

14. CONFIDENTIALITY

- **14.1.** Bidders should be aware that all submissions provided are generally considered public records subject to public disclosure upon conclusion of the Solicitation process, and shall **not** be afforded confidentiality, unless otherwise provided by law.
- **14.2.** If information is submitted with a Bid that is deemed "confidential," the Bidder must stamp those pages of the submission that are considered confidential. The Bidder must provide sufficient documentation demonstrating why such documents should be deemed confidential in accordance with Florida law.
- 14.3. Lee County will not reveal engineering estimates or budget amounts for a project unless required by grant funding or unless it is in the best interest of the County. Pursuant to § 337.168, F.S.: A document or electronic file revealing the official cost estimate of the department of a project is confidential and exempt from the provisions of § 119.07(1), F.S. until the Contract for the project has been executed or until the project is no longer under active consideration.

15. CONFLICT OF INTEREST

- **15.1. Business Relationship Disclosure Requirement**: The Award hereunder is subject to the provisions of Chapter 112, F.S. All Bidders must disclose with their submission the name of any officer, director or agent who is also an officer or employee of Lee County or any of its agencies or a spouse or child of such officers or employees. Furthermore, all Bidders must disclose the name of any County officers, employees, or spouses or children thereof who own directly or indirectly, an interest of five percent (5%) or more in the Bidder's firm or any of its branches.
- **15.2.** A Vendor that assisted in preparing and/or writing a scope of work and/or specifications may not submit a bid or proposal for County consideration on that project.

16. ANTI-LOBBYING CLAUSE (Cone of Silence)

16.1. Upon the issuance of the Solicitation, prospective Bidders, or any agent, representative or person acting at the request of said Bidder shall not have any contact, communicate with or discuss any matter relating in any way to the Solicitation with any commissioner, evaluation review committee, agent or employee of the County other than the Procurement Management Director or their designee. This prohibition begins with the issuance of any Solicitation and ends upon issuance of the Notice of Intended Decision, the rejection of all responses, or the termination of this competitive procurement. If it is determined that improper communications were conducted, the Bidder may be declared non-responsible.

17. ANTITRUST VIOLATION

17.1. A person or an affiliate who has been placed on the antitrust violator vendor list, available at Antitrust Violator Vendor List / Vendor Registration and Vendor Lists / State Agency Resources / State Purchasing / Business Operations / Florida Department of Management Services - DMS (myflorida.com), following a conviction or being held civilly liable for an antitrust violation may not submit a bid, proposal, or reply for any new contract to provide any goods or services to Lee County; may

not submit a bid, proposal, or reply for a new contract with Lee County for the construction or repair of a public building or public work; may not submit a bid, proposal, or reply on new leases of real property to Lee County; may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a new contract with Lee County; and may not transact new business with Lee County.

18. DRUG FREE WORKPLACE

18.1. The County encourages Drug Free Workplace programs.

19. FLORIDA CERTIFIED ENTERPRISES

- **19.1.** The County encourages the use of Florida Certified Enterprises such as Such as Disadvantaged, Minority, Women, Veterans Business Enterprise (DBE, MBE, WBE, VBE) firms.
- 19.2. Bidder/Proposer is requested to indicate whether the Firm and/or any proposed sub-consultants are a Florida Certified Enterprise. Lee County encourages the utilization and participation of DBE, MBE, WBE, VBE or similar in procurements, and evaluation proceedings will be conducted within the established guidelines regarding equal employment opportunity and nondiscriminatory action based upon the grounds of race, color, sex or national origin. Interested Florida Certified Enterprises such as Disadvantaged, Minority, Women, Veterans Business Enterprise (DBE, MBE, WBE, VBE) firms and similar are encouraged to submit.

20. ANTI-DISCRIMINATION/EQUAL EMPLOYMENT OPPORTUNITY

- 20.1. The Bidder agrees to comply, at its own expense, with all federal, state, and local laws and regulations, including federal, state, and local laws, codes, statutes, ordinances, rules, regulations, and requirements applicable to the Work, including but not limited to those dealing with taxation, workers' compensation, equal employment and safety. Bidder acknowledges and agrees, the Rehabilitation Act of 1973 as amended, the Americans with Disabilities Act of 1990 (ADA), and the ADA Amendments Act of 2008 (ADAAA), that in performing the Work hereunder, no person on the grounds of race, religion, color, age, sex, national origin, disability or marital status shall be excluded from participation in, denied the benefits of, or otherwise be subjected to discrimination.
- **20.2.** The Bidder shall not discriminate against any employee or applicant for employment because of race, religion, color, age, sex, national origin, disability, or marital status. The Bidder shall make affirmative efforts to ensure that applicants are employed and that employees are treated during employment without regard to their race, religion, color, age, sex, national origin, disability, or marital status.
- **20.3.** The Bidder shall include the provisions of this section in every sub-contract under this Contract to ensure its provisions will be binding upon each sub-contractor. The Bidder shall take such actions in respect to any sub-contractor, as the contracting agency may direct, as a means of enforcing such provisions, including sanctions for non-compliance.
- 20.4. An entity or affiliate who has been placed on the State of Florida's Discriminatory Vendor List (this list may be viewed by going to the Department of Management Services website at http://www.dms.myflorida.com) may not submit a Bid on a contract to provide goods or services to a public entity, may not submit a Bid on a contract with a public entity for the construction or repair of a public building or public work, may not submit Bids on leases of real property to a public entity, may not award or perform work as a vendor, supplier, sub-contractor, or consultant under contract with any public entity, and may not transact business with any public entity.

21. SUB-CONTRACTORS

21.1. The use of sub-contractors under this Solicitation requires prior written authorization from the County representative.

22. PROJECT GUIDELINES (as applicable)

- **22.1.** The County has established the following guidelines, criteria, goals, objectives, constraints, schedule, budget and or requirements which shall serve as a guide to the Bidder(s) in performing the Work provided for pursuant to this Contract:
 - **22.1.1.** No amount of Work is guaranteed upon the execution of a Contract.

- **22.1.2.** Rates and all other negotiated expenses shall remain in effect throughout the duration of the Contract period inclusive of any renewals unless otherwise specified herein.
- **22.1.3.** This Contract does not entitle any Bidder to exclusive rights to County contracts. The County reserves the right to perform any and all available required Work in house or by any other means it so desires.
- **22.1.4.** In reference to vehicle travel, mileage and man-hours spent in travel, time is considered incidental to the Work and not an extra compensable expense.
- 22.1.5. Lee County reserves the right to add or delete, at any time, any or all material, tasks or services associated with this Contract.
- **22.1.6.** Any Single Large Project: The County, in its sole discretion, reserves the right to separately solicit any project that is outside the scope of this Solicitation, whether through size, complexity or the dollar value.
- **22.1.7.** <u>Background Check(s)</u>: The County is committed to maintaining a safe and secure environment. The following shall apply to the contractor, contractor employees, employees hired through a third-party staffing vendor, subcontractors and any other staffing that may be working in or around a County Facility, School, Library, and other locations as deemed necessary.

Upon written request by Lee County Procurement Management, the contractor at its expense must conduct a background check for each of its employees, as well as for the employees of its subcontractors, who will provide services to the County or have access to the County computer systems, through either onsite or remote access. Contractor employees, for the purpose of this requirement, include such temporary staff as office support, custodial service, and any third-party vendor. Background checks shall be conducted through the Florida Department of Law Enforcement and provided to Lee County Procurement Management Department at procurement@leegov.com. Background checks must be conducted prior to commencement of said project(s).

23. TIEBREAKER

- **23.1.** Whenever two or more Bids, which are equal with respect to price, quality, and service, are received for procurement of commodities or contractual services, from Responsive and Responsible Bidders, the following steps shall be taken to establish the Award to the lowest Bidder. This method shall be used for all ties.
 - 23.1.1. <u>Step 1 Local Bidder</u>: Between a Local Bidder, and a non-Local Bidder, a Contract Award, or the first opportunity to negotiate, as applicable, shall be made to the Local Bidder. **If local preference is prohibited by the funding source, then step 2 will replace step 1.**
 - **23.1.2.** Step 2 Drug Free Workplace: At the conclusion of step 1, if all is equal, the Bidder with a Drug Free Workplace program shall be given preference over a Bidder with no Drug Free Workplace program. The Contract Award, or the first opportunity to negotiate, as applicable, shall be made to the Bidder with the Drug Free Workplace program.
 - **23.1.3.** Step 3 Coin Flip: At the conclusion of Step 1 and Step 2, if all is equal, the Contract Award, or the first opportunity to negotiate, as applicable, the final outcome shall be determined by the flip of a coin.
- 23.2. When the tie has been broken pursuant to the above procedures, the Contract Award, or the first opportunity to negotiate, as applicable, shall be furnished to the prevailing Bidder.
- **23.3.** If an Award or negotiation is unsuccessful with the initial Bidder, Award or negotiations may commence with the next highest Bidder, utilizing the tiebreaker steps above to make the determination of next lowest Bidder, if necessary.

24. WITHDRAWAL OF BID

- 24.1. No Bid may be withdrawn for a period of 180 calendar days after the scheduled time for receiving submissions. A Bid may be withdrawn prior to the Solicitation opening date and time. Withdrawal requests must be made in writing to the Procurement Management Director, who will approve or disapprove the request.
- **24.2.** After submissions are opened, but prior to Award of the Contract by the County Commission, the Procurement Management Director may allow the withdrawal of a Bid because of the mistake of the Bidder in the preparation of the submission document. In such circumstance, the decision of the Procurement

Management Director to allow the submission withdrawal, although discretionary, shall be based upon a finding that the Bidder, by clear and convincing evidence, has met each of the following four tests:

- **24.2.1.** The Bidder acted in good faith in submitting the Bid;
- **24.2.2.** The mistake in Bid preparation was of such magnitude that to enforce compliance by the Bidder would cause a severe hardship on the Bidder;
- 24.2.3. The mistake was not the result of gross negligence or willful inattention by the Bidder; and
- **24.2.4.** The mistake was discovered and was communicated to the County prior to the County Commission having formally Awarded the Contract.

25. PROTEST RIGHTS

- **25.1.** Any Bidder that has submitted a formal Response to Lee County, and who is adversely affected by an intended decision with respect to the Award, has the right to protest an intended decision posted by the County as part of the Solicitation process.
- **25.2.** Notice of Intended Decision is posted on the Lee County Department of Procurement Management website (www.leegov.com/procurement). Bidders are solely responsible to check for information regarding the Solicitation.
- **25.3.** Refer to the "Procurement Protest" section of the Lee County Procurement Ordinance 22-06 & 23-21 for a complete description of the protest process and associated requirements. The ordinance is posted on the Lee County website or may be obtained by contacting the Procurement Management Director.
- 25.4. In order to preserve the right to protest, a written "Notice of Intent to File a Protest" must be filed with the Lee County Procurement Management Director within seventy-two (72) hours of Posting of the Notice of Intended Decision.
 - **25.4.1.** The notice shall clearly indicate all grounds being claimed for the protest.
 - **25.4.2.** The notice must be physically received by the Procurement Management Director within the required time frame described above. No additional time will be granted for mailing.
- 25.5. Following receipt of the Notice of Intent to File a Protest, a "Protest Bond" and "Formal Written Protest" must be filed within ten (10) business days of Posting of the Notice of Intended Decision.
- 25.6. Failure to follow the protest procedures requirement within the time frames as prescribed herein and in the Lee County Procurement Ordinance 22-06 & 23-21 shall constitute a waiver of the right to protest and shall bar any resulting claims.

26. AUTHORITY TO UTILIZE BY OTHER GOVERNMENT ENTITIES

26.1. This procurement opportunity is also made available to any government entity. Pursuant to their own governing laws, and subject to the Agreement/Contract of the Bidder, other entities may be permitted to make purchases at the terms and conditions contained herein. The Lee County Board of County Commissioners shall not be financially responsible for the purchases of other entities from this Solicitation.

27. CONTRACT ADMINISTRATION

27.1. Designated Contact:

- **27.1.1.** The Awarded Bidder shall appoint a person(s) to act as a primary contact for all County departments. This person or their designee shall be readily available during normal working hours by phone or in person and shall be knowledgeable of the terms and procedures involved.
- **27.1.2.** Lee County requires that the Awarded Bidder provide the name of a contact person(s) and phone number(s) which will afford Lee County access twenty-four (24) hours per day, 365 days per year, in the event of major breakdowns or natural disasters.

27.2. Basis of Award:

- **27.2.1.** The County shall issue a Notice of Intended Decision to the lowest Responsive and Responsible Bidder who submits a Bid.
- **27.2.2.** In the event the lowest Responsive and Responsible Bid exceeds the architectural or engineering cost estimates or the amount of available funds, the County Administrator or designee may, when time or economic considerations preclude re-bidding of Work of a reduced scope, negotiate an adjustment of the Scope of Work with the lowest Responsive and Responsible Bidder, in order to bring the Bid within the amount of available funds.

- **27.2.3.** The County reserves the right to make Award(s) by individual item, group of items, all or none, or a combination thereof. The County reserves the right to reject any and all Bids or to waive any minor irregularity or technicality in the Bids received. Award shall be made to the lowest Responsible and Responsive Bidder(s) within the category chosen for basis of Award.
- **27.2.4.** The County reserves the right to Award to one or multiple Bidders at the discretion of the requesting authority and approval of the Procurement Management Director.

27.3. Contract:

27.3.1. The Awarded Bidder will be required to enter into the Contract with the County and will be required to perform the Work in accordance with the Contract terms and conditions. The draft Contract is attached to this Solicitation and incorporated herein by reference. The Contract may be viewed online at http://www.leegov.com/procurement/forms.

27.4. Records:

- **27.4.1.** Retention: The Bidder shall maintain such financial records and other records as may be prescribed by Lee County or by applicable federal and state laws, rules, and regulations. Unless otherwise stated in the Specifications, the Bidder shall retain these records for a period of ten (10) years after final payment, or until they are audited by Lee County, whichever event occurs first.
- 27.4.2. Right to Audit/Disclosure: These records shall be made available during the term of the Contract as well as the retention period. These records shall be made readily available to County personnel with reasonable notice and other persons in accordance with the Florida General Records Schedule. Awarded Bidder(s) are hereby informed of their requirement to comply with Chapter 119, F.S., specifically to:
 - **27.4.2.1.** Keep and maintain public records required by the County to perform the service.
 - **27.4.2.2.** Upon request from the County's custodian of public records, provide the County 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 or as otherwise provided by law.
 - **27.4.2.3.** Ensure that 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 Contract term and following completion of the Contract if the contractor does not transfer the records to the County.
 - 27.4.2.4. Upon completion of the Contract, transfer, at no cost, to the County all public records in possession of the Bidder or keep and maintain public records required by the County to perform the service. If the Bidder transfers all public records to the County upon completion of the Contract, the Bidder shall destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. If the Bidder keeps and maintains public records upon completion of the Contract, the Bidder shall meet all applicable requirements for retaining public records. All records stored electronically must be provided to the County, upon request from the County's custodian of public records, in a format that is compatible with the information technology systems of the County.
- 27.4.3. Public Records: IF THE BIDDER HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO THE BIDDER'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THE CONTRACT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT 239-533-2221, 2115 SECOND STREET, FORT MYERS, FL 33901, Email at PRRCustodian@leegov.com or Visit http://www.leegov.com/publicrecords.
- **27.4.4.** Ownership: It is understood and agreed that all documents, including detailed reports, plans, original tracings, specifications, and all data prepared or obtained by the successful Bidder in connection with its services hereunder, including any documents bearing the professional seal of the successful Bidder,

shall be delivered to, and become the property of Lee County, prior to final payment to the successful Bidder or the termination of the Contract. This includes any electronic versions, such as CAD or other computer aided drafting programs.

27.5. Termination:

- 27.5.1. MATERIAL BREACH A Contractor may be Terminated for Cause by the County, at the sole discretion of the Procurement Management Director, for failing to perform a contractual requirement or for a material breach of any term or condition. A material breach of a term or condition of the Agreement may include but is not limited to: 1. Contractor failure to perform services or deliver materials, supplies, or equipment by the date required or by an alternate date as mutually agreed in a written amendment to the Agreement; 2. Contractor failure to carry out any warranty or fails to perform or comply with any mandatory provision of the Agreement; 3. Contractor becomes insolvent or in an unsound financial condition so as to endanger performance hereunder; 4. Contractor becomes the subject of any proceeding under any law relating to bankruptcy, insolvency or reorganization, or relief from creditors and/or debtors that endangers the Contractor's proper performance hereunder; 5. Appointment of any receiver, trustee, or similar official for Contractor or any of the Contractor's property and such appointment endangers the Contractor's proper performance hereunder; 6. A determination that the Contractor is in violation of federal, state, or local laws or regulations and that such determination renders the Contractor unable to perform any aspect of the Agreement.
- 27.5.2. OPPORTUNITY TO CURE In the event that Contractor fails to perform a contractual requirement or materially breaches any term or condition, the County may issue a written cure notice. The Contractor may have a period of time in which to cure. The County is not required to allow the Contractor to cure defects if the opportunity for cure is not feasible as, determined solely within the discretion of the County. Time allowed for cure shall not diminish or eliminate Contractor's liability for damages, or otherwise affect any other remedies available against Contractor under the Agreement or by law. If the breach remains after Contractor has been provided the opportunity to cure, the County may do any one or more of the following: 1. Exercise any remedy provided by law; 2. Terminate this Agreement and any related contracts or portions thereof; 3. Procure replacements and impose damages as set forth elsewhere in this Agreement, if applicable; 4. Impose actual or liquidated damages; 5. Suspend or bar Contractor from receiving future solicitations or other opportunities; 6. Require Contractor to reimburse the County for any loss or additional expense incurred as a result of default or failure to satisfactorily perform the terms of the Agreement.
- 27.5.3. TERMINATION FOR CAUSE In the event the Procurement Management Director, in his/her sole discretion, determines that the Contractor has failed to comply with the conditions of this Agreement in a timely manner or is in material breach, the Procurement Management Director has the right to terminate this Agreement, in part or in whole. The Procurement Management Director shall notify the Contractor in writing of the need to take corrective action. If corrective action is not taken within thirty (30) calendar days or as otherwise specified by the Procurement Management Director, or if such corrective action is deemed by the County to be insufficient, the Agreement may be terminated. The County reserves the right to withhold further payments or prohibit the Contractor from incurring additional obligations of funds during investigation of the alleged breach and pending corrective action by the Contractor or a decision by the County to terminate the Agreement. In the event of termination, the County shall have the right to procure any replacement materials, supplies, services and/or equipment that are the subject of this Agreement on the open market. In addition, the Contractor shall be liable for damages as authorized by law including, but not limited to, any price difference between the original Agreement and the replacement or cover contract and all administrative costs directly related to the replacement contract, e.g., cost of the competitive bidding, mailing, advertising and staff time. If it is determined that: (1) the Contractor was not in material breach; or (2) failure to perform was outside of Contractor's or its subcontractor's control, fault or negligence, the termination shall be deemed to be a "Termination for Convenience." The rights and remedies of the County provided in this Agreement are not exclusive and are in addition to any other rights and remedies provided by law.
- 27.5.4. TERMINATION FOR CONVENIENCE Except as otherwise provided in this Agreement, the County, at the sole discretion of the Procurement Management Director, may terminate this

Agreement, in whole or in part by giving thirty (30) calendar days written notice beginning on the second day after mailing to the Contractor. If this Agreement is so terminated, the County shall be liable only for payment required under this Agreement for properly authorized services rendered, or materials, supplies and/or equipment delivered to and accepted by the County prior to the effective date of Agreement termination. The County shall have no other obligation whatsoever to the Contractor for such termination.

- **27.5.5.** The Procurement Management Director may immediately terminate any Award resulting from this Solicitation for emergency purposes, as defined by the Lee County Procurement Ordinance 22-06 & 23-21.
- 27.5.6. Any Bidder who has voluntarily withdrawn from a Solicitation without the County's mutual consent during the Contract period shall be barred from further County procurement for a **period of 180 calendar days**. The Bidder may apply to the Board for a waiver of this debarment. Such application for waiver of debarment must be coordinated with and processed by the Procurement Management Department.
- **27.5.7.** For a Contract over \$1,000,000, the County reserves the right to terminate an award of such contract upon information or belief of any of the following, when, applicable:
 - **27.5.7.1.** Bidder is found to have submitted a false certification as provided under § 287.135 (5), F.S.:
 - **27.5.7.2.** Bidder has been placed on the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List (§ 215.473, F.S.);
 - 27.5.7.3. Bidder has engaged in business operations in Cuba or Syria (§ 215.471, F.S.);
 - **27.5.7.4.** Bidder has been placed on the Scrutinized Companies that Boycott Israel List or is engaged in a boycott of Israel (§ 215.4725, F.S.).
 - **27.5.7.5.** The County reserves the right to review, on a case-by-case basis, and waive this stipulation if it is deemed to be advantageous to the County.

28. WAIVER OF CLAIMS

28.1. Once the Contract associated with this Solicitation expires, or final payment has been requested and made, the Awarded Bidder shall have waived any claims against the County concerning such Contract, except those previously made in writing and identified by the Awarded Bidder as unsettled at the time of the final application for payment.

29. LEE COUNTY PAYMENT PROCEDURES

29.1. Unless otherwise noted, all Awarded Bidders are requested to mail an original invoice to:

Lee County Finance Department

Post Office Box 2238

Fort Myers, FL 33902-2238

- **29.2.** All invoices shall be paid as directed by the Lee County payment procedure, unless otherwise stated in the Contract or detailed Specifications for this project.
- **29.3.** Lee County shall not be liable for requests for payment deriving from aid, assistance, or help by any individual, vendor, proposer, or Bidder for the preparation of these Specifications.

30. SAFETY DATA SHEETS (SDS) (as applicable)

30.1. It is the Bidder's responsibility to provide Lee County with Safety Data Sheets on Bid materials, as may apply to this procurement.

31. BOND/SURETY

- **31.1.** Bonding/Surety is required in accordance with the Lee County Procurement Ordinance 22-06 & 23-21.
- 31.2. Bid Bond/Security: The Procurement Management Department shall determine if a Bid Bond shall be required for any Competitive Procurement. Each Bidder shall submit <u>not less than five percent</u> (5%) of the proposed dollar amount (including applicable Alternates) as Bid Bond/Security. One

- <u>ORIGINAL</u> Bid Bond/Security shall be submitted to the County with each Bid submission. The Bid Bond/Security of the Bidder will be retained until the Bidder and the County have entered into the Contract, whereupon the Bid Bond/Security may be returned. The Bid Bond/Security of a Bidder whom the County believes to have a reasonable chance of receiving the Award may be retained by the County until the effective date of the Contract, whereupon any Bid Bonds/Securities furnished by a Bidder may be returned. The following types of Bid Security shall be accepted:
- **31.2.1.** A Certified Check or a Cashier's Check in the amount of not less than five percent (5%) of the proposed dollar amount. Any Certified Check or Cashier's Check submitted in lieu of a Bid Bond shall be drawn on a solvent bank or trust company, made payable to Lee County Board of County Commissioners and shall have all necessary documentary revenue stamps attached (if required by law); or
- **31.2.2.** A Bid Bond may be submitted on a Lee County paper Bid Bond Form. Such Bid Bond must be signed by all required parties, must be in the amount of not less than five percent (5%) of the proposed dollar amount (including Alternate(s) as applicable), and shall accompany each submission. The Bid Bond shall be issued by a surety authorized to do business and in good standing with the Florida Department of State.
- 31.3. Performance and Payment Bond: As further described in the Contract, the successful Bidder shall provide Performance and Payment Bonds in the amount of one hundred percent (100%) of the total Awarded Contract amount within seven (7) calendar days after notification by the County of the approval to award the Contract, the costs of which are to be paid by the successful Bidder. Such Performance and Payment Bonds shall be in the form prescribed by the Exhibits to the attached Contract. The Performance and Payment Bonds shall be underwritten by a surety authorized to do business in the State of Florida and otherwise acceptable to the County; provided, however, the surety shall be rated as "B" or better as reported in the most current Best's Key Rating Guide, published by A.M. Best Company, Inc. The successful Bidder shall record the Performance and Payment Bond with the Lee County Clerk of Courts, at its sole expense, and provide the original, recorded bond document to the County.
- **31.4.** A **Clean Irrevocable Letter of Credit or Cash Bond** may be accepted by the County in lieu of the Public Payment and Performance Bond.
- 31.5. Personal Checks are not acceptable to Lee County as a Bid Security.

32. LOCAL VENDOR PREFERENCE

- 32.1. The Procurement Management Department will adhere to the Lee County Ordinance No. 22-06 and as may be amended from time to time (the County's "Local Vendor Preference"). It shall be at the discretion of the County Manager or Designee whether to apply Local Vendor Preference to any particular Solicitation.
- 32.2. The County's Local Vendor Preference, as it relates to Bidding preferences for local Vendors, is not applicable to Solicitations or Contracts when Commodities and/or Services may be provided in the event of an Emergency.
- 32.3. The County's Local Vendor Preference shall not apply in any procurement for Commodities or Services if the use of the Local Vendor Preference is prohibited by the terms of a grant or funding agreement or other prevailing law or policy.

33. INSURANCE (AS APPLICABLE)

- 33.1. Insurance shall be provided by the Awarded Bidder pursuant to the Specifications provided herein and/or in the Contract. Prior to execution of the Contract, a certificate of insurance (COI) complying with the Solicitation Documents shall be provided by the Bidder.
- **33.2.** Insurance carriers providing coverage required herein shall be licensed to conduct business in the State of Florida and shall possess a current A.M. Best's Financial Strength Rating of "B or better."

End of Terms and Conditions Section

INSURANCE GUIDE



Lee County Insurance Requirements

Minimum Insurance Requirements: Risk Management in no way represents that the insurance required is sufficient or adequate to protect the vendors' interest or liabilities. The following are the required minimums the vendor must maintain throughout the duration of this contract. The County reserves the right to request additional documentation regarding insurance provided

a <u>Commercial General Liability</u> - Coverage shall apply to premises and/or operations, products and completed operations, independent contractors, contractual liability exposures with minimum limits of:

> \$1,000,000 per occurrence \$2,000,000 general aggregate \$1,000,000 products and completed operations \$1,000,000 personal and advertising injury

b. Business Auto Liability - The following Automobile Liability will be required and coverage shall apply to all owned, hired and non-owned vehicles use with minimum limits of:

\$1,000,000 combined single limit (CSL); or \$500,000 bodily injury per person \$1,000,000 bodily injury per accident \$500,000 property damage per accident

c. <u>Workers' Compensation</u> - Statutory benefits as defined by FS 440 encompassing all operations contemplated by this contract or agreement to apply to all owners, officers, and employees regardless of the number of employees. Workers Compensation exemptions may be accepted with written proof of the State of Florida's approval of such exemption. Employers' liability will have minimum limits of:

\$500,000 per accident \$500,000 disease limit \$500,000 disease – policy limit

*The required minimum limit of liability shown in a. and b. may be provided in the form of "Excess Insurance" or "Commercial Umbrella Policies." In which case, a "Following Form Endorsement" will be required on the "Excess Insurance Policy" or "Commercial Umbrella Policy."

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Lee County Insurance Requirements

Verification of Coverage:

- Coverage shall be in place prior to the commencement of any work and throughout the duration of the contract. A certificate of insurance will be provided to the Risk Manager for review and approval. The certificate shall provide for the following:
 - a. Under the Description of Operations, the following must read as listed:

"Lee County, a political subdivision and Charter County of the State of Florida, its agents, employees, and public officials are automatic additional insureds and includes an automatic waiver of subrogation with regard to general liability. The certificate holder is an additional insured on a primary and noncontributory basis with regards to general liability."

b. The certificate holder must read as follows:

Lee County, a political subdivision and Charter County of the State of Florida P.O. Box 398
Fort Myers, Florida 33902

Special Requirements:

- 1. An appropriate "Indemnification" clause shall be made a provision of the contract.
- 2. It is the responsibility of the general contractor to ensure that all subcontractors comply with all insurance requirements.

Grant/Funding Special Requirements

To the fullest extent provided by law, the Contractor/Consultant shall indemnify, defend, and hold harmless the County, and The State of Florida, Department of Transportation, and its officers, agents, and employees, against any actions, claims or damages arising out of, relating to, or resulting from negligent or wrongful act(s) of Contractor/Consultant, or any of its officers, agents, or employees, acting within the scope of their office or employment, in connection with the rights granted to or exercised by Contractor/Consultant hereunder, to the extent and within the limitations of Section 768.28, Florida Statutes.

The foregoing indemnification shall not constitute a waiver of sovereign immunity beyond the limits set forth in Florida Statutes, Section 768.28. Nor shall the same be construed to constitute agreement by Contractor/Consultant to indemnify County for the negligent acts or omissions of County, its officers, agents, or employees, or third parties. Nor shall the same be construed to constitute agreement by Contractor/Consultant to indemnify the Department for the negligent acts or omissions of the Department, its officers, agents, or employees, or third parties. This indemnification shall survive the termination of this Agreement.

In addition to the County, the State of Florida, Department of Transportation shall also be listed as additional insured and certificate holder.

The additional certificate holder shall read:

State of Florida Department of Transportation 605 Suwannee Street Tallahassee, Florida 32399-0450

End of Insurance Guide Section

SPECIAL CONDITIONS

These are conditions that are in relation to this Solicitation only and have not been included in the County's standard Terms and Conditions or the Scope of Work and Specifications.

1. TERM

1.1. From the Notice to Proceed or the Purchase Order date, whichever applies, the timeframe for completion of all Work to Final Acceptance shall be **120 CALENDAR DAYS**.

2. LIQUIDATED DAMAGES

2.1. In accordance with the terms set forth in the Agreement, should the Contractor fail to achieve Final Acceptance of the Work within the time period stated in the Agreement, the County shall be entitled to assess the amount set forth in Article 8-10 of Exhibit E Standard Specifications, as Liquidated Damages, but not as a penalty, for each calendar day thereafter until Final Acceptance is achieved.

3. BASIS OF AWARD

3.1. The basis of award shall be determined by the lowest *Project Total* of the most responsive, responsible, and qualified Contractor meeting all bid specifications.

4. STATUTORY COMPLIANCE

4.1. Lee County and the awarded bidder confirm that, upon execution of the Agreement, the parties will comply with the requirements for timely payment for purchases of construction services, as defined by Section 218.735, Florida Statutes.

End of Special Conditions Section

SCOPE OF WORK AND SPECIFICATIONS

1. GENERAL SCOPE OF WORK SUMMARY

- 1.1. Lee County Board of County Commissioners seeks to contract with a qualified Contractor to repair and replace several electrical, mechanical and structural components of the Matlacha Drawbridge.
- 1.2. All work performed shall follow all Federal, State, Local, OSHA and department mandated regulations and specifications for associated work.
- 1.3. Contractor(s) shall review all drawings detailing work to be performed under this solicitation.
- 1.4. The scope of work is further defined and detailed within Exhibits E-O found attached to the draft contract agreement affixed to this solicitation package as well as within the plans associated with this project. Contractor is responsible for reviewing all documentation associated with this project.

2. TECHNICAL SPECIFICATIONS

- 2.1 The specifications within this Solicitation are taken from what is/was on-site before Hurricane Ian. This shall be used as establishing a standard of quality and shall not be construed as limiting competition. Other brands that are similar or equivalent and can work with current equipment are approved to be used for all of the requested items. Equivalent items shall meet or exceed the requirements set within these specifications for the County to meet all State and Local rules, regulations, and requirements.
- 2.2 If a Contractor has a question regarding if their product can meet these requirements or work with current equipment, they shall email the procurement analyst no later than ten (10) days prior to the bid opening date with the product information and any questions they may have. Answers will then be issued in the form of a written addendum, following addendum guidelines within this solicitation.
- 2.3 If a Contractor has similar or equivalent equipment and do not have any questions of the requirements or capabilities to work with current on-site equipment, they should submit their bid pricing based on those items. Final approval on all items will be determined between the County and Contractor after Notice to Proceed is issued.

3. <u>ATTACHMENTS</u>

- 3.1 Attachment A Map and Construction Documents
- 3.2 Attachment B Detailed Damage Inspection Report
- 3.3 Attachment C Electrical and Mechanical Component List

End of Scope of Work and Specifications Section

SUPPLEMENTAL INFORMATION

These are provisions that are in relation to this solicitation only and have not been included in the County's standard Terms and Conditions or the Scope of Work. Failure to abide by any of the below provisions may serve as grounds for disqualification for award of this contract to the firm. The below provisions and those found herein pertaining to the grant funding of this project apply to any participating Contractor and shall be further understood to be incorporated into any subsequent agreement/contract executed between the Contractor and the County. It shall be further understood that these provisions shall be incorporated into any related agreements/contracts executed between the prime Contractor and any sub-contractors.

1. LAP DIVISION I SPECIFICATIONS

1.1 Following federal funding requirements, this project shall follow LAP Division I Specifications projects provided herein. Such specifications and any applicable exemptions or amendments have been incorporated and made part of this solicitation.

2. CURRENT CAPACITY

2.1 Contractor shall ensure and certify their Firm has the financial capacity to complete the project as described herein. Certification form is contained within this solicitation package and shall be completed in its entirety.

3. CONTRACTOR PURCHASED EQUIPMENT FOR STATE OR LOCAL OWNERSHIP

3.1 The purchase of equipment for state or local ownership is not allowed as part of this contract.

4. DISADVANTAGE BUSINESS ENTERPRISE (DBE)

- 4.1 The Florida Department of Transportation began its DBE race neutral program January 1, 2000. Contract specific goals are not placed on Federal/State contracts; however, the Department has an overall 10.54% DBE goal it must achieve.
- 4.2 Contractors shall follow DBE requirements as described herein through FDOT's standard specification section 7-24.
- 4.3 FDOT must maintain a statewide database of all firms that are participating or attempting to participate in FHWA-assisted contracts. The list must include all firms that bid on prime contracts or bid or quote subcontracts on FHWA-assisted projects, including both DBEs and non-DBEs. The Bid Opportunity List is used to record Bidders' information for all subcontractors or sub consultants who submitted bids to primes. All participating Bidders must enter their bid opportunity information in the Equal Opportunity Compliance (EOC) System within 3 business days of submission of the bid or proposal for all subcontractors or sub-consultants who quoted bids for FHWA-assisted projects.

5. DOMESTIC-OWNED CONTRACTOR LIMITATIONS

5.1 This request for bids or proposal shall not be limited to domestic-owned contractors and may not include or incorporate the Florida orders on business with Syria, Cuba, Iran, Sudan, and Israel. Any statements found that express the contrary shall be considered void and not applicable to the project described herein.

6. INCENTIVE/DISINCENTIVE CLAUSES

6.1 Incentive and/or Disincentive clauses are not applicable to this project and subsequent contract.

7. INDIAN PREFERENCE ON FEDERAL-AID PROJECTS (LABOR & EMPLOYMENT)

7.1 Indian preference on federal-aid projects is not applicable to this project and subsequent contract.

8. LOBBYING

8.1 General: Participating Contractors shall adhere to the Anti-Lobbying clause as provided herein. Following this clause, the participating Contractors are hereby notified they shall not have any contact, communicate with or discuss any matter relating in any way to the solicitation with any Commissioner, Evaluation Review Committee, agent or employee of the County other than the Procurement Management Director or their designee.

8.2 Federal-Aid Contracts:

- 8.3 By participating in this solicitation and completion of affixed affidavit the Contractor certifies that to the best their knowledge:
 - (1) No federal appropriated funds have been paid or will be paid, by or on behalf of the Contractor, to any person for influencing or attempting to influence an officer or employee of any federal agency, a Member of Congress, an officer of employee of Congress, or an employee of a Member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.
 - (2) If any funds other than federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this federal contract, grant, loan, or cooperative agreement, the Contractor shall complete and submit Standard
- 8.4 Form-LLL, "Disclosure of Lobbying Activities", in accordance with its instructions
- 8.5 Submission of the certification found herein is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.
- 8.6 The Contractor also agrees by submitting their proposal that they shall require that the language of the applicable certification found herein be included in all lower tier subcontracts, which exceed \$100,000 and that all such subrecipients shall certify and disclose accordingly.

9. LOCAL VENDOR PREFERENCE EXCLUSION

- 9.1 Local Vendor Preference Ordinance has been waived for this solicitation and any and all references contained herein are not applicable to this solicitation and subsequent contract.
- 9.2 The County's Local Vendor Preference, as it relates to Bidding preferences for local/state hiring is not applicable to this solicitation.

10. NON-COLLUSION

10.1 Contractor shall declare, through completion of the declaration form found herein and participation with this solicitation that the Contractor has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action, in restraint of free competitive bidding in connection with its bid.

11. OWNER FORCE ACCOUNT/COST-EFFECTIVE JUSTIFICATION

11.1 Owner Force Account / Cost-Effective Justification is not applicable or permissible to this project and subsequent contract.

12. PATENTED/PROPRIETARY MATERIALS

12.1 Patented/Proprietary Materials are applicable to this project. FDOT Procedure No. 630 020 005 has been followed with Florida Department of Transportation approval to allow for the specified product usage as described in form no. 630 020 07 and specifications contained herein. See approved Proprietary Product Certification Dated: February 2, 2017, issued by FDOT District 1.

13. PREQUALIFICATION

13.1 Florida Law (Chapter 337.14 F.S.) And Rules of the State of Florida, Department of Transportation, (Chapter 14-22, F.A.C.) require contractors to be prequalified with the Florida Department of Transportation in order to

bid for the performance of road, bridge, or public transportation construction contracts greater than \$250,000.00. Contractors shall be prequalified as required by FDOT and as stated herein.

14. PREVAILING MINIMUM WAGE

14.1.Payment of predetermined minimum wages applies. The U.S. Department of Labor (USDOL) Wage Rates applicable to this contract are stated herein and applicable General Decisions(s) (Wage Tables) are obtainable through the Department's Office of Construction website.

15. PUBLIC AGENCIES IN COMPETITION WITH THE PRIVATE SECTOR

15.1. The County does not allow other Public Agencies to compete with or bid on construction projects against the private sector.

16. PUBLICY-OWNED EQUIPMENT

16.1. The County does not allow publicly owned equipment in contract.

17. STATE (FLORIDA OR OTHER) PRODUCED MATERIALS

17.1. The County affirms that preference is not given to Contractors who purchase materials from Florida or any other specifically designated state.

18. STATE/LOCAL OWNED/FURNISHED/DESIGNATED MATERIALS

18.1.All materials required for this project shall be furnished by the Contractor. Materials shall not be furnished by the County nor purchased through way of Direct Material Purchase Order.

19. DEBARMENT & SUSPENSION

- 19.1. By participating in this solicitation and completion of affixed affidavit the Contractor certifies that:
 - Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;
 - O Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
 - Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and
 - Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State, or local) terminated for cause or default.
 - Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.
 - o If, at any point during the term of this contract, the Contractor or any principals thereof are found to be on a federal or state debarment list, or if federal or state debarment action is initiated against the contractor or their principals during this time period, this contract shall be immediately rendered null and void.
 - If debarment action has been taken against any subcontractor, the Contractor shall provide an alternative subcontractor within 10 days of notification. The debarred subcontractor may not work on the project.

20. CONTRACT TERMINATION

- 20.1.MATERIAL BREACH A Contractor may be Terminated for Cause by the County, at the sole discretion of the Procurement Management Director, for failing to perform a contractual requirement or for a material breach of any term or condition. A material breach of a term or condition of the Agreement may include but is not limited to: 1. Contractor failure to perform services or deliver materials, supplies, or equipment by the date required or by an alternate date as mutually agreed in a written amendment to the Agreement; 2. Contractor failure to carry out any warranty or fails to perform or comply with any mandatory provision of the Agreement; 3. Contractor becomes insolvent or in an unsound financial condition so as to endanger performance hereunder; 4. Contractor becomes the subject of any proceeding under any law relating to bankruptcy, insolvency or reorganization, or relief from creditors and/or debtors that endangers the Contractor's proper performance hereunder; 5. Appointment of any receiver, trustee, or similar official for Contractor or any of the Contractor's property and such appointment endangers the Contractor's proper performance hereunder; 6. A determination that the Contractor is in violation of federal, state, or local laws or regulations and that such determination renders the Contractor unable to perform any aspect of the Agreement.
- 20.2.OPPORTUNITY TO CURE In the event that Contractor fails to perform a contractual requirement or materially breaches any term or condition, the County may issue a written cure notice. The Contractor may have a period of time in which to cure. The County is not required to allow the Contractor to cure defects if the opportunity for cure is not feasible as, determined solely within the discretion of the County. Time allowed for cure shall not diminish or eliminate Contractor's liability for damages, or otherwise affect any other remedies available against Contractor under the Agreement or by law. If the breach remains after Contractor has been provided the opportunity to cure, the County may do any one or more of the following: 1. Exercise any remedy provided by law; 2. Terminate this Agreement and any related contracts or portions thereof; 3. Procure replacements and impose damages as set forth elsewhere in this Agreement, if applicable; 4. Impose actual or liquidated damages; 5. Suspend or bar Contractor from receiving future solicitations or other opportunities; 6. Require Contractor to reimburse the County for any loss or additional expense incurred as a result of default or failure to satisfactorily perform the terms of the Agreement..
- 20.3. TERMINATION FOR CAUSE In the event the Procurement Management Director, in his/her sole discretion, determines that the Contractor has failed to comply with the conditions of this Agreement in a timely manner or is in material breach, the Procurement Management Director has the right to terminate this Agreement, in part or in whole. The Procurement Management Director shall notify the Contractor in writing of the need to take corrective action. If corrective action is not taken within thirty (30) calendar days or as otherwise specified by the Procurement Management Director, or if such corrective action is deemed by the County to be insufficient, the Agreement may be terminated. The County reserves the right to further payments or prohibit the Contractor from incurring additional obligations of funds during investigation of the alleged breach and pending corrective action by the Contractor or a decision by the County to terminate the Agreement. In the event of termination, the County shall have the right to procure any replacement materials, supplies, services and/or equipment that are the subject of this Agreement on the open market. In addition, the Contractor shall be liable for damages as authorized by law including, but not limited to, any price difference between the original Agreement and the replacement or cover contract and all administrative costs directly related to the replacement contract, e.g., cost of the competitive bidding, mailing, advertising and staff time. If it is determined that: (1) the Contractor was not in material breach; or (2) failure to perform was outside of Contractor's or its subcontractor's control, fault or negligence, the termination shall be deemed to be a "Termination for Convenience." The rights and remedies of the County provided in this Agreement are not exclusive and are in addition to any other rights and remedies provided by law.
- 20.4.TERMINATION FOR CONVENIENCE Except as otherwise provided in this Agreement, the County, at the sole discretion of the Procurement Management Director, may terminate this Agreement, in whole or in part by giving thirty (30) calendar days written notice beginning on the second day after mailing to the Contractor.

If this Agreement is so terminated, the County shall be liable only for payment required under this Agreement for properly authorized services rendered, or materials, supplies and/or equipment delivered to and accepted by the County prior to the effective date of Agreement termination. The County shall have no other obligation whatsoever to the Contractor for such termination.

21. WARRANTY CLAUSES

21.1. Warranty provisions shall be for a specific construction product of feature. Items of maintenance are not eligible under federal projects and shall thus not be covered. General condition warranties for an entire project are prohibited under this contract. Transfer of product warranties is allowed under this contract.

22. INSPECTOR GENERAL

22.1. Pursuant to FL § 20.55(5), Consultant shall cooperate and comply with the inspector general in any investigation, audit, inspection, review, or hearing pursuant to FL § 20.55.

23. CLEAN AIR ACT & FEDERAL WATER POLLUTION CONTROL ACT

23.1.The successful firm awarded a contract in excess of \$150,000 agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C 7401-7671q) and the Federal Water Pollution Control Act as amended (33 U.S.C 1251-1387). Violations shall be reported to the Federal awarding agency and the Regional Office of the Environmental Protection Agency (EPA).

24. CONFLICT OF INTEREST

24.1.In addition to other Conflict of Interest terms contained herein, no member, office or employee of the County during his tenure or for 2 years thereafter shall have any interest, direct or indirect, in the Contract or the proceeds thereof.

25. CHANGES

- 25.1. Changes to any federal grant or federally funded cooperative agreement shall be in writing, executed by change order and the costs of any change, modification, change order, or constructive change must be allowable, allocable, and within the original scope of the federal grant or federal cooperative agreement. Changes should be reasonable and necessary for the completion of the original project scope. Any changes must be permissible under state, local and federal laws. Any change recommended and accepted by both parties, in writing, will not be considered a contract breach. Modifications to alter the method, price, or schedule of the work for any reason shall be completed following the terms and provisions of the associated contract documents. No changes to the contract documents or the performance provided shall be made unless the same is in writing and signed by both the CONSULTANT/CONTRACTOR/VENDOR and the County.
- 25.2. Any and all changes shall be in writing, executed by change order, and reviewed and approved by FDOT. FDOT approval is required for all changes. Changes shall be submitted to the County Project Manager who will submit for FDOT approval.

End of Supplemental Information Section

FEDERAL PROCUREMENT SUPPLEMENTAL CLAUSES TO INCLUDE APPENDIX II

NOTICE TO CONSULTANT/CONTRACTOR/VENDOR REGARDING FEDERAL FUNDING

When property or services are procured using funds derived from a Federal grant or Agreement whether direct to the County or "pass-through" from another entity, the County is required to and will follow the Federal procurement standards in the "Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards", 2 C.F.R. Part 200, Sections 200.318 through 200.327.

CONTRACTOR, further referred to as CONSULTANT/CONTRACTOR/VENDOR within this section, shall work with the County under this Agreement to assure that it will comply with the following statutes and regulations to the extent applicable:

- (1) 2 CFR, Part 200 Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards; Appendix II
- (2) The Robert T. Stafford Disaster Relief and Emergency Assistance Act, Public Law 93-288, as amended, 42 U.S.C. 5121 et seq., and Related Authorities
- (3) Sections 1361(A) of the National Flood Insurance Act of 1968, 42 U.S.C. 4104c, as amended by the National Flood Insurance Reform Act of 1994, Public Law 103-325 and the Bunning-Bereuter-Blumenauer Flood Insurance Reform Act of 2004, Public Law 108-264
- (4) 31 CFR Part 25 Rules and Procedures for Funds Transfers

Contract Cost and Price: For every procurement in excess of the Simplified Acquisition Threshold, including contract modifications, the County shall perform a cost or price analysis in connection with every procurement subject to Federal procurement guidelines, which shall include an independent estimate of cost prior to issuing bids or proposals. For proposals where price is not considered in the award, profit shall be negotiated as a separate element of the price. In determining whether profit is fair and reasonable, the County shall consider the complexity of work, CONSULTANT/CONTRACTOR/VENDOR, the risk to be borne by the CONSULTANTS/CONTRACTORS/VENDORS investment, the amount of subcontracting necessary, the quality of the CONSULTANTS/CONTRACTORS/VENDOR's record and past performance, and industry profit rates for the surrounding geographical area. "Cost Plus Percentage" methods for determining profit may not be used.

FEDERAL CLAUSES

1. EQUAL EMPLOYMENT OPPORTUNITY:

- 1.1. During the performance of this contract, the CONSULTANT/CONTRACTOR/VENDOR agrees as follows:
 - 1.1.1.The CONSULTANT/CONTRACTOR/VENDOR will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity, or national origin. The CONSULTANT/CONTRACTOR/VENDOR will take affirmative action to ensure that applicants are employed and that employees are treated during employment, without regard to their race, color, religion, sex, sexual orientation, gender identity, or national origin. Such action shall include, but not be limited to the following: Employment, upgrading, demotion, transfer, recruitment, or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; selection for training. including apprenticeship. CONSULTANT/CONTRACTOR/VENDOR agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the contracting officer setting forth the provisions of this nondiscrimination clause.
 - 1.1.2. The CONSULTANT/CONTRACTOR/VENDOR will, in all solicitations or advertisements for employees placed by or on behalf of the CONSULTANT/CONTRACTOR/VENDOR, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.

- 1.1.3. The CONSULTANT/CONTRACTOR/VENDOR will not discharge or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This provision shall not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee's essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an employer, investigation conducted by the or is consistent with the CONSULTANT/CONTRACTOR/VENDOR's legal duty to furnish information.
- 1.1.4.The CONSULTANT/CONTRACTOR/VENDOR will send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, a notice to be provided by the agency contracting officer, advising the labor union or workers' representative of the CONSULTANT/CONTRACTOR/VENDOR's commitments under section 202 of Executive Order 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- 1.1.5. The CONSULTANT/CONTRACTOR/VENDOR will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
- 1.1.6. The CONSULTANT/CONTRACTOR/VENDOR will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the contracting agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.
- 1.1.7.In the event of the CONSULTANT/CONTRACTOR/VENDOR's non-compliance with the nondiscrimination clauses of this contract or with any of such rules, regulations, or orders, this contract may be canceled, terminated or suspended in whole or in part and the CONSULTANT/CONTRACTOR/VENDOR may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.
- 1.1.8. The CONSULTANT/CONTRACTOR/VENDOR will include the provisions of paragraphs (a) through (h) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, provisions will 1965. so that such binding upon each CONSULTANT/CONTRACTOR/VENDOR. The CONSULTANT/CONTRACTOR/VENDOR will take such action with respect to any subcontract or purchase order as may be directed by the Secretary of Labor as a means of enforcing such provisions including sanctions for noncompliance: Provided, however, that in the event the CONSULTANT/CONTRACTOR/VENDOR becomes involved in, or is threatened with, litigation with a sub-CONSULTANT/CONTRACTOR/VENDOR as a result of such direction, the CONSULTANT/CONTRACTOR/VENDOR may request the United States to enter into such litigation to protect the interests of the United States.

2. MAINTENANCE OF RECORDS:

2.1. The CONSULTANT/CONTRACTOR/VENDOR will keep and maintain adequate records and supporting documentation applicable to all of the services, work, information, expense, costs, invoices, and materials provided and performed pursuant to the requirements of this agreement. Said records and documentation will

- be retained by the CONSULTANT/CONTRACTOR/VENDOR for a minimum of five (5) years from the date of termination of this agreement, or for such period is required by law.
- 2.2. CONSULTANT/CONTRACTOR/VENDOR shall provide when requested, access by the County, Federal granting agency, the Comptroller General of the United States, or any of their duly authorized representatives to any books, documents, papers, and records of the CONSULTANT/CONTRACTOR/VENDOR which are directly pertinent to this contract for the purpose of making audit, examination, excerpts, and transcriptions.
- 2.3. CONSULTANT/CONTRACTOR/VENDOR agrees to permit any of the foregoing parties to reproduce by any means whatsoever or to copy excerpts and transcriptions as reasonably needed.
- 2.4. CONSULTANT/CONTRACTOR/VENDOR agrees to provide the GRANT AGENCY Administrator or his authorized representatives access to construction or other work sites pertaining to the work being completed under the contract.
- 2.5. CONSULTANT/CONTRACTOR/VENDOR shall retain all records associated with this solicitation and any agreements that are created in response to the solicitation for a period of no less than five (5) years after final payments and all other pending matters are closed.
- 2.6. The County and its authorized agents shall, with reasonable prior notice, have the right to audit, inspect and copy all such records and documentation as often as the County deems necessary during the period of this agreement, and during the period as outlined in the paragraphs above; provided, however, such activities shall be conducted only during normal business hours of the CONSULTANT/CONTRACTOR/VENDOR and at the expense of the County.

3. DHS SEAL, LOGO, AND FLAGS:

3.1. The CONSULTANT/CONTRACTOR/VENDOR shall not use the DHS seal(s), logos, crests, or reproductions of flags or likenesses of DHS agency officials without specific GRANT AGENCY preapproval. The CONSULTANT/CONTRACTOR/VENDOR shall include this provision in any subcontracts.

4. LOCAL VENDOR PREFERENCE EXCLUSION:

4.1. Local Vendor Preference Ordinance has been waived for this service/purchase request and any and all references contained herein are non-applicable to this request and subsequent contract and/or purchase order(s).

5. COMPLIANCE WITH FEDERAL LAW, REGULATIONS, and EXECUTIVE ORDERS:

5.1. This is an acknowledgment that GRANT AGENCY financial assistance will be used to fund all or a portion of the contract. The CONSULTANT/CONTRACTOR/VENDOR will comply with all applicable federal law, regulations, executive orders, GRANT AGENCY policies, procedures, and directives.

6. NO OBLIGATION BY THE FEDERAL GOVERNMENT:

6.1. The Federal Government is not a party to this solicitation and/or contract and is not subject to any obligations or liabilities to the non- Federal entity, CONSULTANT/CONTRACTOR/VENDOR, or any other party pertaining to any matter resulting from the Solicitation.

7. FRAUD and FALSE OR FRAUDULENT OR RELATED ACTS:

7.1. The CONSULTANT/CONTRACTOR/VENDOR acknowledges that 31 U.S.C. Chapter 38 (Administrative Remedies for False Claims and Statements) applies to the CONSULTANT/CONTRACTOR/VENDORs actions pertaining to this solicitation and/or contract.

8. SUBCONTRACTS:

8.1. The selected firm must require compliance with all federal requirements of all sub-CONSULTANT/CONTRACTOR/VENDORs performing work for Prime CONSULTANT/CONTRACTOR/VENDOR under this Agreement, by including these federal requirements in all contracts with sub-CONSULTANT/CONTRACTOR/VENDORs.

9. CONFLICT OF INTEREST:

9.1. No employee, officer, or agent may participate in the selection, award, or administration of a contract supported by a Federal award if he or she has a real or apparent conflict of interest. Such a conflict of interest would arise when the employee, officers, or agent, any member of his or her immediate family, his or her partner, or an organization that employs or is about to employ any of the parties indicated herein, has a financial or other interest in or a tangible personal benefit from a firm considered for a contract. The officers, employees, and agents of the non-Federal entity must neither solicit nor accept gratuities, favors, or anything of monetary value from CONSULTANT/CONTRACTOR/VENDORs or parties to subcontracts.

10. EMPLOYMENT ELIGIBILITY VERIFICATION SYSTEM (E-VERIFY):

- 10.1. Statutes and Executive Orders require employers to abide by the Immigration laws of the United States and to employ only individuals who are eligible to work in the United States. The Employment Eligibility Verification System (E-Verify) operated by the U.S. Department of Homeland Security (DHS) in partnership with the Social Security Administration (SSA) to provides an internet-based means of verifying the employment eligibility of workers in the United States; it is not a substitute for any other employment eligibility verification requirements.
- 10.2. Sub-CONSULTANT/CONTRACTOR/VENDOR requirement: Vendors shall require all subcontracted vendors to flow down the requirement to use E-Verify to sub-CONSULTANT/CONTRACTOR/VENDORs.
- 10.3. It shall be the vendor's responsibility to familiarize themselves with all rules and regulations governing this program.
- 10.4. For additional information regarding the Employment Eligibility Verification System (E-Verify) program visit the following website: http://www.dhs.gov/E-Verify.

11. ENERGY POLICY AND CONSERVATION ACT:

11.1. CONSULTANT/CONTRACTOR/VENDOR must follow any mandatory standards and policies relating to energy efficiency which are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act (42 U.S.C. 6201).

12. SMALL AND MINORITY BUSINESS, WOMEN'S BUSINESS ENTERPRISES, AND LABOR SURPLUS AREA FIRMS:

- 12.1. If subcontracts are to be let, the prime CONSULTANT/CONTRACTOR/VENDOR is required to take all necessary steps identified in 2 C.F.R. § 200.321(b)(1)-(5) to ensure that small and minority businesses, women's business enterprises, and labor surplus area firms are used when possible.
- a) Place qualified small and minority businesses and women's business enterprises on solicitation lists.
- b) Assuring that small and minority businesses, and women's business enterprises <u>are solicited</u> whenever they are potential sources.

- c) Using the services and assistance, as appropriate, of such organizations as the <u>Small Business Administration</u> and the Minority Business Development Agency of the Department of Commerce.
- d) Dividing total requirements, when economically feasible, into <u>smaller tasks or quantities</u> to permit maximum participation by small and minority businesses, and women's business enterprises.
- e) Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority businesses, and women's business enterprises.

13. DOMESTIC PREFERENCES FOR PROCUREMENT (2 C.F.R. § 200.322):

- 13.1. As appropriate and to the greatest extent consistent with law, the CONSULTANT/CONTRACTOR/VENDOR should, to the greatest extent practicable, provide a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States (including but not limited to iron, aluminum, steel, cement, and other manufactured products). The requirements of this section must be included in all sub-awards including all contracts and purchase orders for work or products under this award. 2 C.F.R. § 200.322 also provides specific definitions for "Produced in the United States" and "manufactured products" that states should review.
 - 13.1.1. Produced in the United States means, for iron and steel products, that all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States.
 - 13.1.2. Manufactured product means items and construction materials composed in whole or in part of non-ferrous metals such as aluminum; plastics and polymer-based products such as polyvinyl chloride pipe; aggregates such as concrete; glass, including optical fiber; and lumber.

14. PROHIBITION ON CONTRACTING FOR COVERED TELECOMMUNICATIONS OR SERVICES (2 C.F.R. § 200.216):

- 14.1 The Contractor shall comply with 2 C.F.R. § 200.216, Prohibition on Contracting for Covered Telecommunications Equipment or Services:
 - (a) Definitions. As used in this clause, the terms backhaul; covered foreign country; covered telecommunications equipment or services; interconnection arrangements; roaming; substantial or essential component; and telecommunications equipment or services have the meaning as defined in FEMA Policy 405-143-1, Prohibitions on Expending FEMA Award Funds for Covered Telecommunications Equipment or Services (Interim), as used in this clause—
 - (b) Prohibitions.
 - (1) Section 889(b) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019, Pub. L. No. 115-232, and 2 C.F.R. § 200.216 prohibit the head of an executive agency on or after Aug.13, 2020, from obligating or expending grant, cooperative agreement, loan, or loan guarantee funds on certain telecommunications products or from certain entities for national security reasons.
 - (2) Unless an exception in paragraph (c) of this clause applies, the contractor and its subcontractors may not use grant, cooperative agreement, loan, or loan guarantee funds from the Federal Emergency Management Agency to:
 - (i) Procure or obtain any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology of any system;
 - (ii) Enter into, extend, or renew a contract to procure or obtain any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology of any system;

- (iii) Enter into, extend, or renew contracts with entities that use covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system; or
- (iv) Provide, as part of its performance of this contract, subcontract, or other contractual instrument, any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system.

(c) Exceptions.

- (1) This clause does not prohibit contractors from providing—
 - (i) A service that connects to the facilities of a third party, such as backhaul, roaming, or interconnection arrangements; or
 - (ii) Telecommunications equipment that cannot route or redirect user data traffic or permit visibility into any user data or packets that such equipment transmits or otherwise handles.
- (2) By necessary implication and regulation, the prohibitions also do not apply to:
 - (i) Covered telecommunications equipment or services that:
 - i. Are not used as a substantial or essential component of any system; and
 - ii. Are not used as critical technology of any system.
 - (ii) Other telecommunications equipment or services that are not considered covered telecommunications equipment or services.

(d) Reporting requirement.

- (1) In the event the contractor identifies covered telecommunications equipment or services used as a substantial or essential component of any system, or as critical technology as part of any system, during contract performance, or the contractor is notified of such by a subcontractor at any tier or by any other source, the contractor shall report the information in paragraph (d)(2) of this clause to the recipient or sub-recipient unless elsewhere in this contract are established procedures for reporting the information.
- (2) The Contractor shall report the following information pursuant to paragraph (d)(1) of this clause:
 - (i) Within one business day from the date of such identification or notification: The contract number; the order number(s), if applicable; supplier name; supplier unique entity identifier (if known); supplier Commercial and Government Entity (CAGE) code (if known); brand; model number (original equipment manufacturer number, manufacturer part number, or wholesaler number); item description; and any readily available information about mitigation actions undertaken or recommended.
 - (ii) Within 10 business days of submitting the information in paragraph (d)(2)(i) of this clause: Any further available information about mitigation actions undertaken or recommended. In addition, the contractor shall describe the efforts it undertook to prevent the use or submission of covered telecommunications equipment or services and any additional efforts that will be incorporated to prevent future use or submission of covered telecommunications equipment or services.
- (e) Subcontracts. The Contractor shall insert the substance of this clause, including this paragraph (e), in all subcontracts and other contractual instruments."

15. TERMINATION FOR CAUSE AND/OR CONVENIENCE (for projects greater than \$10,000):

15.1. MATERIAL BREACH A Contractor may be Terminated for Cause by the County, at the sole discretion of the Procurement Management Director, for failing to perform a contractual requirement or for a material breach of any term or condition. A material breach of a term or condition of the Agreement may include but is not limited to: 1. Contractor failure to perform services or deliver materials, supplies, or equipment by the date required or by an alternate date as mutually agreed in a written amendment to the Agreement; 2. Contractor failure to carry out any warranty or fails to perform or comply with any mandatory provision of the Agreement; 3. Contractor becomes insolvent or in an unsound financial condition so as to endanger performance hereunder; 4. Contractor becomes the subject of any proceeding under any law relating to bankruptcy, insolvency or reorganization, or relief from creditors and/or debtors that endangers the Contractor's proper performance hereunder; 5. Appointment of any receiver, trustee, or similar official for

Contractor or any of the Contractor's property and such appointment endangers the Contractor's proper performance hereunder; 6. A determination that the Contractor is in violation of federal, state, or local laws or regulations and that such determination renders the Contractor unable to perform any aspect of the Agreement.

- 15.2. OPPORTUNITY TO CURE In the event that Contractor fails to perform a contractual requirement or materially breaches any term or condition, the County may issue a written cure notice. The Contractor may have a period of time in which to cure. The County is not required to allow the Contractor to cure defects if the opportunity for cure is not feasible as, determined solely within the discretion of the County. Time allowed for cure shall not diminish or eliminate Contractor's liability for damages, or otherwise affect any other remedies available against Contractor under the Agreement or by law. If the breach remains after Contractor has been provided the opportunity to cure, the County may do any one or more of the following: 1. Exercise any remedy provided by law; 2. Terminate this Agreement and any related contracts or portions thereof; 3. Procure replacements and impose damages as set forth elsewhere in this Agreement, if applicable; 4. Impose actual or liquidated damages; 5. Suspend or bar Contractor from receiving future solicitations or other opportunities; 6. Require Contractor to reimburse the County for any loss or additional expense incurred as a result of default or failure to satisfactorily perform the terms of the Agreement.
- 15.3. TERMINATION FOR CAUSE In the event the Procurement Management Director, in his/her sole discretion, determines that the Contractor has failed to comply with the conditions of this Agreement in a timely manner or is in material breach, the Procurement Management Director has the right to terminate this Agreement, in part or in whole. The Procurement Management Director shall notify the Contractor in writing of the need to take corrective action. If corrective action is not taken within thirty (30) calendar days or as otherwise specified by the Procurement Management Director, or if such corrective action is deemed by the County to be insufficient, the Agreement may be terminated. The County reserves the right to withhold further payments or prohibit the Contractor from incurring additional obligations of funds during investigation of the alleged breach and pending corrective action by the Contractor or a decision by the County to terminate the Agreement. In the event of termination, the County shall have the right to procure any replacement materials, supplies, services and/or equipment that are the subject of this Agreement on the open market. In addition, the Contractor shall be liable for damages as authorized by law including, but not limited to, any price difference between the original Agreement and the replacement or cover contract and all administrative costs directly related to the replacement contract, e.g., cost of the competitive bidding, mailing, advertising and staff time. If it is determined that: (1) the Contractor was not in material breach; or (2) failure to perform was outside of Contractor's or its subcontractor's control, fault or negligence, the termination shall be deemed to be a "Termination for Convenience." The rights and remedies of the County provided in this Agreement are not exclusive and are in addition to any other rights and remedies provided by law.
- 15.4. TERMINATION FOR CONVENIENCE Except as otherwise provided in this Agreement, the County, at the sole discretion of the Procurement Management Director, may terminate this Agreement, in whole or in part by giving thirty (30) calendar days written notice beginning on the second day after mailing to the Contractor. If this Agreement is so terminated, the County shall be liable only for payment required under this Agreement for properly authorized services rendered, or materials, supplies and/or equipment delivered to and accepted by the County prior to the effective date of Agreement termination. The County shall have no other obligation whatsoever to the Contractor for such termination.

16. CHANGES:

16.1. Changes to any federal grant or federally funded cooperative agreement shall be in writing, executed by change order and the costs of any change, modification, change order, or constructive change must be allowable, allocable, and within the original scope of the federal grant or federal cooperative agreement. Changes should be reasonable and necessary for the completion of the original project scope. Any changes must be permissible under state, local and federal laws. Any change recommended and accepted by both

parties, in writing, will not be considered a contract breach. Modifications to alter the method, price, or schedule of the work for any reason shall be completed following the terms and provisions of the associated contract documents. No changes to the contract documents or the performance provided shall be made unless the same is in writing and signed by both the CONSULTANT/CONTRACTOR/VENDOR and the County.

17. LICENSE AND DELIVERY OF WORKS SUBJECT TO COPYRIGHT AND DATA RIGHTS:

17.1. The CONSULTANT/CONTRACTOR/VENDOR grants to the County, a paid-up, royalty-free, nonexclusive, irrevocable, worldwide license in data first produced in the performance of this contract to reproduce, publish, or otherwise use, including preparing derivative works, distributing copies to the public, and perform publicly and display publicly such data. For data required by the contract but not first produced in the performance of this contract, the CONSULTANT/CONTRACTOR/VENDOR will identify such data and grant to the County or acquires on its behalf a license of the same scope as for data first produced in the performance of this contract. Data, as used herein, shall include any work subject to copyright under 17 U.S.C. § 102, for example, any written reports or literary works, software and/or source code, music, choreography, pictures or images, graphics, sculptures, videos, motion pictures or other audiovisual works, sound and/or video recordings, and architectural works. Upon or before the completion of this contract, the CONSULTANT/CONTRACTOR/VENDOR will deliver to the County data first produced in the performance of this contract and data required by the contract but not first produced in the performance of this contract in formats acceptable by the County."

18. TIME & MATERIAL, TIME & EQUIPMENT, FIRM FIXED PRICE LUMP SUM CONTRACTS:

18.1. The following applies to purchases made or reimbursed with Federal funds as per 2 CFR 200.318(j) and other Federal Regulations. For a firm fixed price, lump sum, Time & Material (T&M), and/or Time & Equipment (T&E) procurements, a Purchase Order represents a CONSULTANT/CONTRACTOR/VENDOR's Notice to Proceed (NTP). Line-item Extended Price(s) shall be considered Not to Exceed (NTE) ceiling value(s). Additionally, the Total Order value for a Purchase Order represents an NTE ceiling value. If the CONSULTANT/CONTRACTOR/VENDOR anticipates exceeding either of these NTE values, they should contact the Lee County Procurement Department for a change order. If a CONSULTANT/CONTRACTOR/VENDOR exceeds a Line Item or Total Order NTE value, it does so at its own risk.

19. SUSPENSION AND DEBARMENT (for projects greater than \$25,000):

- 19.1. This contract is a covered transaction for purposes of 2 C.F.R. pt. 180 and 2 C.F.R. pt. 3000. As such the CONSULTANT/CONTRACTOR/VENDOR is required to verify that none of the CONSULTANT/CONTRACTOR/VENDOR, its principals (defined at 2 C.F.R. § 180.995), or its affiliates (defined at 2 C.F.R. § 180.905) are excluded (defined at 2 C.F.R. § 180.940) or disqualified (defined at 2 C.F.R. §180.935).
- 19.2. The CONSULTANT/CONTRACTOR/VENDOR must comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C and must include a requirement to comply with these regulations in any lower tier covered transaction it enters into.
- 19.3. This certification is a material representation of fact relied upon by the awarded CONSULTANT/CONTRACTOR/VENDOR. If it is later determined that the CONSULTANT/CONTRACTOR/VENDOR did not comply with 2 C.F.R. pt.180, subpart C and 2 C.F.R. pt. 3000, subpart C, in addition to remedies available to Lee County, the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment.

- 19.4. The CONSULTANT/CONTRACTOR/VENDOR agrees to comply with the requirements of 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C while this offer is valid and throughout the period of any contract that may arise from this offer. The bidder or proposer further agrees to include a provision requiring such compliance in its lower-tier covered transactions.
- 19.5. If, at any point during the term of this contract, the CONSULTANT/CONTRACTOR/VENDOR or any principals thereof are found to be on a federal or state debarment list, or if federal or state debarment action is initiated against the contractor or their principals during this time period, this contract shall be immediately rendered null and void.
 - 19.5.1. If debarment action has been taken against any subcontractor, the CONSULTANT/CONTRACTOR/VENDOR shall provide an alternative subcontractor within 10 days of notification. The debarred subcontractor may not work on the project.

20. RECOVERED MATERIALS (for projects greater than \$10,000):

- 20.1. In the performance of this contract, the CONSULTANT/CONTRACTOR/VENDOR shall make maximum use of products containing recovered materials that are EPA-designated items unless the product cannot be acquired:
 - Competitively within a timeframe providing for compliance with the contract performance schedule;
 - Meeting contract performance requirements; or
 - At a reasonable price.
- 20.2. Information about this requirement is available on the EPA'S Comprehensive Procurement Guidelines website, http://www.epa.gov/cpg/ The list of EPA- designate items is available at http://www.epa.gov/cpg/products/htm
- 20.3. The CONSULTANT/CONTRACTOR/VENDOR also agrees to comply with all other applicable requirements of Section 6002 or the Solid Waste Disposal Act.

21. OTHER REMEDIES AND RIGHTS:

- 21.1. Pursuing any of the above remedies will not keep the County from pursuing any other rights or remedies, which may be otherwise available under law or in equity. If the County waives any right or remedy in this Agreement or fails to insist on strict performance by the CONSULTANT/CONTRACTOR/VENDOR, it will not affect, extend, or waive any other right or remedy of the County, or affect the later exercise of the same right or remedy by the County for any other default by the CONSULTANT/CONTRACTOR/VENDOR.
- 21.2. Unless otherwise provided by the Contract, all claims, counterclaims, disputes, and other matters in question between the County and the CONSULTANT/CONTRACTOR/VENDOR arising out of or relating to the Agreement between the parties, or the breach of it, that cannot be resolved by and between the parties after conferring in good faith, will be decided by a court of competent jurisdiction pursuant to Florida law. If such a dispute is in state court, the venue shall be in the Twentieth Judicial Circuit Court in and for Lee County, Florida. If in federal court, the venue shall be in the U.S. District Court for the Middle District of Florida, Ft. Myers Division.

22. CONTRACT WORK HOURS & SAFETY STANDARDS (40 U.S.C. 3701-3708).: (for projects greater than \$100,000):

22.1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in

such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

- 22.2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause outlined in paragraph (1) of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or territory, to such District or such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause outlined in paragraph (1) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause outlined in paragraph (1) of this section.
- 22.3. Withholding for unpaid wages and liquidated damages. The State of Florida Division of Emergency Management shall upon its action or written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any money payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause outlined in paragraph (2) of this section.
- 22.4. Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses outlined in paragraph.
 - (1) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower-tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower-tier subcontractor with the clauses outlined in paragraphs (1) through (4) of this section.

23. CLEAN AIR ACT (for projects greater than \$150,000):

- 23.1. The contractor agrees to comply with all applicable standards, orders, or regulations issued under the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq.
- 23.2. The contractor agrees to report each violation to the GRANT AGENCY and the Regional Office of the Environmental Protection Agency and understands and agrees that the GRANT AGENCY and the Regional Office of the Environmental Protection Agency will, in turn, report each violation as required to assure notification to the County, Federal Emergency Management Agency, and the appropriate Environmental Protection Agency Regional Office.
- 23.3. The contractor agrees to include these requirements in each subcontract exceeding \$150,000 financed in whole or in part with Federal assistance provided by GRANT AGENCY.

24. FEDERAL WATER POLLUTION CONTROL ACT:

- 24.1. The contractor agrees to comply with all applicable standards, orders, or regulations issued under the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et seq.
- 24.2. The contractor agrees to report each violation to the GRANT AGENCY and the Regional Office of the Environmental Protection Agency and understands and agrees that the GRANT AGENCY and the Regional Office of the Environmental Protection Agency will, in turn, report each violation as required to assure notification to the County, Federal Emergency Management Agency, and the appropriate Environmental Protection Agency Regional Office.

24.3. The contractor agrees to include these requirements in each subcontract exceeding \$150,000 financed in whole or in part with Federal assistance provided by GRANT AGENCY.

25. BYRD ANTI-LOBBYING AMENDMENT (for projects greater than \$100,000):

25.1. CONSULTANT/CONTRACTOR/VENDORs who apply or bid for an award of \$100,000 or more shall file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant, or any other award covered by 31 U.S.C. § 1352. Each tier shall also disclose any lobbying with nonfederal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the recipient.

26. RIGHTS TO INVENTIONS MADE UNDER A CONTRACT OR AGREEMENT:

26.1. If the Federal award meets the definition of "funding agreement" under 37C.F.R. § 401.2(a) and Lee County enters into a contract with a small business firm or nonprofit organization regarding the substitution of parties, assignment or performance of experimental, developmental, or research work under that "funding agreement," the County must comply with the requirements of 37 C.F.R. Part 401 (Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements), and any implementing regulations issued by the Federal Awarding Agency. See 2 C.F.R. Part 200, Appendix II(F).

27. FLY AMERICA REQUIREMENTS:

27.1. The CONSULTANT/CONTRACTOR/VENDOR agrees to comply with 49 U.S.C. 40118 (the "Fly America" Act) in accordance with the General Services Administration's regulations at 41 C.F.R. Part 301-10, which provide that recipients and sub-recipients of Federal funds and their contractors are required to use U.S. Flag air carriers for U.S. Government-financed international air travel and transportation of their personal effects or property, to 4 the extent such service is available, unless travel by foreign air carrier is a matter of necessity, as defined by the Fly America Act. The Contractor shall submit, if a foreign air carrier was used, an appropriate certification or memorandum adequately explaining why service by a U.S. flag air carrier was not available or why it was necessary to use a foreign air carrier and shall, in any event, provide a certificate of compliance with the Fly America requirements. The Contractor agrees to include the requirements of this section in all subcontracts that may involve international air transportation.

28. AMERICANS WITH DISABILITIES ACT (ADA):

28.1. All design and construction must be accessible to individuals with disabilities pursuant to Titles II and III of the Americans with Disabilities Act.

29. CARGO PREFERENCE:

- 29.1. The Cargo Preference requirements apply to all contracts involving equipment, materials, or commodities which may be transported by ocean vessels.
- 29.2. Use of United States Flag Vessels:
- 29.3. The CONSULTANT/CONTRACTOR/VENDOR agrees to use privately owned United States- Flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to the underlying Contract to the extent such vessels are available at fair and reasonable rates for United States- Flag commercial vessels.

- 29.4. Furnish within twenty (20) business days following the date of loading for shipments originating within the United States or within thirty (30) business days following the date of leading for shipments originating outside the United States, a legible copy of a rated, "on-board" commercial ocean bill-of-lading in English for each shipment of cargo described in the preceding 6 paragraph to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590 and to LCBOCC (through the Contractor in the case of a subcontractor's bill-of-lading.)
- 29.5. Include these requirements in all subcontracts issued pursuant to the Contract when the subcontract may involve the transport of equipment, material, or commodities by ocean vessel.

30. SEISMIC SAFETY REQUIREMENTS FOR THE CONSTRUCTION OF NEW BUILDINGS OR ADDITION TO EXISTING BUILDINGS:

30.1. CONSULTANT/CONTRACTOR/VENDOR agrees that any new building or addition to an existing building will be designed and constructed in accordance with the standards for Seismic Safety required in Department of Transportation Seismic Safety Regulations 49 C.F.R. Part 41 and will certify compliance to the extent required by the regulation. The CONSULTANT/CONTRACTOR/VENDOR also agrees to ensure that all Work performed under the Contract including Work performed by a subcontractor is in compliance with the standards required by the Seismic Safety Regulations and the certification of compliance issued on the project.

31. ENERGY CONSERVATION:

31.1. CONSULTANT/CONTRACTOR/VENDOR agrees to comply with mandatory standards and policies relating to energy efficiency which are contained in the Florida energy conservation plan issued in compliance with the Energy Policy and Conservation Act, as amended, 42 USC § 6321 *et seq.*, and perform an energy assessment for any building constructed, reconstructed, or modified with Federal funds required under Federal regulations, "Requirements for Energy Assessment," 49 CFR part 622, subpart C.

CONSTRUCTION ONLY, if Applicable

32. DAVIS-BACON ACT:

32.1. All prime construction contracts in excess of \$2,000 awarded by non- Federal entities must include a provision for compliance with the Davis-Bacon Act (40 U.S.C. §§ 3141-3144 and 3146-3148) as supplemented by Department of Labor regulations at 29 C.F.R. Part 5 (Labor Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction). See 2 C.F.R. Part 200, Appendix II(D). In accordance with the statute, contractors must be required to pay wages to laborers and mechanics at a rate not less than the prevailing wages specified in a wage determination made by the Secretary of Labor. In addition, contractors must be required to pay wages not less than once a week.

The Davis-Bacon Act only applies to the Emergency Management Preparedness Grant Program, Homeland Security Grant Program, Nonprofit Security Grant Program, Tribal Homeland Security Grant Program, Port Security Grant Program, and Transit Security Grant Program. It DOES NOT apply to other FEMA grant and cooperative agreement programs, including the Public Assistance Program.

32.2. Minimum wages

i. All laborers and mechanics employed or working upon the site of the Work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project), will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 C.F.R. part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part

hereof, regardless of any contractual relationship which may be alleged to exist between the CONTRACTOR and such laborers and mechanics. Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis - Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (1)(iv) of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 C.F.R. Part 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein; provided, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classifications and wage rates conformed under paragraph (a)(ii) of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the CONTRACTOR and its sub-CONTRACTORS at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

ii.

- (A) The Contracting Officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the Contract shall be classified in conformance with the wage determination. The Contracting Officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:
 - 1. Except with respect to helpers as defined as 29 C.F.R. 5.2(n)(4), the work to be performed by the classification requested is not performed by a classification in the wage determination; and
 - 2. The classification is utilized in the area by the construction industry; and
 - 3. The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination; and
 - 4. With respect to helpers as defined in 29 C.F.R. 5.2(n) (4), such a classification prevails in the area in which the work is performed.
- (B) If the CONTRACTOR and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the Contracting Officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the Contracting Officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the Contracting Officer or will notify the Contracting Officer within the 30-day period that additional time is necessary.
- (C) In the event the CONTRACTOR, the laborers or mechanics to be employed in the classification or their representatives, and the Contracting Officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the Contracting Officer shall refer the questions, including the views of all interested parties and the recommendation of the Contracting Officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the Contracting Officer or will notify the Contracting Officer within the 30-day period that additional time is necessary.

- (D) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs (a) (ii) (B) or (C) of this section, shall be paid to all workers performing Work in the classification under the Contract from the first day on which Work is performed in the classification.
- 32.3 Withholding LCBOCC shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the CONTRACTOR under the Contract or any other Federal contract with the same prime CONTRACTOR, or any other federally- assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime CONTRACTOR, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the CONTRACTOR or any sub-CONTRACTOR the full amount of wages required by the Contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the Work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project), all or part of the wages required by the Contract, LCBOCC may, after written notice to the CONTRACTOR, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

32.4 Payrolls and basic records

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

ii.

- (A) The CONTRACTOR shall submit weekly for each week in which any Contract Work is performed a copy of all payrolls to LCBOCC for transmission to the Federal Transit Administration. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under section 5.5(a) (3) (i) of Regulations, 29 C.F.R. part 5. This information may be submitted in any form desired. Optional Form WH-347 is available for this purpose and may be purchased from the Superintendent of Documents (Federal Stock Number 029-005-00014-1), U.S. Government Printing Office, Washington, DC 20402. The prime CONTRACTOR is responsible for the submission of copies of payrolls by all sub-CONTRACTORS.
- (B) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the CONTRACTOR or sub-CONTRACTOR or his or her agent who pays or supervises the payment of the persons employed under the Contract and shall certify the following:
 - 1. That the payroll for the payroll period contains the information required to be maintained under section 5.5(a)(3)(i) of Regulations, 29 C.F.R. part 5 and that such information is correct and complete;

- 2. That each laborer or mechanic (including each helper, apprentice, and trainee employed on the Contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 C.F.R. part 3;
- 3. That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of Work performed, as specified in the applicable wage determination incorporated into the Contract.
- (C) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph (c) (i) (B) of this section.
- (D) The falsification of any of the above certifications may subject the CONTRACTOR or sub-CONTRACTOR to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.
- iii. The CONTRACTOR or sub-CONTRACTOR shall make the records required under paragraph (a)(3)(i) of this section available for inspection, copying, or transcription by authorized representatives of the Federal Transit Administration or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the CONTRACTOR or sub-CONTRACTOR fails to submit the required records or to make them available, the Federal agency may, after written notice to the CONTRACTOR, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 C.F.R. 5.12.

32.5 Apprentices and trainees

Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the Work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State Apprenticeship Agency recognized by the Bureau, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the CONTRACTOR as to the entire Work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of Work actually performed. In addition, any apprentice performing Work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the Work actually performed. Where a CONTRACTOR is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the CONTRACTOR's or sub-CONTRACTOR's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen's hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator of the Wage and Hour Division of the U.S. Department of Labor determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Bureau of Apprenticeship and

- Training, or a State Apprenticeship Agency recognized by the Bureau, withdraws approval of an apprenticeship program, the CONTRACTOR will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the Work performed until an acceptable program is approved.
- ii. Trainees Except as provided in 29 C.F.R. 5.16, trainees will not be permitted to work at less than the predetermined rate for the Work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of Work actually performed. In addition, any trainee performing Work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the Work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the CONTRACTOR will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the Work performed until an acceptable program is approved.
- iii. Equal employment opportunity The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 C.F.R. part 30.
- 32.6 Compliance with Copeland Act requirements. The CONTRACTOR shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in the Contract.
- 32.7 Subcontracts. The CONTRACTOR or sub-CONTRACTOR shall insert in any subcontracts the clauses contained in 29 C.F.R. 5.5(a)(1) through (10) and such other clauses as the Federal Transit Administration may by appropriate instructions require, and also a clause requiring the sub-CONTRACTORS to include these clauses in any lower tier subcontracts. The prime CONTRACTOR shall be responsible for compliance by any sub-CONTRACTOR or lower-tier sub- CONTRACTOR with all the Contract clauses in 29 C.F.R. 5.5.
- 32.8 Contract termination: debarment. A breach of the Contract clauses in 29 C.F.R. 5.5 may be grounds for termination of the Contract, and for debarment as a CONTRACTOR and a sub-CONTRACTOR as provided in 29 C.F.R. 5.12.
- 32.9 Compliance with Davis Bacon and Related Act requirements. All rulings and interpretations of the Davis Bacon and Related Acts contained in 29 C.F.R. parts 1, 3, and 5 are herein incorporated by reference in the Contract.
- 32.10 Disputes concerning labor standards. Disputes arising out of the labor standards provisions of the Contract shall not be subject to the general disputes clause of the Contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 C.F.R. parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the CONTRACTOR (or any of its sub-CONTRACTORS) and the Contracting agency, the U.S. Department of Labor, or the employees or their representatives.

32.11 Certification of eligibility

- i. By entering into the Contract, the CONTRACTOR certifies that neither it (nor he or she) nor any person or firm who has an interest in the CONTRACTOR's firm is a person or firm ineligible to be awarded Government Contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 C.F.R. 5.12(a)(1).
- ii. No part of the Contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 C.F.R. 5.12(a)(1).
- iii. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

33. COPELAND ANTI-KICKBACK ACT:

- 33.1. Recipient and sub-recipient contracts must include a provision for compliance with the Copeland "Anti-Kickback" Act (40 U.S.C. 3145), as supplemented by Department of Labor regulations (29 CFR Part 3, "Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States").
- 33.2. This requirement applies to all contracts for construction or repair work above \$2,000 in situations where the Davis-Bacon Act also applies. It DOES NOT apply to the FEMA Public Assistance Program.

33.3. Compliance

- 33.3.1. CONSULTANT/CONTRACTOR/VENDOR shall comply with 18 U.S.C. § 874, 40 U.S.C. § 3145, and the requirements of 29 C.F.R. pt. 3, which are incorporated by reference into the Contract.
- 33.3.2. Subcontracts. The CONSULTANT/CONTRACTOR/VENDOR or subcontractor shall insert in any subcontracts the clause above and such other clauses as may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower-tier subcontracts. The prime CONSULTANT/CONTRACTOR/VENDOR shall be responsible for the compliance by any subcontractor or lower-tier subcontractor with all of these contract clauses.
- 33.3.3. Breach. A breach of the contract clauses above may be grounds for termination of the contract, and for debarment as a contractor and subcontractor as provided in 29 C.F.R. § 5.12."

34. BUILD AMERICA, BUY AMERICA ACT (BABA) – INFRASTRUCTURE PROJECTS

- 34.1 If applicable, Recipients or Subrecipients of an award of Federal financial assistance from a program for infrastructure are required to comply with the Build America, Buy America Act (BABA), including the following provisions:
 - 34.1.1. All iron and steel used in the project are produced in the United States—this means all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States;
 - 34.1.2. All manufactured products used in the project are produced in the United States—this means the manufactured product was manufactured in the United States; and the cost of the components of the manufactured product that are mined, produced, or manufactured in the United States is greater than 55 percent of the total cost of all components of the manufactured product, unless another standard for determining the minimum amount of Domestic content of the manufactured product has been established under applicable law or regulation; and
 - 34.1.3. All construction materials are manufactured in the United States—this means that all manufacturing processes for the construction material occurred in the United States.

34.1.4. The Buy America preference only applies to articles, materials, and supplies that are consumed in, incorporated into, or affixed to an infrastructure project. As such, it does not apply to tools, equipment, and supplies, such as temporary scaffolding, brought to the construction site and removed at tor before the completion of the infrastructure project. Nor does a Buy America preference apply to equipment and furnishings, such as movable chairs, desks, and portable computer equipment, that are used at or within the finished infrastructure project but are not an integral part of the structure or permanently affixed to the infrastructure project.

35. INVESTING IN AMERICA

- 35.1 If applicable, Grantees of an award for construction projects in whole or in part by the Bipartisan Infrastructure Law or the Inflation Reduction Act, must include the following provision:
 - 35.1.1. Signage Requirements
 - 35.1.1.1. Investing in America Emblem: The recipient will ensure that a sign is placed at construction sites supported in whole or in part by this award displaying the official Investing in America emblem and must identify the project as a "project funded by President Biden's Bipartisan Infrastructure Law" or "project funded by President Biden's Inflation Reduction Act" as applicable. The sign must be placed at construction sites in an easily visible location that can be directly linked to the work taking place and must be maintained in good condition throughout the construction period.
 - 35.1.1.2. The recipient will ensure compliance with the guidelines and design specifications provided by EPA for using the official Investing in America emblem available at: https://www.dpa.gov/invest/investing-america-signage
 - 35.1.1.3. Procuring Signs: Consistent with section 6002 of RCRA, 42 U.S.C. 6962, and 2 CFR200.323, recipients are encouraged to use recycled or recovered materials when procuring signs. Signage costs are considered an allowable cost under this assistance agreement provided that the costs associated with signage are reasonable. Additionally, to increase public awareness of projects serving communities where English is not the predominant language, recipients are encouraged to translate the language on signs (excluding the official Investing in America emblem or EPA logo or seal) into the appropriate non-English language(s). The costs of such translation are allowable, provided the costs are reasonable.

End of Supplemental Clauses to Include Appendix II

LEE COUNTY DOCUMENT MANAGEMENT FORM

For

B240509LND - Hurricane Ian Matlacha Drawbridge M&E Repairs - LAP

These forms are required as indicated below and all required forms should be submitted with the Bidder's/Proposer's submission package. If it is determined that forms in this selection are not applicable to your company or solicitation they should be marked "N/A or Not Applicable" across the form in large letters and returned with your submission package.

FORM #	TITLE / DESCRIPTION	REQUIRED STATUS (Required, Not Required, If Applicable)	VENDOR CHECK-OFF
1	Solicitation Response Form	Required	
1a	Bid/Proposal Form	Required	
N/A	Business Relationship Disclosure Requirement	If Applicable	
2	Affidavit Certification Immigration Laws	Required	
3	Reference Survey *(Requested after opening of lowest Bidder only)	Required	
4	Negligence or Breach of Contract Disclosure Form	Required	
5	Sub-Contractor List	Required	
6	Public Entity Crime Form	Required	
7	Trench Safety	Required	
8	Bid Bond	Required	
9	Affidavit of Compliance with Section 287.138 and 787.06 Florida Statutes	Required	
10	E-Verify Affidavit	Required	
*	Evidence of Enrollment in the E-Verify Program (Profile or MOU)	Required	
11	375-030-32 - Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion	Required	
12	375-030-33 - Certification for Disclosure of Lobbying Activities	Required	
13	375-030-34 - Disclosure of Lobbying Activities	Required	
14	375-030-50 - Conflict of Interest/Confidentiality Certification for Consultant/Contractor/Technical Advisors	Required	
15	525-010-46 - LAP Certification of Current Capacity	Required	
16	575-060-13 - Non-Collusion Declaration and Compliance with 49 CFR § 29	Required	
17	375-030-31 - Affidavit Regarding Labor and Services	Required	
*	Proposal Label	Required	
	ADDITIONAL REQUIRED DOCUMENTS – See Exhibit	0	
	275-030-11 - DBE BID PACKAGE INFORMATION **REMINDER: Bidder MUST report to Equal Opportunity Compliance system within 3 days of bid submission.	Review Only	
	FHWA 1273 Required Contract Provisions	Review Only	
	Wage Rate Table	Review Only	

It is the Bidder's/Proposer's responsibility to review the submittal request in its entirety and ensure that all submittal requirements are included within their submission package. Failure to submit required forms may deem your company as non-responsive.

FORMS DESCRIPTION & INSTRUCTIONS

INVITATION TO BID

This table provides a brief list, description, and instructions regarding the standard requested forms that should be submitted with all bids or proposals. This is not intended to be an all-inclusive list of forms required for your submission, but rather a guide to assist in completion of the County's standard forms. Bidders/Proposers should utilize the Lee County Document Management Form for a complete list of all forms required for project submission.

Form # Title/Description

1 Solicitation Response Form

All signatures must be by a corporate authorized representative, witnessed, and corporate and/or notary seal (as applicable.) The corporate or mailing address must match the company information as it is listed with the Florida Department of State Division of Corporations. Attach a copy of the webpage(s) from http://www.sunbiz.org as certification of this required information. Sample attached for your reference.

Verify that all Addenda and tax identification number have been provided.

1a Bid/Proposal Form

This form is used to provide itemization of project cost. A more detailed "schedule of values" may be requested by the County.

N/A Business Relationship Disclosure Requirement

Sections 112.313(3) and 112.313(7), F.S., prohibit certain business relationships on the part of public officers and employees, their spouses, and their children. If this <u>disclosure is applicable, the Bidder must request the form</u> entitled "INTEREST IN COMPETITIVE BID FOR PUBLIC BUSINESS" (Required by § 112.313(12)(b), F.S.) to be completed and <u>returned with the Solicitation Response</u>. It is the Bidder's responsibility to request the form and disclose this relationship; failure to do so may result in being declared non-responsive.

NOTICE: UNDER THE PROVISIONS OF § 112.317, F.S., A FAILURE TO MAKE ANY REQUIRED DISCLOSURE CONSTITUTES GROUNDS FOR, AND MAY BE PUNISHED BY, ONE OR MORE OF THE FOLLOWING: IMPEACHMENT, REMOVAL OR SUSPENSION FROM OFFICE OR EMPLOYMENT, DEMOTION, REDUCTION IN SALARY, REPRIMAND, OR A CIVIL PENALTY NOT TO EXCEED \$10,000.00.

2 Affidavit Certification Immigration Laws

Submission of this form constitutes acknowledgement that the Bidder is in compliance in regard to all applicable immigration laws.

3 Reference Survey

Provide this form to reference respondents. For Bids, this form will be requested from the apparent low Bidder prior to the award. (Not required to submit with bid)

- 1. **Section 1**: Bidder/Proposer to complete with <u>reference respondent's</u> information prior to providing to them for their response. (This is **not** the Bidder/Proposer's information.)
- 2. **Section 2**: Enter the name of the Bidder/Proposer; provide the project information in which the reference respondent is to provide a response.
- 3. The reference respondent should complete "Section 3."
- 4. **Section 4**: The reference respondent to print and sign name
- 5. **Three (3) Reference responses** are to be provided upon request.
- 6. Failure to obtain reference surveys may make your company non-responsive.

4 Negligence or Breach of Contract Disclosure Form

The form may be used to disclose negligence or breach of contract litigation that your company may have been a part of over the past ten (10) years. You may need to duplicate this form to list all history. If the Bidder has more than ten (10) lawsuits, you may narrow them to litigation of the company or subsidiary submitting the Solicitation Response. Include, at a minimum, litigation for similar projects completed in the State of Florida. Final outcome should include in whose favor the litigation was settled and whether a monetary amount was awarded. The settlement amount may remain anonymous.

If you have **no litigation, enter "None" in the first "type of incident" block** of the form. Please do not write N/A on this form.

5 Sub-Contractor/Consultant List

To be completed and returned when sub-contractor/consultants are to be utilized and are known at the time of the submission.

6 Public Entity Crime Form

Any person or affiliate, as defined by statute, who has been placed on the convicted vendor list following a conviction for a public entity crime, may not submit a Bid on a Contract to provide any goods or services to the County; may not submit a Bid on a contract with the County for the construction or repair of a public building or a public work; may not submit Bids or leases of real property to the County; may not be Awarded or perform Work as a contractor, supplier, subcontractor, or consultant under a contract with the County, and may not transact business with the County in excess of \$25,000.00 for a period of thirty-six (36) months from the date of being placed on the convicted vendor list.

7 Trench Safety

Typically required in construction projects where trench excavations are in excess of 5 feet deep per Florida Trench Safety Act (90-96, Laws of Florida)

8 Bid Bond

Guarantee to County that Bidder/Proposer will take on job if selected.

9 Affidavit of Compliance with Section 287.138 and 787.06 Florida Statutes

Vendor pursuant to Florida Statute certifies that Vendor is not owned by a government of a foreign country of concern, a government of a foreign country of concern does not have a controlling interest in Vendor, and Vendor is not organized under the law of nor has its principal place of business in a foreign country of concern, as defined by statute.

10 E-Verify Affidavit

Vendor shall complete this form and provide evidence of enrollment in the E-Verify program by providing their Profile or MOU.

11 FDOT Form 375-030-32 - Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion

Form certifying that neither the Vendor nor its principals are presently suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation by any federal department or agency.

12 FDOT Form 375-030-33 - Certification for Disclosure of Lobbying Activities

Form certifying that the Vendor hasn't had any influence or participated in any Lobbying Activities.

13 FDOT Form 375-030-34 - Disclosure of Lobbying Activities

Form to describe Lobbying Activities the Vendor participated in. Indicate if none or non-applicable.

14 FDOT Form 375-030-50 - Conflict of Interest/Confidentiality Certification for Consultant/Contractor/Technical Advisors

Form to certify the Vendor has no present conflict of interest, their firm has no conflict, and if one does arise, they will recuse themselves if a conflict presents itself.

15 FDOT Form 525-010-46 - LAP Certification of Current Capacity

Form to describe all contracts currently held either as a prime or subcontractor.

16 FDOT Form 575-060-13 - Non-Collusion Declaration and Compliance with 49 CFR § 29

Form to certify the Vendor has not directly or indirectly entered into any agreement or taken action to restrict free competitive bidding of this solicitation.

17 FDOT Form 375-030-31 - Affidavit Regarding Labor and Services

Form to certify the Vendor follows Florida Statues 787.06 and does not use coercion for labor or services

* Bid/Proposal Label

Self-explanatory. Please affix to the outside of the sealed submission documents.

* Include any licenses or certifications requested

Local Business Tax Account (as applicable) issued by City and/or County entity. This is necessary for all Florida vendors.

It is the Bidder's responsibility to ensure the Solicitation Response is mailed or delivered in time to be received no later than the specified opening date and time. (If Solicitation is not received prior to the deadline, it cannot be considered or accepted)

Form 1 – Solicitation Response Form



LEE COUNTY PROCUREMENT MANAGEMENT SOLICITATION RESPONSE FORM

Date Submitted:		Bio	d Due Date:	1/9/2025					
SOLICITATION IDENTIFICATION:	B240509	LND							
SOLICITATION NAME: Hurricane Ian	OLICITATION NAME: Hurricane Ian Matlacha Drawbridge M&E Repairs - LAP								
COMPANY NAME:									
NAME & TITLE: (TYPED ORPRINTED)									
BUSINESS ADDRESS: (PHYSICAL) CORPORATE OR MAILING ADDRESS: SAME AS PHYSICAL									
ADDRESS MUST MATCH SUNBIZ.ORG									
E-Mail Address:									
Phone Number:		FAX							
NOTE REQUIREMENT: IT IS THE SOLE RESPONSIBILITY OF THE <u>BIDDER/PROPOSER</u> TO CHECK THE LEE COUNTY PROCUREMENT MANAGEMENT WEB SITE FOR ANY ADDENDA ISSUED FOR THIS PROJECT. THE COUNTY WILL POST ADDENDA TO THIS WEB PAGE BUT WILL <u>NOT NOTIFY</u> . By responding to this sealed Solicitation, the Bidder/Proposer makes all representations required by the instructions and further warrants and represents that: Bidder/Proposer has examined copies of all the Solicitation Documents and of the following Addenda:									
No Dated:	No	Dated:	No	Dated:					
No Dated:	No	Dated:	No	Dated:					
	-	ation Number -OT- (2)							

** Lee County collects your social security number for tax reporting purposes only

Please submit a copy of your registration from the website www.sunbiz.org establishing your firm as authorized (including authorized representatives) to conduct business in the State of Florida, as provided by the Florida Department of State, Division of Corporations. (a sample is attached for your reference)

1 <u>Collusion Statement:</u> Lee County, Florida. The undersigned, as Bidder/Proposer, hereby declares that no person or other persons, other than the undersigned, are interested in this Solicitation as principal, and that this Solicitation is submitted without collusion with others; and that they have carefully read and examined the Specifications or Scope of Work, and with full knowledge of all conditions under which the services herein is contemplated must be furnished, hereby Bid and agree to furnish this service according to the requirements set out in the Solicitation Documents, Specifications or Scope of Work for said service for the prices as listed on the County provided price sheet or (CCNA) agree to negotiate prices in good faith if a contract is Awarded.

2 Scrutinized Companies Certification:

Section 287.135, F.S, entitled "Prohibition against contracting with scrutinized companies" prohibits agencies from contracting with companies, for goods or services over \$1,000,000, that are on the Scrutinized Companies with Activities in Sudan List, the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, Scrutinized Companies that Boycott Israel List, have been engaged in a boycott of Israel, or been engaged in business operations in Cuba or Syria. The County reserves the right to review, on a case-by-case basis, and waive this stipulation if it is deemed advantageous to the County.

As the person authorized to sign on behalf of Respondent, I hereby certify that the company identified above is in compliance with Section 287.135, F.S. I understand that submission of a false certification may subject company to contract termination, civil penalties, attorney's fees, and/or costs.

Form 1 – Solicitation Form, Page 2

Business Relationship Disclosure Requirement: Sections 112.313(3) and 112.313(7), F.S., prohibit certain business relationships on the part of public officers and employees, their spouses, and their children. See Part III, Chapter 112, F.S., and/or the brochure entitled "A Guide to the Sunshine Amendment and Code of Ethics for Public Officers, Candidates and Employees" for more details on these prohibitions. However, Section 112.313(12), F.S., provides certain limited exemptions to the above-referenced prohibitions, including one where the business is awarded under a system of sealed, competitive bidding; the public official has exerted no influence on bid negotiations or specifications; and where disclosure is made, prior to or at the time of the submission of the bid, of the official's or his/her spouse's or child's interest and the nature of the intended business. The Commission on Ethics has promulgated this form for such disclosure, if and when applicable to a public officer or employee. If this disclosure is applicable, the Bidder must request form "INTEREST IN COMPETITIVE BID FOR PUBLIC BUSINESS" (Required by 112.313(12)(b), F.S.) to be completed and returned with Solicitation Response. It is the Bidder/proposer's responsibility to disclose this relationship, failure to do so could result in being declared nonresponsive. Business Relationship Applicable (request form) Business Relationship NOT Applicable Disadvantaged, Minority, Women, Veterans Business Enterprise (DBE, MBE, WBE, VBE) No Proposer? If yes, please attach a current certificate. Yes ALL SUBMISSIONS MUST BE EXECUTED BY AN AUTHORIZED AUTHORITY OF THE BIDDER/PROPOSER, WITNESSED AND SEALED (AS APPLICABLE) Company Name (Name printed or typed) **Authorized Representative Name** (printed or typed) (Affix Corporate Seal, as applicable) Witnessed/Attested by: (Witness/Secretary name and title printed or typed) Authorized Representative's Title (printed or typed) **Authorized Representative's Signature** Witness/Secretary Signature

Any blank spaces on the form(s), qualifying notes or exceptions, counter offers, lack of required submittals, or signatures, on County's form may result in the submission being declared non-responsive by the County.

Bidders may not adjust or modify County-authored data as provided within the Bid Schedule. Bids received with modified data may deem the Bidder as non-responsive and ineligible for award.

Detail by Entity Name

Florida Profit Corporation

Bill's Widget Corporation

Filing Information

Document Number 655555 FEI/EIN Number 511111 5111111111 Date Filed 09/22/1980 FL ACTIVE State

Status

Last Event AMENDED AND RESTATED ARTICLES

Event Date Filed 07/25/2006 Event Effective Date NONE

Principal Address

555 N Main Street Your Town, USA 99999 Changed 02/11/2012

Mailing Address

555 N Main Street MYour Town, USA 99999 Changed 02/11/2012

Registered Agent Name & Address

My Registered Agent 111 Registration Road Registration, USA99999 Name Changed:12/14/2006 Address Changed: 12/14/2006 Officer/Director Detail

Name & Address

Title P

President, First 555 AVENUE Anytown, USA99999

Title V President, Second 555 AVENUE Anytown, USA99999

Form 1a – Bid/Proposal Form (not applicable for CCNA solicitations)



Lee County Procurement Management BID/PROPOSAL FORM

Company Name:							
Solicitation #	B240509LND	Solicitation Name	Hurricane Ian Matlacha Drawbridge M&E Repairs - LAP				

This page serves as a header/placeholder only. Please refer to the Excel document provided with the solicitation for the complete Bid Schedule. The Excel document contains formulas for convenience; however, it is the Contractor's responsibility to verify all pricing and calculations are CORRECT. Lee County is not responsible for errors in formulas or calculations contained within Excel document(s).

REMINDER: In the event there is a discrepancy between the total quoted amount, or the extended amounts and the unit prices quoted, the unit prices will prevail, and the corrected sum will be considered the quoted price.

The County will only accept bids submitted on bid forms provided by the County. Bids submitted on other forms, other than those provided by the County, will deem Bidder as non-responsive and ineligible for award.

Bidders may not adjust or modify County-authored data as provided within the Bid Schedule. Bids received with modified data may deem the Bidder as non-responsive and ineligible for award.

PLEASE ENSURE you have provided a printed copy of the Bid Schedule with your hard copy submission packages and provided the excel version with your digital submission package.

PRICING

Pricing shall be inclusive of all labor, equipment, supplies, overhead, profit, materials, and any other incidental costs required to perform and complete all work as specified herein.

Form 2 – Affidavit Certification of Immigration Laws



AFFIDAVIT CERTIFICATION IMMIGRATION LAWS

SOLICITATION NO.: <u>B240509LND</u> SOLICITATION NAME: Hurricane Ian Matlacha Drawbridge M&E Repairs - LAP

LEE COUNTY WILL NOT INTENTIONALLY AWARD COUNTY CONTRACTS TO ANY CONTRACTOR WHO KNOWINGLY EMPLOYS UNAUTHORIZED ALIEN WORKERS, CONSTITUTING A VIOLATION OF THE EMPLOYMENT PROVISIONS CONTAINED IN 8 U.S.C. SECTION 1324 a(e) {SECTION 274A(e) OF THE IMMIGRATION AND NATIONALITY ACT ("INA").

LEE COUNTY MAY CONSIDER THE EMPLOYMENT BY ANY CONTRACTOR OF UNAUTHORIZED ALIENS A VIOLATION OF SECTION 274A(e) OF THE INA. SUCH VIOLATION BY THE RECIPIENT OF THE EMPLOYMENT PROVISIONS CONTAINED IN SECTION 274A(e) OF THE INA SHALL BE GROUNDS FOR UNILATERAL CANCELLATION OF THE CONTRACT BY LEE COUNTY. PROPOSER ATTESTS THAT THEY ARE FULLY COMPLIANT WITH ALL APPLICABLE IMMIGRATION LAWS (SPECIFICALLY TO THE 1986 IMMIGRATION ACT AND SUBSEQUENT AMENDMENTS).

BY REGISTERING AS A VENDOR, SUBMITTING A RESPONSE TO A SOLICITATION, OR ENTERING INTO A CONTRACT, IF YOU ARE OBLIGATED TO COMPLY WITH THE PROVISIONS OF SECTION 448.095, FLA. STAT., "EMPLOYMENT ELIGIBILITY." FURTHER, BY YOUR REGISTRATION AS A VENDOR, RESPONSE TO A SOLICITATION, ENTERING INTO A CONTRACT, YOU AFFIRM AND REPRESENT THAT YOU ARE REGISTERED WITH THE E-VERIFY SYSTEM AND ARE USING SAME, AND WILL CONTINUE TO USE SAME AS REQUIRED BY SECTION 448.095, F.S. COMPLIANCE WITH SECTION 448.095 INCLUDES, BUT IS NOT LIMITED TO, UTILIZATION OF THE E-VERIFY SYSTEM TO VERIFY THE WORK AUTHORIZATION STATUS OF ALL NEWLY HIRED EMPLOYEES, AND REQUIRING ALL SUBCONTRACTORS TO PROVIDE AN AFFIDAVIT ATTESTING THAT THE SUBCONTRACTOR DOES NOT EMPLOY, CONTRACT WITH, OR SUBCONTRACT WITH, AN UNAUTHORIZED ALIEN. FAILURE TO COMPLY WILL LEAD TO TERMINATION AS A VENDOR, DISQUALIFYING YOU FOR AWARD OF A SOLICITATION, DENIAL OF ENTERING INTO A CONTRACT AND/OR, CANCELLATION OF AN ACTIVE CONTRACT, OR IF YOUR SUBCONTRACTOR KNOWINGLY VIOLATES THE STATUTE, THE SUBCONTRACT MUST BE TERMINATED IMMEDIATELY. ANY CHALLENGE TO TERMINATION UNDER THIS PROVISION MUST BE FILED WITH THE DEPARTMENT OF PROCUREMENT MANAGEMENT NO LATER THAN 20 CALENDAR DAYS AFTER THE DATE OF TERMINATION. IF TERMINATED FOR A VIOLATION OF THE STATUTE BY THE VENDOR, THE VENDOR MAY NOT BE ALLOWED TO DO BUSINESS WITH THE COUNTY OR BE AWARDED A SOLICITATION OR CONTRACT FOR A PERIOD OF 1 YEAR AFTER THE DATE OF TERMINATION. ALL COSTS INCURRED TO INITIATE AND SUSTAIN THE AFOREMENTIONED PROGRAMS SHALL BE THE RESPONSIBILITY OF THE VENDOR.

	Company Nan	ne:	
	Signature	Title	Date
STATE OF			
COUNTY OF _		_	
	strument was sigr 20		ore me, by means of \square physical presence or \square online notarization, thiswho has produced
		(Print or Type Name)
(Type of Identific	cation)	as identification.	
Notary Public Sig	gnature		
Printed Name of	Notary Public		
Notary Commiss	ion Number/Expi	ration	

The signee of this Affidavit guarantee, as evidenced by the sworn affidavit required herein, the truth and accuracy of this affidavit to interrogatories hereinafter made. <u>LEE COUNTY RESERVES THE RIGHT TO REQUEST SUPPORTING DOCUMENTATION</u>, <u>AS EVIDENCE OF SERVICES PROVIDED</u>, <u>AT ANY TIME</u>.

Form 3 - Reference Survey

Lee County Procurement Management Reference Survey

REQUIRED OF THE LOWEST APPARENT BIDDER ONLY

Reference surveys submitted can be a maximum of twelve (12) months old. If using a previous reference, Proposers must clearly identify the project name and number the reference is being submitted for.

Project Name & Number: _____

Section 1	Reference Respondent Information	Please re	eturn completed	form to:
FROM:		Bidder/Proposer:	•	
COMPANY:		Due Date:	•	
PHONE #:		Total # Pages:	1	
FAX #:		Phone #:	Fax #	!:
EMAIL:		Bidder/Proposer E-M	Mail:	
Section 2	Enter Bidder/Proposer Information , as applicable Similar Perform	ed Project (Bidder/Proposer to enter details of	a project performed for above	reference respondent)
Bidder/Proposer Name:				
Reference Project Name:	Project Address:		Project Cost:	
Summarize Scope:				
You as an individual	or your company has been given a	s a reference on the pro	ject identified a	bove. Please
· · · · ·	es in Section 3 below.			
Section 3				Indicate: "Yes" or "No"
1. Did this comp	pany have the proper resources and p	ersonnel by which to get	the job done?	
2. Were any pro	blems encountered with the company	y's work performance?		
3. Were any cha	inge orders or contract amendments i	ssued, other than owner i	nitiated?	
4. Was the job of	ompleted on time?			
5. Was the job of	completed within budget?			
6. On a scale of	one to ten, ten being best, how woul	d you rate the overall wor	rk	
performance,	considering professionalism; final pr			
7 If the ementur	nity were to present itself, would you). (10 being highest)	
			yank nanfannad	for your
8. Please provide	e any additional comments pertinent	to this company and the	work performed	for you:
Section 4 Please	e submit non-Lee County employees a	s references		
1 Ious	e submit non zee county employees a			
Reference Name (Print Name)				
D 6 6'				
Reference Signature				

Form 4 - Negligence, Breach and/or Non-Compliance Disclosure Form



ALLEGED NEGLIGENCE/BREACH OF CONTRACT/NON-COMPLIANCE WITH GOVERNMENTAL REGULATION FORM

"Please fill in the form below. Provide details for each incident of alleged negligence, breach of contract or non-compliance with governmental regulation that has occurred over the past 10 years. Examples of non-compliance with governmental regulation include but are not limited to zoning violations, code enforcement violations, civil or criminal citations, denial, or revocation of permits. Provide details for all entities currently or previously owned in whole or in party by the proposer in the last 10 years. Please complete in chronological order with the most recent incident starting on page 1. Please do not modify this form (expansion of spacing allowed) or submit your own variation."

Company Name: Type of Incident **Incident Date** | Plaintiff Case Court Project Allegation **Final Outcome** Alleged Negligence, And (Company, person, entity-Number (Name of (Stated reason your company (Who prevailed and how) (Address and Name) Breach of Contract, acted against your State and was accused of negligence, **Date Filed** or Non-Compliance company or state if your County) breach of contract or noncompany initiated the action) compliance of governmental regulation or the allegations your company made) Make as many copies of this sheet as necessary to provide a 10-year history of the requested information. If there is no action pending or action taken in the last 10 years, complete the company name and write "NONE" in the first "Type of Incident" box of this page and return with your proposal package. This form should also include the primary partners listed in your proposal. Do not include litigation with your company as the plaintiff. Final outcome should include who prevailed and what method of settlement was made. If a monetary settlement was made the amount may remain anonymous. Proposals may be declared "non-responsive" due to omissions of "Negligence or Breach of Contract" on this disclosure form. Additionally, proposals may be declared "not responsible" due to past or pending lawsuits that are relevant to the subject procurement such that they call into question the ability of the proposer to assure good faith performance. This determination may be made by the Procurement Management Director, after consulting with the County Attorney. Of Total pages Page Number:

Form 5 - Sub-contractor/consultant List



SUB-CONTRACTOR/CONSULTANT LIST

Sub-Contractor/Consultant Company Name	Area Of Work	Point Of Contact Or Project Supervisor	Contact Info Phone or Email	Qualified DBE, MBE, WBE, VBE or Similar	Amount or Percentage of Total

Please include sub-contractor/consultant name, area of work (i.e., mechanical, electrical, etc.) and a **valid** phone number and/or email. Also include the dollar value or percentage that the sub-contractor/consultant will be performing. If sub-contractor/consultant qualifies as a current certificate Florida Certified Business Enterprise such as MBE, WBE, DBE, VBE or similar please indicate such above and provide proof of certification.

1.

Public Entity Crime Form

This form must be signed and sworn to in the presence of a notary public or other officer authorized to administer oaths.

This sworn states	ment is submitted to
	(Print name of the public entity)
by	
	(Print individual's name and title)
for	
	(Print name of entity submitting sworn statement)
whose business a	ddress is
(If applicable) its	Federal Employer Identification Number (FEIN) is
•	no FEIN, include the Social Security Number of the individual signing this swor
statement: On the	e attached sheet.) Required as per IRS Form W-9.

- 2. I understand that a "public entity crime" as defined in Section 287.133(1) (g), Florida Statutes, means a violation of any state or federal law by a person with respect to and directly related to the transaction of business with any public entity or with an agency or political subdivision of any other state or with the United States, including but not limited to, a bid or contract for goods or services to be provided to any public entity or agency or political subdivision or any other state or of the Unites States, and involving antitrust, fraud, theft, bribery, collusion, racketeering, conspiracy, or material misrepresentation.
- 3. I understand that "convicted" or "conviction" as defined in Section 287.133(1) (b), Florida Statutes, means a finding of guilt or a conviction of a public entity crime, with or without an adjudication of guilt, in any federal or state trial court of record relating to charges brought by indictment or information after July 1, 1989, as a result of a jury verdict, nonjury trial, or entry of a plea of guilty or nolo contendere.
- 4. I understand that "affiliate" as defined in Section 287.133(1)(a), Florida Statutes, means:
 - . A predecessor or successor of a person convicted of a public entity crime:
 - 2. An entity under the control of any natural person who is active in the management of the entity and who has been convicted of a public entity crime. The term "affiliate" includes those offices, directors, executives, partners, shareholders, employees, members, and agents who are active in the management of the affiliate. The ownership by one person of shares constituting a controlling interest in another person, or a pooling of equipment or income among persons when not fair market value under an arm's length Agreement/Contract, shall be a facie case that one person controls another person. A person who knowingly enters into a joint venture with a person who has been convicted of a public entity crime in Florida during the preceding thirty-six (36) months shall be considered an affiliate.
- 5. I understand that a "person" as defined in Section 287.133(1) (c), Florida Statutes, means any natural person or entity organized under the laws of any state or of the United States with the legal power to enter a binding contract and which bids or applies to bid on contracts for the provision of goods or services let by a public entity, or which otherwise transacts or applies to transact business with a public entity. The term "person" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in management of the entity.
- 6. Based on information and belief, the statement which I have marked below is true in relation to the entity submitting those sworn statement. (*Please indicate which statement applies*)

N	Neither the e	ntity submitting	this sworn	statement,	nor any	officers,	directors,	executives,	partners,	share	holders,
employee	es, members,	and agents wh	o are active	in manage	ement of	an entity	nor affilia	ate of the en	tity have	been	charged
with and	convicted of	a public entity	crime subse	equent to Ju	ıly 1, 198	39.					

Form – 6 Public Entity Crime Form, Page 2

	it, or one or more of the officers, directors, executives, partners, active in management of the entity, or an affiliate of the entity have ime subsequent to July 1, 1989.
shareholders, employees, member, or agents who are been charged with and convicted of a public entity cri proceeding before a Hearing Officer of the State of Flo	nt, or one or more of its officers, directors, executives, partners, e active in management of the entity, or an affiliate of the entity has ime subsequent to July 1, 1989. However, there has been subsequent orida, Division of Administrative Hearing and the Final Order entered the public interest to place the entity submitting this sworn statement hal order)
VALID THROUGH DECEMBER 31 OF THE CALENDAR `AM REQUIRED TO INFORM THE PUBLIC ENTITY PRIO	OR THAT PUBLIC ENTITY ONLY AND THAT THIS FORM IS YEAR IN WHICH IT IS FILED. I ALSO UNDERSTAND THAT I OR TO ENTERING INTO A CONTRACT IN EXCESS OF THE 7, FLORIDA STATUTES, FOR CATEGORY TWO OR ANY
	(Signature)
STATE OF	(Date)
COUNTY OF	
Sworn to (or affirmed) and subscribed before me, by meaday of20, by(F	ans of □ physical presence or □ online notarization, this who has produced
(F	Print or Type Name)
as identification. (Type of Identification)	
Notary Public Signature	
Printed Name of Notary Public	
Notary Commission Number/Expiration	

TRENCH SAFETY

Contractor/vendor acknowledges that included in the appropriate Solicitation items of the Solicitation and in the total Solicitation price are costs for complying with the Florida Trench Safety Act (90-96, Laws of Florida) effective October 1, 1990. The contractor/vendor further identifies the costs of such compliance to be summarized below:

	Trench Safety Measure (Description)	Units of Measure (LF, SF)	Unit (Quantity)	Unit Cost	Extended Cost
A					
В			_		
C			_		
D			_		
	TOTAL \$_				
Failure to complete the	ne above may result		being declared non-resp	oonsive.	
	(Company Na				
STATE OF					
The foregoing instronline notarization,	ument was signed thisday	and acknowledg	ged before me, by mean), by(Print or	ns of □ phy	sical presence or who has
produced			(Print or	Type Name	e)
(Type of Identificat	as ic	lentification.			
			(NOTARY PUBLIC	C)	
My Commission Exp	ires:				

BID BOND

mplete <u>EITHER</u> Lee County Paper Bid Bond <u>OR</u> provide cashier's check					
IOW ALL MEN BY THESE PRESENTS, that we					
as Principal, and BIDDER'S Name) a corporation licensed to do Surety's Name) siness under the laws of the State of Florida as a Surety, are held and firmly bound unto LEE COUNTY OARD OF COUNTY COMMISSIONERS, LEE COUNTY, FLORIDA, a political subdivision of the State orida, the SUM OF the payment whereof, well and truly to be made, we bind ourselves, our heirs, successors, personaresentatives, and assigns, jointly and severally, firmly, by these presents.					
GNED AND SEALED this day of					
HEREAS, said Principal is herewith submitting a Bid/Proposal for the project know as:					
B240509LND - Hurricane Ian Matlacha Drawbridge M&E Repairs - LAP					
NOW, THEREFORE, the condition of the above obligation is such that if said Principal shall be Awarded the Contract upon said Bid/Proposal within the specified time and shall enter into a written Contract, satisfactory in form, provide an acceptable Public Performance and Payment Bond from a Surety acceptable to the County and provide other insurance as may be required to the County within seven (7) calendar days after the written Notice of Intent to Award date, or within such extended period as the County may grant, then this obligation shall be null and void; otherwise said Principal and Surety shall pay to said County in money the difference between the amount of the Bid of said Principal and the amount for which said County may legally contract with another party to perform said Work, if the latter amount be in excess of the former, together with any expenses and reasonable attorney's fees incurred by said County if suit be brought hereon, but in no event shall said Surety's liability exceed the penal sum hereof plus such expenses and attorney's fees. For purposes of unsuccessful bid protests filed by the Principal herein, this obligation shall bind the Surety to pay costs and damages associated with the bid protest or delays to the project upon a finding from the Board of County Commissioners for Lee County that the bid protest was frivolous and/or lacked merit. The liability of the Surety shall not exceed the penal sum of the bid bond.					
tness as to Principal: (SEAL) (Principal)					
Printed Name					
tness as to Surety: (SEAL) (Surety's Name)					
(By-As Attorney-in-Fact, Surety)					

Affix Corporate Seals and attach proper Power of Attorney for Surety.

AFFIDAVIT OF COMPLIANCE WITH SECTION 287.138 and 787.06, FLORIDA STATUTES

	Before	me,	the	undersigned	authority,	personally	appeared	(Name	of a	ffiant)
					, v	vho, after bei	ng first duly	sworn, de	eposes ar	ıd says
of h	is or her p	ersonal	know	ledge the follow	ving:					
1.	Affiant is	the ((Title)					_of (Bus	iness Na	ame)
-									_ which	n does
1	business ir	the St	ate of	Florida, hereina	after called th	he "Vendor."				

- 2. Vendor, pursuant to Section 287.138, Florida Statutes, certifies that (1) Vendor is not owned by a government of a foreign country of concern; (2) a government of a foreign country of concern does not have a "controlling interest" in Vendor, as defined by Section 287.138(1)(a), Florida Statutes; and (3) Vendor is not organized under the law of nor has its principal place of business in a foreign country of concern. For the purposes of this affidavit, foreign country of concern means the People's Republic of China, the Russian Federation, the Islamic Republic of Iran, the Democratic People's Republic of Korea, the Republic of Cuba, the Venezuelan regime of Nicolás Maduro, or the Syrian Arab Republic, including any agency of or any other entity of significant control of such foreign country of concern, as defined in Section 287.138(1)(c), Florida Statutes, as amended from time to time.
- **3.** Vendor, pursuant to Section 787.06, Florida Statutes, certifies that Vendor does not use coercion for labor or services as defined in Section 787.06, Florida Statutes, as amended from time to time.
- **4.** This Affidavit is executed by the Vendor in accordance with Section 287.138, Florida Statutes, for the purposes of preventing the County from entering contracts with foreign entities of concern which would provide Vendor access to an individual's personal identifying information.
- 5. This Affidavit is executed by the Vendor in accordance with Section 787.06, Florida Statutes.

	(Signature)	
	(Date)	
STATE OF		
COUNTY OF		
Sworn to (or affirmed) and subscribed before methisday of, by	ne, by means of □ physical presence or □ (Print or Type Name)	online notarization, who has produced
as identifica		
(Type of Identification)	uton.	
Notary Public Signature		
Printed Name of Notary Public		
Notary Commission Number/Expiration		

Attachment: Immigration Law Affidavit Certification

This Affidavit is required and should be signed by an authorized principal of the firm, notarized and submitted with County Procurements where applicable. Further, Vendors / Bidders are required to enroll in the E-Verify program, and provide acceptable evidence of their enrollment, upon request by County personnel. Acceptable evidence consists of a copy of the properly completed E-Verify Company Profile page or a copy of the fully executed E-Verify Memorandum of Understanding for the company.

Lee County will not intentionally award County contracts to any vendor who knowingly employs unauthorized alien workers, constituting a violation of the employment provision contained in 8 U.S.C. Section 1324 a(e) Section 274A(e) of the Immigration and Nationality Act ("INA").

Lee County may consider the employment by any vendor of unauthorized aliens a violation of Section 274A (e) of the INA. Such Violation by the recipient of the Employment Provisions contained in Section 274A (e) of the INA shall be grounds for unilateral termination of the contract by Lee County.

Vendor attests that they are fully compliant with all applicable immigration laws (specifically to the 1986 Immigration Act and subsequent Amendment(s)) and agrees to comply with the provisions of the Memorandum of Understanding with E-Verify and to provide proof of enrollment in The Employment Eligibility Verification System (E-Verify), operated by the Department of Homeland Security in partnership with the Social Security Administration at any time upon request by the County.

Company Name			
Print Name		Title	
Signature		Date	
State of	_		
County of	_		
The foregoing instrument w online notarization, this		ed before me, by means of □ ph , by	ysical presence or □
	who has produced		s identification.
(Print or Type Name)		(Type of Identification)	
Notary Public Signature			
Printed Name of Notary Publi	c		
Notary Commission Number/	Expiration		

The signee of these Affidavit guarantees, as evidenced by the sworn affidavit required herein, the truth and accuracy of this affidavit to interrogatories hereinafter made.

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

375-030-32 PROCUREMENT

CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSIONLOWER TIER COVERED TRANSACTIONS FOR FEDERAL AID CONTRACTS

(Compliance with 2 CFR Parts 180 and 1200)

It is certified that neither the below identified firm nor its principals are presently suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any federal department or agency.

Name	of Contractor:
Ву:	
Date:	
Title: _	

Instructions for Certification

Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200)

- a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.
- b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.
- c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.
- d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).
- e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
- f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.
- g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (https://www.epls.gov/), which is compiled by the General Services Administration.
- h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

Form 12 - 375-030-33 Certification for Disclosure of Lobbying Activities

STATE OF ELORIDA DEPARTMENT OF TRANSPORTATION.

375-030-33 PROCUREMENT

CERTIFICATION FOR DISCLOSURE OF LOBBYING ACTIVITIES ON FEDERAL-AID CONTRACTS (Compliance with 49CFR, Section 20.100 (b))

The prospective participant certifies, by signing this certification, that to the best of his or her knowledge and belief:

- (1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure of Lobbying Activities", in accordance with its instructions.
- (3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

The prospective participant also agrees by submitting his or her proposal that he or she shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such subrecipients shall certify and disclose accordingly.

Name of Consultant:	
Ву:	Date:
Authorized Signature:	
Title:	
has 18 february 18	

Page 1 of 2

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

DISCLOSURE OF LOBBYING ACTIVITIES

375-030-34 PROCUREMENT 02/16

Is this form applicable to your firm?
YES NO S
If no, then please complete section 4 below for "Prime"

a. contract b. grant c. cooperative agreement d. loan e. loan guarantee f. loan insurance	a. bid/offer/application b. initial award c. post-award		a. initial filing b. material change For Material Change Only: Year: Quarter: Date of last report: (mm/dd/yyyy)		
4. Name and Address of Reporting Prime Subaward Tier	ee if known:	Address of Prime: Congressional Dis	strict, <i>if known</i> :	bawardee, Enter Name and	
6. Federal Department/Agency:		CFDA Number, if		tion:	
8. Federal Action Number, if know	'n:	9. Award Amoun	*		
10. a. Name and Address of Lobb (if individual, last name, first		b. Individuals Pe different from No (last name, first	o. 10a)	(including address if	
11. Information requested through this form U.S.C. section 1352. This disclosure of material representation of fact upon whi by the tier above when this transaction into. This disclosure is required pursuar This information will be available for put person who fails to file the required disc to a civil penalty of not less than \$10,00 \$100,000 for each such failure.	lobbying activities is a ch reliance was placed was made or entered to to 31 U.S.C. 1352. blic inspection. Any closure shall be subject	Print Name:		e (mm/dd/yyyy):	
Federal Use Only:				Authorized for Local Reproduction Standard Form LLL (Rev. 7-97)	

375-030-34 PROCUREMENT 04/14 Page 2 of 2

INSTRUCTIONS FOR COMPLETION OF SF-LLL, DISCLOSURE OF LOBBYING ACTIVITIES

This disclosure form shall be completed by the reporting entity, whether subawardee or prime Federal recipient, at the initiation or receipt of a covered Federal action, or a material change to a previous filing, pursuant to title 31 U.S.C. section 1352. The filing of a form is required for each payment or agreement to make payment to any lobbying entity for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with a covered Federal action. Complete all items that apply for both the initial filing and material change report. Refer to the implementing guidance published by the Office of Management and Budget for additional information.

- 1. Identify the type of covered Federal action for which lobbying activity is and/or has been secured to influence the outcome of a covered Federal action.
- 2. Identify the status of the covered Federal action.
- 3. Identify the appropriate classification of this report. If this is a followup report caused by a material change to the information previously reported, enter the year and quarter in which the change occurred. Enter the date of the last previously submitted report by this reporting entity for this covered Federal action.
- 4. Enter the fullname, address, city, State and zip code of the reporting entity. Include Congressional District, if known. Check the appropriate classification of the reporting entity that designates if it is, or expects to be, a prime or subaward recipient. Identify the tier of the subawardee, e.g., the first subawardee of the prime is the 1st tier. Subawards include but are not limited to subcontracts, subgrants and contract awards under grants.
- 5. If the organization filing the report in item 4 checks "Subawardee," then enter the full name, address, city, State and zip code of the prime Federal recipient. Include Congressional District, if known.
- 6. Enter the name of the Federal agency making the award or loan commitment. Include at least one organizational level below agency name, if known. For example, Department of Transportation, United States Coast Guard.
- 7. Enter the Federal program name or description for the covered Federal action (item 1). If known, enter the full Catalog of Federal Domestic Assistance (CFDA) number for grants, cooperative agreements, loans, and loan commitments.
- 8. Enter the most appropriate Federal identifying number available for the Federal action identified in item 1 (e.g., Request for Proposal (RFP) number; Invitation for Bid (IFB) number; grant announcement number; the contract, grant, or loan award number; the application/proposal control number assigned by the Federal agency). Include prefixes, e.g., "RFP-DE-90-001."
- 9. For a covered Federal action where there has been an award or loan commitment by the Federal agency, enter the Federal amount of the award/loan commitment for the prime entity identified in item 4 or 5.
- (a) Enter the full name, address, city, State and zip code of the lobbying registrant under the Lobbying
 Disclosure Act of 1995 engaged by the reporting entity identified in item 4 to influence the covered Federal
 action.
 - (b) Enter the full names of the individual(s) performing services, and include full address if different from 10 (a). Enter Last Name, First Name, and Middle Initial (MI).
- 11. The certifying official shall sign and date the form, print his/her name, title, and telephone number.

According to the Paperwork Reduction Act, as amended, no persons are required to respond to a collection of information unless it displays a valid OMB Control Number. The valid OMB control number for this information collection is OMB No. 0348-0046. Public reporting burden for this collection of information is estimated to average 10 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0046), Washington, DC 20503.

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

375-030-50 PROCUREMENT OGC - 1/20

CONFLICT OF INTEREST/CONFIDENTIALITY CERTIFICATION FOR CONSULTANT/CONTRACTOR/TECHNICAL ADVISORS

I certify that I have no present conflict of interest, that I have no knowledge of any conflict of interest that my firm may have, and that I will recuse myself from any capacity of decision making, approval, disapproval, or recommendation on any contract if I have a conflict of interest or a potential conflict of interest.

Consultants/Contractors are expected to safeguard their ability to make objective, fair, and impartial decisions when performing work for the Department, and therefore may not accept benefits of any sort under circumstances in which it could be inferred by a reasonable observer that the benefit was intended to influence a pending or future decision of theirs, or to reward a past decision. Consultants performing work for the Department should avoid any conduct (whether in the context of business, financial, or social relationships) which might undermine the public trust, whether or not that conduct is unethical or lends itself to the appearance of ethical impropriety.

I will maintain the confidentiality of all information not made public by the Florida Department of Transportation ("Department") related to the procurement of the above-referenced ("Project") that I gain access to as a result of my involvement with the Project ("Procurement Information"). I understand that Procurement Information includes, but is not limited to, documents prepared by or for the Department related to procurement of the Project. I also understand that Procurement Information includes, but is not limited to, documents submitted to the Department by entities seeking an award of the Project ("Proposers"). I understand that Procurement Information may include documents submitted by Proposers related to letters of response/letters of interest, technical proposals, price proposals, financial proposals, and information shared during exempt meetings. I also understand that Procurement Information may also include documents that evaluate or review documents submitted by Proposers, and information regarding Project cost estimates. I also agree not to discuss the Project with anyone who is a member of or acting on behalf of a Proposer.

Unless so ordered by a court of competent jurisdiction or an opinion of the Office of the Florida Attorney General, I will not divulge any Procurement Information except to individuals who have executed a Conflict of Interest/Confidentiality Certification which has been approved by the Department ("Project Personnel"). I understand that a list of Project Personnel will be maintained by Department. If I am contacted by any member of the public or the media with a request for Procurement Information, I will promptly forward such request to the Department's Procurement Office. I will also maintain security and control over all documents containing Procurement Information which are in my custody.

I agree not to solicit or accept gratuities, unwarranted privileges or exemptions, favors, or anything of value from any firm under consideration for an agreement associated with the Project, and I recognize that doing so may be contrary to statutes, ordinances, and rules governing or applicable to the Department or may otherwise be a violation of the law.

I agree not to engage in bid tampering, pursuant to Section 838.22, Florida Statutes.

I realize that violation of the above mentioned standards could result in the termination of my work for the Department. I further realize that violation of the above mentioned statute would be punishable in accordance with Section 838.22, Florida Statutes..

Advertisement No./ Solicitation No	Description		Financial Project Number(s)
Each un	dersigned individual agre	es to the terms of this Conflict of In	terest/Confidentiality Certification.
Printed Names		Signatures	Date

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

375-030-50 PROCUREMENT OGC - 1/20

CONFLICT OF INTEREST/CONFIDENTIALITY CERTIFICATION FOR CONSULTANT/CONTRACTOR/TECHNICAL ADVISORS Additional Page

Advertisement No./ Solicitation No	Description		Fi	nancial Project Number(s)
	_			
Each un	dersigned individual agree	es to the terms of this Conflict of	f Interest/Confidentiality	Certification.
Printed Names		Signatures	Di	ate
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Form 15 - 525-010-46 LAP Certification of Current Capacity

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

LAP CERTIFICATION OF CURRENT CAPACITY

525-010-46 PROGRAM MANAGEMENT 09/20 Page 1 of 2

CONFIDENTIAL per Ch 337.14(1) F.S.

For bids to be received on(Letting Date)	Fill in your FDOT Vendor Number VF (Only applicable to FDOT pre-qualified contractors)
CERTIF	<u>ICATE</u>
I hereby certify that the amount of any proposal submitted by of the Firm's CURRENT CAPACITY (maximum capacity rating	
The total uncompleted work as shown on the "Status of Contracts on Hand" report (pag	e 2) \$
I further certify that the "Status of Contracts on Hand" report ($\mbox{\sc i}$	page 2) was prepared as follows:
1. If the letting is before the $25^{\rm th}$ day of the month, the certification day of the month, last preceding the month of the letting.	ate and report reflect the uncompleted work as of the 15 th
2. If the letting is after the 25th day of the month, the certificate the 15th day of the month of the letting.	e and report reflects the uncompleted work in progress as of
3. All new contracts (and subcontracts) awarded earlier than and charged against our total rating.	five days before the letting date are included in the report
I certify that the information above is correct.	NAME OF FIRM
Sworn to and subscribed this day	By:
of, 20	Title

Form 15 - 525-010-46 LAP Certification of Current Capacity

525-010-46 PROGRAM MANAGEMENT 09/20 Page 2 of 2

STATUS OF CONTRACTS ON HAND

(Furnish complete information about all your contracts, whether prime or subcontracts; whether in progress or awarded, but not yet begun; and regardless of whom contracted with.)

<u></u>							
1	2	3	4	5		6	
PROJECTS	CONTRACT (OR SUBCONTRACT)		CONTRACT (OR AMOUNT BALANCE OF		UNCOMPLE	ETED AMOUNT TO BE DONE BY YOU	
OWNER, LOCATION AND DESCRIPTION	AMOUNT	SUBLET TO OTHERS	CONTRACT AMOUNT	AS PRIM CONTRACT		AS SUBCONTRACTOR	
NOTE: Columns 2 and 3 to show total contract (or subcontract) amounts. Column 4 to be difference between columns 2 and 3. Amount in columns 5 or 6 to be uncompleted portion of amount in column 4.			TOTALS	:	\$0.00	\$0.00	
All amounts to be shown to nearest \$100. The Contractor may consolidate and list as a single item all contracts which, individually, do not exceed 3% of total, and which, in the aggregate, amount to less than 20% of the total.			TOTAL UNCOMPLETED HAND TO BE DONE BY (TOTAL COLUMNS 5 AN	YOU	\$0.00)	

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

NON-COLLUSION DECLARATION AND COMPLIANCE WITH 49 CFR § 29

575-060-13 RIGHT OF WAY 05/01 Page 1 of 3

			ITEM/SEGMENT NO	O.:
				K-240,0555
				ICT:
				-100
1,		(NAME)		, hereby declare that I am
		of		
2	(TITLE)		((FIRM)
of				
		(CITY AN	D STATE)	
and that I am th	he person responsible wit	hin my firm for the fi	nal decision as to the pric	e(s) and amount of this Bid on this

I further declare that:

State Project.

- 1. The prices(s) and amount of this bid have been arrived at independently, without consultation, communication or agreement, for the purpose of restricting competition with any other contractor, bidder or potential bidder.
- 2. Neither the price(s) nor the amount of this bid have been disclosed to any other firm or person who is a bidder or potential bidder on this project, and will not be so disclosed prior to the bid opening.
- 3. No attempt has been made or will be made to solicit, cause or induce any other firm or person to refrain from bidding on this project, or to submit a bid higher than the bid of this firm, or any intentionally high or non-competitive bid or other form of complementary bid.
- 4. The bid of my firm is made in good faith and not pursuant to any agreement or discussion with, or inducement from, any firm or person to submit a complementary bid.
- 5. My firm has not offered or entered into a subcontract or agreement regarding the purchase of materials or services from any firm or person, or offered, promised or paid cash or anything of value to any firm or person, whether in connection with this or any other project, in consideration for an agreement or promise by any firm or person to refrain from bidding or to submit a complementary bid on this project.
- 6. My firm has not accepted or been promised any subcontract or agreement regarding the sale of materials or services to any firm or person, and has not been promised or paid cash or anything of value by any firm or person, whether in connection with this or any other project, in consideration for my firm's submitting a complementary bid, or agreeing to do so, on this project.
- 7. I have made a diligent inquiry of all members, officers, employees, and agents of my firm with responsibilities relating to the preparation, approval or submission of my firm's bid on this project and have been advised by each of them that he or she has not participated in any communication, consultation, discussion, agreement, collusion, act or other conduct inconsistent with any of the statements and representations made in this Declaration.
- 8. As required by Section 337.165, Florida Statutes, the firm has fully informed the Department of Transportation in writing of all convictions of the firm, its affiliates (as defined in Section 337.165(I)(a), Florida Statutes), and all directors, officers, and employees of the firm and its affiliates for violation of state or federal antitrust laws with respect to a public contract or for violation of any state or federal law involving fraud, bribery, collusion, conspiracy or material misrepresentation with respect to a public contract. This includes disclosure of the names of current employees of the firm or affiliates who were convicted of contract crimes while in the employ of another company.

575-060-13 RIGHT OF WAY 05/01 Page 2 of 3

- 9. I certify that, except as noted below, neither my firm nor any person associated therewith in the capacity of owner, partner, director, officer, principal, investigator, project director, manager, auditor, and/or position involving the administration of Federal funds:
 - (a) is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions, as defined in 49 CFR §29.110(a), by any Federal department or agency;
 - (b) has within a three-year period preceding this certification been convicted of or had a civil judgment rendered against him or her for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a Federal, State or local government transaction or public contract; violation of Federal or State antitrust statutes; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements or receiving stolen property;
 - (c) is presently indicted for or otherwise criminally or civilly charged by a Federal, State or local governmental entity with commission of any of the offenses enumerated in paragraph 9(b) of this certification; and
 - (d) has within a three-year period preceding this certification had one or more Federal, State or local government public transactions terminated for cause or default.
- 10. I(We), certify that I(We), shall not knowingly enter into any transaction with any subcontractor, material supplier, or vendor who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this contract by any Federal Agency unless authorized by the Department.

Where I am unable to declare or certify as to any of the statements contained in the above stated paragraphs numbered (1) through (10), I have provided an explanation in the "Exceptions" portion below or by attached separate sheet.

EXCEPTIONS:

(Any exception listed above will not necessarily result in denial of award, but will be considered in determining bidder responsibility. For any exception noted, indicate to whom it applies, initiating agency and dates of agency action. Providing false information may result in criminal prosecution and/or administrative sanctions.)

I declare under penalty of perjury that the foregoing is true and correct.

CONTRACTO	DR: (Seal)		
BY:	NAME AND TITLE PRINTED	WITNESS:	
BY:	SIGNATURE	WITNESS:	
Executed on this	day of	,	

FAILURE TO FULLY COMPLETE AND EXECUTE THIS DOCUMENT MAY RESULT IN THE BID BEING DECLARED NONRESPONSIVE

575-060-13 RIGHT OF WAY 05/01 Page 3 of 3

REQUIRED CONTRACT PROVISIONS

This certification applies to subcontractors, material suppliers, vendors and other lower tier participants.

- Appendix B of 49 CFR Part 29 -

Appendix B—Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion—Lower Tier Covered Transactions

Instructions for Certification

- 1. By signing and submitting this proposal, the prospective lower tier participant is providing the certification set out below.
- 2. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.
- 3. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- 4. The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the person to whom this proposal is submitted for assistance in obtaining a copy of those regulations.
- 5. The prospective lower tier participant agrees by submitting this proposal that it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
- 6. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
- 7. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the Nonprocurement List.
- 8. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- 9. Except for transactions authorized under paragraph 5 of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

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

- (1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntary excluded from participation in this transaction by any Federal department or agency.
- (2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION AFFIDAVIT REGARDING LABOR AND SERVICES

375-030-31 PROCUREMENT

Effective July 1, 2024, pursuant to §787.06(13), Florida Statutes, when a contract is executed, renewed, or extended between a nongovernmental entity and a governmental entity, the nongovernmental entity must provide the governmental entity with an affidavit signed by an officer or a representative of the nongovernmental entity under penalty of perjury attesting that the nongovernmental entity does not use coercion for labor or services.

Nongovernmental Entity's Name: Address:		
Phone Number:		
Authorized Representative's Name:	·	
Authorized Representative's Title:		
Email Address:		
	-	
	Affidavit	
- □		
I,		_, as authorized representative attest that
labor or services as defined in §787.06,	E1' 1- C4-4-4	(entity name) does not use coercion for
labor of services as defined in 9787.00,	Fiorida Statutes.	
Under penalty of perjury, I declare that	I have read the forego:	ing Affidavit and that the facts stated in it
are true.		
(Signature of authorized representative	e) Date	
(Signature of authorized representative	,,	
STATE OF FLORIDA		
COUNTY OF		
Sworn to (or affirmed) and subscribed before	re me, by means of 🔲 p!	hysical presence or online notarization, this
day of,	(year), by	
Notary Public, not required when digital		
Tvotary I done, not required when digital		
Commission Expires		
Commission Expires Personally Known OR Produced Identify Type of Identification Produced	ication	

Cut along the outer border and affix this label to your sealed solicitation envelope to identify it as a "Sealed Bid".

SEALED BID DOCUMENTS • DO NOT OPEN		
BID No.:	B240509LND	
BID TITLE:	Hurricane Ian Matlacha Drawbridge M&E Repairs - LAP	
DATE DUE:	Thursday, January 9, 2025	
TIME DUE:	Prior to: 2:30 PM	
SUBMITTED BY:		
	(Name of Company)	
e-mail address	Telephone	
DELIVER TO:	Lee County Procurement Management 2115 Second Street, 1 st Floor Fort Myers FL 33901	



*Notice: The Date Due/Bid Due Date/Opening Date as stated on this label and other forms contained herein may have been updated via issuance of Addenda against this project. It is the sole responsibility of the Contractor to monitor the County project webpage for any updates to the Date Due/Bid Due Date/Opening Date via Addenda. This label nor other original forms may not be updated. Contractor may strike through and update Date Due/Bid Due Date/Opening Date at their discretion to match any updates to this date that have been published via Addenda.

Submission received after the time and date of the Date Due/Bid Due Date/Opening Date will not be acceptable at the sole discretion of the County.

PLEASE PRINT CLEARLY

DRAFT CONSTRUCTION AGREEMENT

CONSTRUCTION AGREEMENT

LEE COUNTY, a political subdivision of the State of Florida, by and through its Board of County Commissioners, situated at 2115 Second St., Fort Myers, FL 33901 (the "County"), hereby contracts with [Contractor's name **exactly** as it appears on Sunbiz] (the "Contractor") of [Contractor's primary business address] a [Contractor's state] contractor licensed to perform all Work in the State of Florida in connection with the County's Solicitation No. [Solicitation Number and Project Name] (the "Project"), as said Work is set forth in the Plans and Specifications prepared by [Engineer of Record's name], the "Engineer of Record," and other Contract Documents hereafter specified (the "Work").

The County and the Contractor, for the consideration herein set forth, agree as follows:

Section 1. Contract Documents.

- A. The Contract Documents consist of this Agreement, the Exhibits described in Section 6 hereof, the legal advertisement, the instructions to bidders, the Proposal and Proposal Forms, the solicitation documents and any duly executed and issued addenda, the Contractor's proposal, Change Orders, Field Directive Change Orders, and amendments relating thereto. All of the foregoing Contract Documents are incorporated by reference and made a part of this Agreement with the exception of the solicitation which shall be incorporated to the extent that it does not conflict with the remainder of the Agreement (all of said documents including the Agreement sometimes being referred to herein as the "Contract Documents" or "Contract" and sometimes as the "Agreement"). A copy of the Contract Documents shall be maintained by Contractor at the Project Site at all times during the performance of the Work.
- B. The Engineer of Record is the initial interpreter of the Contract Documents concerning design intent, but is not the judge between the County and the Contractor. The County reserves the right to make final decisions considering the Engineer of Record's recommendations or interpretations of the Contract Documents. The Engineer of Record does not have authority to obligate or commit the County to fund additional expenditures or approve extensions of time over the approved Contract Time or Amount. However, the Engineer of Record's interpretation as to the intent of her or his design shall be final and not subject to interpretation by the County's staff.
- C. The Construction Engineering and Inspection Consultant ("CEI Consultant") is the initial interpreter of the Contract Documents in all matters not concerning design intent. The CEI Consultant shall administer, monitor, test, sample, and inspect the Construction of the Project to ensure that the Project is constructed in reasonable conformity with the plans, specifications, and special provisions of the Contract Documents and shall observe the Contractor's work to determine the progress and quality of work, identify discrepancies, report significant discrepancies to the County, and direct the Contractor to correct such observed discrepancies. The County reserves the right to make final decisions considering the CEI Consultant's recommendations or

interpretations of the Contract Documents. The CEI Consultant may issue Field Directive Change Orders to the Contractor, but the CEI Consultant does not have authority to change the scope of the Project, obligate or commit the County to fund additional expenditures, or approve extensions of time over the approved Contract Time or Amount. The CEI Consultant shall consult with the Engineer of Record regarding any questions concerning the intent of the Project design.

- D. Any Work that may be reasonably inferred from the Plan and Specifications as being required to produce the intended result shall be supplied whether or not it is specifically called for. In case of any inconsistency or conflict among the provisions of the Contract Documents, the order of precedence shall be as follows: (1) Change Orders; (2) the main body of the Agreement, including amendments; (3) the Exhibits to the Agreement; (4) Field Directive Change Orders; (5) the solicitation documents, including any addenda. Exhibit E, Article 5-2 provides the order of precedence for Specifications, Plans, Special Provisions, Technical Special Provisions, and other Project specifications. The Contract Documents represent the entire and integrated Agreement between the parties hereto, and supersede prior negotiations, representations, or agreements, either written or oral.
- E. Work, materials or equipment described in words which have a well-known technical or trade meaning, shall be deemed to refer to such recognized standards.
- F. The County shall furnish to the Contractor Contract Documents in electronic form and PDF file format.
- G. The Contractor agrees to bind specifically every Subcontractor to the applicable terms and conditions of the Contract Documents for the benefit of the County.
- H. The Work to be provided by Contractor for the Project shall be under the general direction of the CEI Consultant, or their successor, who shall act as the County's representative during the term of this Agreement. If the County's representative is not a County employee, then County's representative is not authorized to issue changes to the Contract Amount, Contract Time, or Scope of Work without express approval by the County Director, County Manager, or Board of County Commissioners.

Section 2. Scope of Work.

- A. The Contractor agrees to furnish and pay for all management, supervision, financing, labor, materials, tools, transportation, fuel, supplies, utilities, equipment and services of every kind and type necessary to diligently, timely, and fully perform and complete in a good and workmanlike manner the Work required by this Agreement.
- B. The Work shall be prosecuted and administered in accordance with the Standard Specifications attached hereto and incorporated herein as Exhibit E.

Section 3. Contract Amount.

- A. In consideration of the faithful performance by the Contractor of the covenants in this Contract to the full satisfaction and acceptance of the County, the County agrees to pay, or cause to be paid, to Contractor the following Contract Amount in accordance with the terms of this Agreement: \$[Contract amount in numbers] or in words: [Contract amount in words].
- B. Measurement and payment provisions are provided in Division 1, Section 9 of the Standard Specifications attached hereto as Exhibit E, except that the amount of retainage to be withheld by the department shall not exceed 5% of the amount due on the current estimate, when the percent of Contract Time used exceeds the percent of Contract amount earned by more than 15%.

Section 4. Bonds.

- A. The Contractor shall provide and maintain through the life of the Contract, including the warranty period, Performance and Payment Bonds, in the form prescribed in the Exhibits to the Agreement, in the amount of 100% of the Contract Amount, the costs of which are to be paid by Contractor. If the Contract is increased by a Change Order, it shall be the Contractor's responsibility to ensure that the Performance and Payment Bonds are amended accordingly and a copy of the amendment recorded by the Lee County Clerk of Court and forwarded to the County. The Performance and Payment Bonds shall be underwritten by a Surety authorized to do business in the State of Florida and otherwise acceptable to the County; provided, however, the Surety shall be rated as "A or better" as to general policy holders rating as reported in the most current Best Key Rating Guide, published by A.M. Best Company, Inc. and/or shall be approved by the County prior the issuance of such Bond, which approval shall not be unreasonably withheld.
- B. Attorneys-in-fact who sign Bonds for County projects must file with such Bond a certified copy of their Power of Attorney to sign such Bond. All agents of Surety companies must list their name, address, and telephone number on all Bonds. The life of all Bonds provided to the County shall extend twelve (12) months beyond the date of final payment and shall contain a waiver of alternation to the terms of the Agreement, extensions of time and/or forbearance on the part of the County. The County shall not return or release the Bonds for a period of twelve (12) months after the date of final payment to allow time for claims against the Bonds during this period.
- C. If the Surety for any Bond furnished by Contractor is declared bankrupt, becomes insolvent, its right to do business is terminated in the State of Florida, or it ceases to meet the requirements imposed by the Contract Documents, the Contractor shall, within five (5) calendar days thereafter, substitute at Contractor's cost another Bond and Surety, both of which shall be subject to the County's approval.

- D. If the Contractor cannot obtain another Bond and Surety within five (5) calendar days, the County may accept and the Contractor shall submit an irrevocable letter of credit drawn on a Lee County, Florida bank until the Bond and Surety can be obtained.
- E. In case of default on the part of the Contractor, the County will charge against the Contract/Performance Bond all expenses for services incidental to ascertaining and collecting losses under the Contract/Performance Bond, including accounting, engineering, and legal services, together with any and all costs incurred in connection with renegotiation of the Contract.
- F. The Surety shall indemnify and provide defense for the County when called upon to do so for all claims or suits against the County, by third parties, pertaining to Contractor payment or performance issues arising out of the Contract where the Contractor has failed to timely provide the County such defense. It is expressly understood that the monetary limitation on the extent of the indemnification shall be the approved Contract amount, which shall be the original Contract amount as may be modified by subsequent Supplemental Agreements.
- G. The principal and Surety executing the Contract/Performance Bond shall be liable to the County in any civil action that might be instituted by the County or any officer of the County authorized in such cases, for triple any amount in money or property the County might lose, or be overcharged, or otherwise be defrauded of by any wrongful or criminal act of the Contractor, their agent or their employees.

Section 5. Contract Time and Liquidated Damages

- A. Time is of the essence in the performance of the Work under this Agreement. The Commencement Date is established in the Notice to Proceed to be issued by the County, and the Contractor must begin the Work within the number of days specified by the Notice to Proceed. Written Notice to Proceed is contingent upon and will be done subsequent to the Contractor fully satisfying the County's stated insurance and Bond submittal requirements. No Work shall be performed at the Project Site prior to the Commencement Date. Any Work performed by the Contractor prior to the Commencement Date shall be at the sole risk of the Contractor. Final Acceptance of the Work shall be achieved within [The number of days specified in the Contractor's proposal in words and (number)] calendar days from the Commencement Date, and that time period shall be the Contract Time. The date of Final Acceptance of the Work (or designated portions thereof) is the date certified by the Director pursuant to Exhibit E, Article 5-11.
- B. Prosecution and progress of the Work provisions are provided in Division 1, Section 8 of the Standard Specifications attached hereto as Exhibit E.
- C. The County and the Contractor recognize that, since time is of the essence for this Agreement, the County will suffer financial loss if Final Acceptance of the Work is not achieved within the time specified above, as said time may be adjusted as provided

for herein. Should the Contractor fail to achieve Final Acceptance of the Work within the time period noted above, the County shall be entitled to assess the amount set forth in Article 8-10 of the Standard Specifications, as Liquidated Damages, but not as a penalty, for each calendar day thereafter until Final Acceptance is achieved. Final Acceptance of the Work shall be deemed to occur on the date the Director issues a written notice of Final Acceptance pursuant to the terms hereof. The Contractor hereby expressly waives and relinquishes any right which it may have to seek to characterize the above noted Liquidated Damages as a penalty, which the parties agree represents a fair and reasonable estimate of the County's actual damages at the time of contracting if the Contractor fails to achieve Final Acceptance of the Work in a timely manner.

- D. When any period of time is referenced by days herein, it shall be computed to include the first day and last day of such period. All days shall mean calendar day and not business day.
- E. Any agreed upon changes to the Contract Time must be accomplished by an approved, written Change Order in the form attached to this Agreement.

Section 6. Exhibits Incorporated.

The following documents are attached and expressly agreed as incorporated into and made a part of this Agreement:

- A. Legal Advertisement
- B. Invitation to Bid and all addenda, including the Project Plans
- C. Bid Form and Required Documents
- D. Form of Public Construction Performance and Payment Bond
- E. Standard Specifications
- F. Insurance Requirements, including Certificates of Insurance
- G. Form of Release and Affidavit
- H. Change Order Form
- I. Supplemental Specifications
- J. Special Provisions
- K. Technical Special Provisions
- L. FDOT and Lee County Design Standards
- M. Developmental Specifications
- N. Contractor's Background Screening Affidavit
- O. Other relevant forms

Section 7. Public Records.

- A. In addition to other requirements provided herein, Contractor shall comply with public records laws embodied in Chapter 119, Florida Statutes, and specifically shall:
 - A.1. Keep and maintain public records required by the County in order to perform the Scope of Services identified herein.

- A.2. Upon request from the County provide the County with any requested public records or allow the requested records to be inspected or copied within a reasonable time by the County.
- A.3. Ensure that 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 thereafter if the Contractor does not transfer all records to the County.
- A.4. Transfer, at no cost, to County all public records in possession of the Contractor upon termination of this Agreement and destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. All records stored electronically must be provided to the County, upon request from the County, in a format that is compatible with the information technology systems of the County. If the Contractor keeps and maintains public records upon the conclusion of this Agreement, the Contractor shall meet all applicable requirements for retaining public records that would apply to the County.
- B. If Contractor does not comply with a public records request, the County shall treat that omission as a breach of this Agreement and enforce the Contract provisions accordingly. Additionally, if the Contractor fails to provide records when requested, the Contractor may be subject to penalties under Section 119.10, Florida Statutes, and reasonable costs of enforcement, including attorney fees.
- IF THE CONTRACTOR HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO THE CONTRACTOR'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS AGREEMENT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT 239-533-2221, 2115 SECOND STREET, FORT MYERS, FL 33901, PRRCustodian@leegov.com; http://www.leegov.com/publicrecords.

Section 8. Audit.

- A. Upon execution of the Contract, the County reserves the right to conduct an audit of the Contractor's records pertaining to the Project. The County or its representatives may conduct an audit, or audits, at any time prior to final payment, or thereafter pursuant to 5-12 of the Standard Specifications. The County may also require submittal of the records from either the Contractor or any subcontractor or material supplier. As the County deems necessary, records include all books of account, supporting documents, and papers pertaining to the cost of performance of the Work.
- B. The Contractor must retain all records pertaining to the Contract for a period of not less than ten (10) years from the date of the Director's final acceptance of the Project, unless a longer minimum period is otherwise specified. Upon request, make all such records available to the County or its representative(s). For the purpose of this

section, records include but are not limited to all books of account, supporting documents, and papers that the County deems necessary to ensure compliance with the provisions of the Contract Documents.

- C. If the Contractor fails to comply with these requirements, the County may disqualify or suspend the Contractor from bidding on or working as a subcontractor on future Contracts.
- D. The Contractor must ensure that the subcontractors provide access to their records pertaining to the project upon request by the County.

Section 9. Indemnification and Insurance.

- Contractor agrees to save harmless, indemnify, and defend or, at the option of the County, pay the cost of defense, the County and its representative from any and all claims, losses, penalties, demands, judgments, and costs of suit, including attorneys' fees and paralegals' fees, for any expense, damage or liability incurred by any of them, whether for personal injury, property damage, direct or consequential damages, or economic loss, arising directly or indirectly on account of or in connection with the Work performed by Contractor under this Agreement or by any person, firm or corporation to whom any portion of the Work is subcontracted by Contractor or resulting from the use by Contractor, or by any one for whom Contractor is legally liable, of any materials, tools, machinery or other property of the County. The County and Contractor agree the first \$100.00 of the Contract Amount paid by the County to Contractor shall be given as separate consideration for this indemnification, and any other indemnification of the County by Contractor provided for within the Contract Documents, the sufficiency of such separate consideration being acknowledged by Contractor by Contractor's execution of the Agreement. The Contractor's obligation under this provision shall not be limited in any way by the agreed upon Contract Amount as shown in this Contract or the Contractor's limit of, or lack of, sufficient insurance protection.
- B. The Contractor guaranties the payment of all just claims for materials, supplies, tools, or labor and other just claims against him or any subcontractor, in connection with the Contract. The Department's final acceptance and payment does not release the Contractor's bond until all such claims are paid or released.
- C. Contractor shall obtain and carry, at all times during its performance under the Contract Documents, insurance of the types and in the amounts set forth in the Insurance Requirements attached to this Agreement. All insurance policies shall be from responsible companies duly authorized to do business in the State of Florida and/or responsible risk retention group insurance companies which are registered with the State of Florida. Prior to execution of the Agreement, Contractor shall provide the County with properly executed Certificates of Insurance to evidence Contractor's compliance with the insurance requirements of the Contract Documents. Said Certificates of Insurance shall be on forms approved by the County. The Certificates of Insurance shall be personally, manually signed by the authorized representatives of the insurance company/companies

shown on the Certificates of Insurance, with proof that they are authorized representatives thereof. In addition, certified, true and exact copies of all insurance policies required hereunder shall be provided to the County, on a timely basis, when requested by the County.

- D. The Certificates of Insurance and required insurance policies shall contain provisions that thirty (30) calendar days prior written notice by registered or certified mail shall be given to the County of any cancellation, intent not to renew, or reduction in the policies or coverages, except in the application of the aggregate limits provisions. In the event of a reduction in the aggregate limit of any policy, Contractor shall immediately take steps to have the aggregate limit reinstated to the full extent permitted under such policy.
- E. To the extent multiple insurance coverage and/or County's self-insured retention may apply, any and all insurance coverage purchased by Contractor and its Subcontractors identifying the County as an additional named insured shall be primary. The acceptance by the County of any Certificate of Insurance does not constitute approval or agreement by the County that the insurance requirements have been satisfied or that the insurance policy shown on the Certificate of Insurance is in compliance with the requirements of the Contract Documents. No Work shall commence at the Project Site unless and until the required Certificates of Insurance are received by the County.
- F. The Contractor will be fully responsible for all acts and omissions of his Subcontractors and of persons directly or indirectly employed by them and of persons for whose acts they may be liable to the same extent that they are employed by him. Nothing in the Contract Documents shall create any contractual relationship between any Subcontractor and the County. The County may, upon request, furnish to any Subcontractor, to the extent practicable, evidence of amounts paid to the Contractor on account of specific Work done.
- G. Contractor shall require each of its Subcontractors to procure and maintain, until the completion of the Subcontractor's work, insurance of the types and to the limits specified in the Insurance Requirements attached to this Agreement, unless such insurance requirements for the Subcontractor are expressly waived in writing by the County. All liability insurance policies, other than professional liability, workers' compensation, employer's liability and business auto liability policies, obtained by Contractor to meet the requirements of the Contract Documents shall name the County and Engineer of Record as additional insureds. If any insurance provided pursuant to the Contract Documents expires prior to the completion of the Work, renewal Certificates of Insurance and, if requested by the County, certified, true copies of the renewal policies, shall be furnished by Contractor within thirty (30) calendar days prior to the date of expiration.
- H. Should, at any time, the Contractor not maintain the insurance coverages required herein, the County may terminate the Agreement or at its sole discretion shall be authorized to purchase such coverages and charge the Contractor for such coverages purchased. The County shall be under no obligation to purchase such insurance, nor

shall it be responsible for the coverages purchased or the insurance company or companies used. The decision of the County to purchase such insurance coverages shall in no way be construed to be a waiver of any of its rights under the Contract Documents.

I. Contractor shall submit to Engineer of Record a copy of all accident reports arising out of any injuries to its employees or those of any firm or individual to whom it may have subcontracted a portion of the Work, or any personal injuries or property damages arising or alleged to have arisen on account of any Work by Contractor under the Contract Documents.

Section 10. Compliance with Laws and Regulations

- A. Contractor agrees to comply, at its own expense, with all federal, state, and local Laws and Regulations, including federal, state and local laws, codes, statutes, ordinances, rules, regulations and requirements applicable to the Project, including but not limited to those dealing with taxation, workers' compensation, equal employment and safety. If Contractor observes that the Contract Documents are at variance therewith, it shall promptly notify the County and Engineer of Record in writing.
- B. Legal Requirements and provisions concerning Laws and Regulations to be observed are provided in Division 1, Section 7 of the Standard Specifications attached hereto as Exhibit E.

Section 11. Warranty

- A. Contractor shall obtain and assign to the County all express warranties given to Contractor or any Subcontractors by any materialmen supplying materials, equipment or fixtures to be incorporated into the Project.
- B. Contractor warrants to the County that any materials and equipment furnished under the Contract Documents shall be new unless otherwise specified, and that all Work shall be of good quality, free from all defects and in conformance with the Contract Documents. Contractor further warrants to the County that all materials and equipment furnished under the Contract Documents shall be applied, installed, connected, erected, used, cleaned and conditioned in accordance with the instructions of the applicable manufacturers, fabricators, Suppliers or processors except as otherwise provided for in the Contract Documents. If, within one (1) year after Final Acceptance, any Work is found to be Defective or not in conformance with the Contract Documents, Contractor shall correct it promptly after receipt of written notice from the County. Contractor shall also be responsible for and pay for replacement or repair of adjacent materials or Work which may be damaged as a result of such replacement or repair. These warranties are in addition to those express or implied warranties to which the County is entitled as a matter of law.

C. The Contractor warrants and guarantees that title to all Work, materials and equipment covered by an application for progress payment, whether incorporated in the Project or not, will be passed to the County prior to the next application for progress payment, free and clear of all liens, claims, security interest and encumbrances; and that no Work, materials or equipment covered by an Application for Payment will have been acquired by the Contractor or by any other person performing the Work at the site or furnishing materials and equipment for the Project subject to an agreement under which an interest therein or encumbrance thereon is retained by the seller or otherwise imposed by the Contractor or such other person.

Section 12. Notices.

A. All notices required or made pursuant to this Agreement by the Contractor to the County shall be in writing and delivered by hand or by United States Postal Service, first class mail, postage pre-paid, return receipt requested, or by courier, addressed to the following:

Dave Harner, II Lee County Manager P.O. Box 398 Fort Myers, FL 33902

With copies addressed to each of the following:

[County Project Manager Name], Project Manager, P.O. Box 398, Fort Myers, FL 33902

[County Procurement Director Name], Procurement Management Director, P.O. Box 398, Fort Myers, FL 33902

[County DOT Director Name], Department of Transportation Director, P.O. Box 398, Fort Myers, FL 33902

B. All notices required or made pursuant to this Agreement by the County to Contractor shall be made in writing and shall be delivered by hand, email, or by United States Postal Service, first class mail, postage pre-paid, return receipt requested, or by courier, addressed to the following:

[Corporate Name of Contractor]

Attention: [Name of person with their title to whose attention the notice should be sent]

[Address (including city, state and zip)]

Telephone: [Telephone Number] Fax: [Fax Number] Email: [Email Address]

C. Either party may change its above noted address by giving written notice to the other party in accordance with the requirements of this Section.

Section 13. Modification.

No modification or change to the Agreement shall be valid or binding upon the parties unless in writing and executed by the appropriate parties intended to be bound by it

Section 14. Successors and Assigns.

Subject to other provisions hereof, the Agreement shall be binding upon and shall inure to the benefit of the successors and assigns of the parties to the Agreement.

Section 15. No Waiver.

The failure of the County to enforce, at any time or for any period of time, any one or more of the provisions of the Agreement shall not be construed to be, and shall not be, a waiver of any such provision or provisions or of its right thereafter to enforce each and every such provision.

Section 16. Entire Agreement.

Each of the parties hereto agrees and represents that the Agreement comprises the full and entire agreement between the parties affecting the Work contemplated, and no other agreement or understanding of any nature concerning the same has been entered into or will be recognized, and that all negotiations, acts, Work performed, or payments made prior to the execution hereof shall be deemed merged in, integrated and superseded by the Agreement.

Section 17. Severability.

Should any provision of the Agreement be determined by a court to be unenforceable, such a determination shall not affect the validity or enforceability of any other section or part thereof.

[Remainder of this page left intentionally blank.]

IN WITNESS WHEREOF, the parties have executed this Agreement on the date(s) indicated below.

WITNESS:	CONTRACTOR: [Contractor Name]
Signed By:	Signed By:
Print Name:	Print Name:
	Title:
	Date:
	OWNER: LEE COUNTY
	BOARD OF COUNTY COMMISSIONERS OF LEE COUNTY, FLORIDA
	Signed By:
	Print Name:
	Title:
	Date:
ATTEST: CLERK OF THE CIRCUIT COURT	
BY:	
DEPUTY CLERK	
APPROVED AS TO FORM FOR THE RELIANCE OF LEE COUNTY ONLY:	
BY:	
OFFICE OF THE COUNTY ATTOR	≺NEY

EXHIBIT A LEGAL ADVERTISEMENT

EXHIBIT B INVITATION TO BID

EXHIBIT C BID FORM AND REQUIRED DOCUMENTS

EXHIBIT D PUBLIC CONSTRUCTION PERFORMANCE AND PAYMENT BOND

By this bond, we [Name of Contractor], as **Principal**, and [Name of Surety], as **Surety**, are bound to **Lee County Board of County Commissioners**, a political subdivision of the State of Florida, herein called **Owner**, in the sum of [**Total Contract Price**], for payment of which we bind ourselves, our heirs, personal representatives, successors, and assigns, jointly and severally.

THE CONDITION OF THIS BOND IS that is that if Principal:

- 2. Promptly makes payments to all claimants, as defined in Section 255.05 (1), Florida Statutes, supplying Principal with labor, materials, or supplies, used directly or indirectly by Principal in the prosecution of the work provided for in the contract; and
- 3. Pays Owner all losses, damages, expenses, costs, and attorney's fees, including appellate proceedings, that Owner sustains because of a default by Principal under the contact; and
- 4. Performs the guarantee of all work and materials furnished under the contract for the time specified in the contract, then this bond is void; otherwise it remains in full force.

Any action instituted by a claimant under this bond for payment must be in accordance with the notice and time limitation provisions in Section 255.05(2), Florida Statutes.

Any changes in or under the contract documents and compliance or noncompliance with any formalities connected with the contract or the changes do not affect Surety's obligation under this bond.

	OWNER	PRINCIPAL	SURETY
NAME	Lee County Board of County Commissioners	[Name of Contractor]	[Name of Surety]
	2115 Second St.	[Principal Business	[Principal Business
ADDRESS	Fort Myers, FL 33901	Address of Contractor]	Address of Surety]
PHONE		[Principal Business	[Principal Business
NUMBER	239-533-2221	Phone of Contractor]	Phone of Surety]

[The remainder of this page intentionally left blank.]

BOND NO. [Surety to enter bond #]

DI CC + 1	_		DATED THIS _	DAY
[Name of Contractor]			OF	, 2
By:[Printed Name and Title of Signer]	_			
STATE OF COUNTY OF				
The foregoing instrument was sworn to (presence or □ online notarization, this _ acknowledging].	· · · · · · · · · · · · · · · · · · ·		•	
(NOTARY SEAL)	Signature of Notary Public			
(NOTTHET SETE)	[Name of No	tary Typed, Pr	inted, or Stamped	d]
Personally Known OR Produce Type of Identification Produced:	d Identification _			
[Name of Surety]	_		_	DAY
By: [Printed Name] as Attorney in Fact Address:				
STATE OF COUNTY OF				
The foregoing instrument was sworn to (or affirmed) and	subscribed be	fore me by mean	ns of □ physical
presence or \square online notarization, this $_$ acknowledging].	day of		_, by [name of po	erson
ALOTA DV CEAL)	Signature of Notary Public			
(NOTARY SEAL)	[Name of No	tary Typed, Pr	inted, or Stamped	d]
Personally Known OR Produce Type of Identification Produced:	d Identification			

EXHIBIT E STANDARD SPECIFICATIONS

The Standard Specifications comprise Divisions I, II and III as noted below:

- 1. Division I General Requirements and Covenants, Sections 1-9 as included herein.
- 2. Division II-Construction Details and Division III-Materials refer to the 2024 -2025 edition of the Florida Department of Transportation Standard Specifications for Road and Bridge Construction, available at the following link:

http://www.fdot.gov/programmanagement/Implemented/SpecBooks/

DIVISION I

General Requirements and Covenants

SECTION 1 DEFINITIONS AND TERMS

1-1 General.

These Specifications are written to the bidder, prior to award of the Contract, and to the Contractor. Within Divisions I and II of the specifications, sentences that direct the Contractor to perform work are written in the active voice-imperative mood. These directions to the Contractor are written as commands. In the imperative mood, the subject "the bidder" or "the Contractor" is understood.

All other requirements to be performed by others, with the exception of the Method of Measurement and the Basis of Payment Articles, have been written in the active voice, but not in the imperative mood. Sentences written in the active voice identify the party responsible for performing the action. For example, "The Engineer will determine the density of the compacted material." Certain requirements of the Contractor may also be written in the active voice, rather than active voice-imperative mood.

Division III of the Specifications (Materials) is written in the passive voice writing style.

1-2 Abbreviations.

The following abbreviations, when used in the Contract Documents, represent the full text shown.

own.	
AAN	American Association of Nurserymen, Inc.

AASHTO American Association of State Highway and Transportation Officials

ACI American Concrete Institute

AGC The Associated General Contractors of America, Inc.

AGMA American Gear Manufacturers Association

AIA American Institute of Architects
AISI American Iron and Steel Institute

ANSI American National Standards Institute, Inc.
AREA American Railway Engineering Association

ASCE American Society of Civil Engineers

ASME American Society of Mechanical Engineers **ASTM** American Society for Testing and Materials

AWG American Wire Gauge

AWPA American Wood Preservers Association

AWS American Welding Society

AWWA American Water Works Association
CRSI Concrete Reinforcing Steel Institute
EASA Electrical Apparatus Service Association

EPA Environmental Protection Agency of the United States Government

FDOT Florida Department of Transportation **FHWA** Federal Highway Administration

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FSS Federal Specifications and Standards

IEEE Institute of Electrical and Electronics Engineers

IES Illuminating Engineering Society

IPCEA Insulated Power Cable Engineers AssociationISO International Organization for Standards

MASH AASHTO Manual for Assessing Safety Hardware MUTCD Manual on Uniform Traffic Control Devices

NEC National Electrical Code

NEMA National Electrical Manufacturers Association

NFPA National Fire Protection Association

NIST National Institute for Standards and Technology
NOAA National Oceanic and Atmospheric Administration
OSHA Occupational Safety and Health Administration

SAE Society of Automotive Engineers
SI International System of Units
SSPC Society of Protective Coatings
UL Underwriters' Laboratories

Each of the above abbreviations, when followed by a number or letter designation, or combination of numbers and letters, designates a specification, test method, or other code or recommendation of the particular authority or organization shown.

Use standards, specifications, test methods, or other codes as specified in the current edition at the time of the bid opening.

1-3 Definitions.

The following terms, when used in the Contract Documents, have the meaning described.

Advertisement.

The public announcement, as required by law, inviting bids for work to be performed or materials to be furnished, usually issued as "Notice to Contractors," or "Notice to Bidders."

Article.

The numbered prime subdivision of a Section of these Specifications.

Bidder.

An individual, firm, or corporation submitting a proposal for the proposed work.

Bridge.

A structure, including supports, erected over a depression or over an obstruction such as water, highway or railway, or for elevated roadway, for carrying traffic or other moving loads, and having a length, measured along the center of the roadway, of more than 20 feet between the inside faces of end supports. A multiple-span box culvert is considered a bridge, where the length between the extreme ends of the openings exceeds 20 feet.

Calendar day.

Every day shown on the calendar, ending and beginning at midnight.

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Contract.

The term "Contract" means the entire and integrated agreement between the parties thereunder and supersedes all prior negotiations, representations, or agreements, either written or oral. The Contract Documents form the Contract between the Department and the Contractor setting forth the obligations of the parties thereunder, including, but not limited to, the performance of the Work and the basis of payment.

Contract Bond.

The security furnished by the Contractor and the surety as a guaranty that the Contractor shall fulfill the terms of the Contract and pay all legal debts pertaining to the construction of the project.

Contract Claim (Claim).

A written demand submitted to the Department by the Contractor in compliance with 5-12.3 seeking additional monetary compensation, time, or other adjustments to the Contract, the entitlement or impact of which is disputed by the Department.

Contract Documents.

The term "Contract Documents" includes: Advertisement for Proposal, Proposal, Certification as to Publication and Notice of Advertisement for Proposal, Appointment of Agent by Nonresident Contractors, Noncollusion Affidavit, Warranty Concerning Solicitation of the Contract by Others, Resolution of Award of Contract, Executed Form of Contract, Performance Bond and Payment Bond, Specifications, Plans (including revisions thereto issued during construction), Estimated Quantities Report, Standard Plans, Addenda, or other information mailed or otherwise transmitted to the prospective bidders prior to the receipt of bids, work orders and supplemental agreements, all of which are to be treated as one instrument whether or not set forth at length in the form of contract.

Note: As used in Sections 2 and 3 only, Contract Documents do not include work orders, and supplementary agreements. As used in Section 2 only, Contract Documents also do not include Resolution of Award of Contract, Executed Form of Contract, and Performance and Payment Bond.

Contract Letting.

The date that the Department opened the bid proposals.

Contract Time.

The number of calendar days allowed for completion of the Contract work, including authorized time extensions.

Contractor.

The individual, firm, joint venture, or company contracting with the Department to perform the work.

Contractor's Engineer of Record.

A Professional Engineer registered in the State of Florida, other than the Engineer of Record or his subcontracted consultant, who undertakes the design and drawing of components of the permanent structure as part of a redesign or Cost Savings Initiative Proposal, or for repair

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designs and details of the permanent work. The Contractor's Engineer of Record may also serve as the Specialty Engineer.

The Contractor's Engineer of Record must be an employee of a pre-qualified firm. The firm shall be pre-qualified in accordance with the Rules of the Department of Transportation, Chapter 14-75. Any Corporation or Partnership offering engineering services must hold a Certificate of Authorization from the Florida Department of Business and Professional Regulation.

As an alternate to being an employee of a pre-qualified firm, the Contractor's Engineer of Record may be a Department-approved Specialty Engineer. For items of the permanent work declared by the State Construction Office to be "major" or "structural", the work performed by a Department-approved Specialty Engineer must be checked by another Department-approved Specialty Engineer. An individual Engineer may become a Department-approved Specialty Engineer if the individual meets the Professional Engineer experience requirements set forth within the individual work groups in Chapter 14-75, Rules of the Department of Transportation, Florida Administrative Code. Department-approved Specialty Engineers are listed on the State Construction Website. Department-approved Specialty Engineers will not be authorized to perform redesigns or Cost Savings Initiative Proposal designs of items fully detailed in the Plans.

Controlling Work Items.

The activity or work item on the critical path having the least amount of total float. The controlling item of work will also be referred to as a Critical Activity.

Culverts.

Any structure not classified as a bridge that provides an opening under the roadway.

Delay.

Any unanticipated event, action, force or factor which extends the Contractor's time of performance of any controlling work item under the Contract. The term "delay" is intended to cover all such events, actions, forces or factors, whether styled "delay", "disruption", "interference", "impedance", "hindrance", or otherwise, which are beyond the control of and not caused by the Contractor, or the Contractor's subcontractors, materialmen, suppliers or other agents. This term does not include "extra work".

Department.

State of Florida Department of Transportation.

Developmental Specification.

See definition for Specifications.

Engineer.

The Director, Office of Construction, acting directly or through duly authorized representatives; such representatives acting within the scope of the duties and authority assigned to them.

Note: In order to avoid cumbersome and confusing repetition of expressions in these Specifications, it is provided that whenever anything is, or is to be done, if, as, or, when, or where "acceptable, accepted, approval, approved, authorized, condemned, considered necessary, contemplated, deemed necessary, designated, determined, directed, disapproved, established,

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given, indicated, insufficient, ordered, permitted, rejected, required, reserved, satisfactory, specified, sufficient, suitable, suspended, unacceptable, or unsatisfactory," it shall be understood as if the expression were followed by the words "by the Engineer," "to the Engineer," or "of the Engineer."

Engineer of Record.

The Professional Engineer or Engineering Firm registered in the State of Florida that develops the criteria and concept for the project, performs the analysis, and is responsible for the preparation of the Plans and Specifications. The Engineer of Record may be Departmental inhouse staff or a consultant retained by the Department.

The Contractor shall not employ the Engineer of Record as the Contractor's Engineer of Record or as a Specialty Engineer.

Equipment.

The machinery and equipment, together with the necessary supplies for upkeep and maintenance thereof, and all other tools and apparatus necessary for the construction and acceptable completion of the work.

Estimated Quantities Report.

The Estimated Quantities Report contains pay item and quantity information for the project. When the Plans do not adequately describe quantity related information, refer to the Estimated Quantities Report.

Extra Work.

Any "work" which is required by the Engineer to be performed and which is not otherwise covered or included in the project by the existing Contract Documents, whether it be in the nature of additional work, altered work, deleted work, work due to differing site conditions, or otherwise. This term does not include a "delay".

Federal, State, and Local Rules and Regulations.

The term "Federal, State and Local Rules and Regulations" includes: any and all Federal, State, and Local laws, bylaws, ordinances, rules, regulations, orders, permits, or decrees including environmental laws, rules, regulations, and permits.

Highway, Street, or Road.

A general term denoting a public way for purposes of vehicular travel, including the entire area within the right-of-way.

Holidays.

Days designated by the State Legislature or Cabinet as holidays, which include, but are not limited to, New Year's Day, Martin Luther King's Birthday, Memorial Day, Independence Day, Labor Day, Veterans' Day, Thanksgiving Day and the following Friday, and Christmas Day.

Inspector.

An authorized representative of the Engineer, assigned to make official inspections of the materials furnished and of the work performed by the Contractor.

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Laboratory.

The official testing laboratory used by the Department.

Major Item of Work.

Any item of work having an original Contract value in excess of 5% of the original Contract amount.

Materials.

Any substances to be incorporated in the work under the Contract.

Median.

The portion of a divided highway or street separating the traveled ways for traffic moving in opposite directions.

Plans.

The plans sheets and digital models (2D and 3D) provided as contract documents, including reproductions thereof, showing the location, character, dimensions, and details of the work.

Proposal (Bid, Bid Proposal).

The offer of a bidder, on the prescribed form, to perform the work and to furnish the labor and materials at the prices quoted.

Proposal Form.

The official form or the electronically generated bid item sheets on which the Department requires formal bids to be prepared and submitted for the work.

Proposal Guaranty.

The security furnished by the bidder as guaranty that the bidder will enter into the Contract for the work if the Department accepts the proposal.

Request for Correction.

A document initiated by the Contractor proposing a method for correction of work that is not in compliance with the Contract Documents. The Request for Correction is submitted to the Engineer for review and disposition.

Request for Information.

A document initiated by the Contractor that is submitted to the Engineer for interpretation of a Contract Document provision, the meaning of which is not clear to the Contractor. The Request for Information is submitted to the Engineer for review and disposition.

Request for Modification.

A document initiated by the Contractor requesting to modify the Contract Documents, that is submitted to the Engineer for review and disposition.

Right-of-Way.

The land that the Department has title to, or right of use, for the road and its structures and appurtenances, and for material pits furnished by the Department.

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Roadbed.

The portion of the roadway occupied by the subgrade and shoulders.

Roadway.

The portion of a highway within the limits of construction.

Secretary.

Secretary of Transportation, State of Florida Department of Transportation, acting directly or through an assistant or other representative authorized by him; the chief officer of the Department of Transportation.

Section.

A numbered prime division of these Specifications.

Special Event.

Any event, including but not limited to, a festival, fair, run or race, motorcade, parade, civic activity, cultural activity, charity or fund drive, sporting event, or similar activity designated in the Contract Documents.

Special Provisions.

See definition for Specifications.

Specialty Engineer.

A Professional Engineer registered in the State of Florida, other than the Engineer of Record or his subcontracted consultant, who undertakes the design and drawing preparation of components, systems, or installation methods and equipment for specific temporary portions of the project work or for special items of the permanent works not fully detailed in the Plans and required to be furnished by the Contractor. The Specialty Engineer may also provide designs and details, repair designs and details, or perform Engineering Analyses for items of the permanent work declared by the State Construction Office to be "minor" or "non-structural".

For items of work not specifically covered by the Rules of the Department of Transportation, a Specialty Engineer is qualified if he has the following qualifications:

- 1. Registration as a Professional Engineer in the State of Florida.
- 2. The education and experience necessary to perform the submitted design as required by the Florida Department of Business and Professional Regulation.

Specifications.

The directions, provisions, and requirements contained herein, together with all stipulations contained in the Contract Documents, setting out or relating to the method and manner of performing the work, or to the quantities and qualities of materials and labor to be furnished under the Contract.

Standard Specifications: "Standard Specifications for Road and Bridge Construction" an electronic book, applicable to all Department Contracts containing adopted requirements, setting out or relating to the method or manner of performing work, or to the quantities and qualities of materials and labor.

Supplemental Specifications: Approved additions and revisions to the Standard Specifications, applicable to all Department Contracts.

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Special Provisions: Specific clauses adopted by the Department that add to or revise the Standard Specifications or supplemental specifications, setting forth conditions varying from or additional to the Standard Specifications applicable to a specific project.

Technical Special Provisions: Specifications, of a technical nature, prepared, signed, and sealed by an Engineer registered in the State of Florida other than the State Specifications Engineer or his designee, that are made part of the Contract as an attachment to the Contract Documents.

Developmental Specification: A specification developed around a new process, procedure, or material.

Standard Plans.

"Standard Plans for Road and Bridge Construction", an electronic book describing and detailing aspects of the Work. Where the term Design Standards appears in the Contract Documents, it will be synonymous with Standard Plans.

Standard Specifications.

See definition for Specifications.

State.

State of Florida.

Subarticle.

A headed and numbered subdivision of an Article of a Section of these Specifications.

Subgrade.

The portion of the roadbed immediately below the base course or pavement, including below the curb and gutter, valley gutter, shoulder and driveway pavement. The subgrade limits ordinarily include those portions of the roadbed shown in the Plans to be constructed to a design bearing value or to be otherwise specially treated. Where no limits are shown in the Plans, the subgrade section extends to a depth of 12 inches below the bottom of the base or pavement and outward to 6 inches beyond the base, pavement, or curb and gutter.

Substructure.

All of that part of a bridge structure below the bridge seats, including the parapets, backwalls, and wingwalls of abutments.

Superintendent.

The Contractor's authorized representative in responsible charge of the work.

Superstructure.

The entire bridge structure above the substructure, including anchorage and anchor bolts, but excluding the parapets, backwalls, and wingwalls of abutments.

Supplemental Agreement.

A written agreement between the Contractor and the Department, and signed by the surety, modifying the Contract within the limitations set forth in these Specifications.

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Supplemental Specifications.

See definition for Specifications.

Surety.

The corporate body that is bound by the Contract Bond with and for the Contractor and responsible for the performance of the Contract and for payment of all legal debts pertaining thereto.

Technical Special Provisions.

See definition for Specifications.

Traveled Way.

The portion of the roadway for the movement of vehicles, exclusive of shoulders and bicycle lanes.

Unilateral Payment.

A payment of money made to the Contractor by the Department pursuant to Section 337.11(12), Florida Statutes (2009), for sums the Department determines to be due to the Contractor for work performed on the project, and whereby the Contractor by acceptance of such payment does not waive any rights the Contractor may otherwise have against the Department for payment of any additional sums the Contractor claims are due for the work.

Work.

All labor, materials and incidentals required to execute and complete the requirements of the Contract including superintendence, use of equipment and tools, and all services and responsibilities prescribed or implied.

Work Order.

A written agreement between the Contractor and the Department modifying the Contract within the limitations set forth in these Specifications. Funds for this agreement are drawn against the Initial Contingency Pay Item or a Contingency Supplemental Agreement.

Working Day.

Any calendar day on which the Contractor works or is expected to work in accordance with the approved work progress schedule.

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SECTION 2 PROPOSAL REQUIREMENTS AND CONDITIONS

2-1 Reserved

2-2 Reserved

2-3 Interpretation of Estimated Quantities.

2-3.1 Lump Sum Contracts: The Contractor is responsible for the determination of the quantities for those items constructed within the authorized plan limits or dimensions.

The County does not assume any responsibility for any incidental information in bid documents that may be construed as a quantity of work and/or materials.

2-3.2 Contracts other than Lump Sum: For those items constructed within authorized plan limits or dimensions, use the quantities shown in the Plans and in the Proposal Form as the basis of the bid. The County will also use these quantities for final payment as limited by the provisions for the individual items. For those items having variable final pay quantities that are dependent on actual field conditions, use and measurement, the quantities shown in the Plans and in the Proposal Form are approximate and provide only a basis for calculating the bid upon which the County will award the Contract. Where items are listed for payment as lump sum units and the Plans show estimates of component quantities, the County is responsible for the accuracy of those quantities limited to the provisions of 9-3.3. Where items are listed for payment as lump sum units and the Plans do not show estimates of component quantities, the Contractor is solely responsible for their own estimates of such quantities.

The County may increase, decrease, or omit the estimated quantities of work to be done or materials to be furnished.

2-4 Examination of Plans, Specifications, Special Provisions and Site of Work.

The Contractor is responsible for examining the Contract Documents and the site of the proposed Work carefully before submitting a Proposal for the Work contemplated. Contractor shall investigate the conditions to be encountered, as to the character, quality, and quantities of work to be performed and materials to be furnished, and as to the requirements of all Contract Documents.

The County does not guarantee the details pertaining to borings, as shown in the Contract Documents, to be more than a general indication of the materials likely to be found adjacent to holes bored at the site of the work, approximately at the locations indicated. The Contractor shall examine boring and pavement core data, where available, and make their own interpretation of the subsoil investigations and other preliminary data and shall base their bid solely on their own opinion of the conditions likely to be encountered.

The Contractor's submission of a Proposal is prima facie evidence that the Contractor has made an examination as described in this Article.

2-5 Reserved

2-6 Reserved

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- 2-7 Reserved
- 2-8 Reserved
- 2-9 Reserved
- 2-10 Reserved
- 2-11 Reserved

2-12 Material, Samples and Statement.

The County may require that the Contractor furnish a statement of the origin, composition, and manufacture of any and all materials to be used in the construction of the work, together with samples that may be subjected to the tests provided for in these Specifications to determine the materials' quality and fitness for the work.

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SECTION 3

RESERVED

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SECTION 4 SCOPE OF THE WORK

4-1 Intent of Contract.

The intent of the Contract is to provide for the construction and completion in every detail of the Work described in the Contract. Furnish all labor, materials, equipment, tools, transportation, and supplies required to complete the work in accordance with the Contract Documents.

4-2 Work not covered by Standard Specifications.

Proposed construction and any contractual requirements not covered by these Standard Specifications may be covered by Contract Plan notes or by Supplemental Specifications or Special Provisions for the Contract, and all requirements of such Supplemental Specifications or Special Provisions shall be considered as a part of these Specifications.

4-3 Alteration of Plans or of Character of Work.

4-3.1 General: The Director reserves the right to make, at any time prior to or during the progress of the work, such increases or decreases in quantities, whether a significant change or not, and such alterations in the details of construction, whether a substantial change or not, including but not limited to alterations in the grade or alignment of the road or structure or both, as may be found necessary or desirable by the Director. Such increases, decreases or alterations shall not constitute a breach of Contract, shall not invalidate the Contract, nor release the Surety from any liability arising out of this Contract or the Surety bond. Minor increases, decreases or alterations that do not change the scope of the Project, the Project cost, or the Contract Time may be initially authorized in a Field Directive Change Order. The Contractor agrees to perform the work, as altered, the same as if it had been a part of the original Contract. All Field Directive Change Orders shall be approved as a Supplemental Agreement pursuant to 4-3.4 prior to Project close-out.

The term "significant change" applies only when:

- 1. The Director determines that the character of the work as altered differs materially in kind or nature from that involved or included in the original proposed construction, or
- 2. A major item of work, as defined in 1-3, is increased in excess of 125% or decreased below 75% of the original Contract quantity. The County will apply any price adjustment for an increase in quantity only to that portion in excess of 125% of the original Contract item quantity in accordance with 4-3.2 below. In the case of a decrease below 75% the County will only apply a price adjustment for the additional costs that are a direct result of the reduction in quantity.
- In (1) above, the determination by the Director shall be conclusive. If the determination is challenged by the Contractor in any proceeding, the Contractor must establish by clear and convincing proof that the determination by the Director was without any reasonable basis.
- **4-3.2 Increase, Decrease or Alteration in the Work:** The Director reserves the right to make alterations in the character of the work which involve a substantial change in the nature of the design or in the type of construction or which materially increases or decreases the cost or time

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of performance. Such alteration shall not constitute a breach of Contract, shall not invalidate the Contract or release the Surety.

Notwithstanding that the Contractor shall have no formal right whatsoever to any extra compensation or time extension deemed due by the Contractor for any cause unless and until the Contractor follows the procedures set forth in 5-12.2 for preservation, presentation and resolution of the claim, the Contractor may at any time, after having otherwise timely submitted a notice of intent to claim or preliminary time extension request pursuant to 5-12.2 and 8-7.3.2, submit to the County a request for equitable adjustment of compensation or time or other dispute resolution proposal. The Contractor shall in any request for equitable adjustment of compensation, time, or other dispute resolution proposal certify under oath and in writing, in accordance with the formalities required by Florida law, that the request is made in good faith, that any supportive data submitted is accurate and complete to the Contractor's best knowledge and belief, and that the amount of the request accurately reflects what the Contractor in good faith believes to be the County's responsibility. Such certification must be made by an officer or director of the Contractor with the authority to bind the Contractor. Any such certified statements of entitlement and costs shall be subject to the audit provisions set forth in 5-12.14. While the submittal or review of a duly certified request for equitable adjustment shall neither create, modify, nor activate any legal rights or obligations as to the Contractor or the County, the County will review the content of any duly certified request for equitable adjustment or other dispute resolution proposal, with any further action or inaction by the County thereafter being in its sole discretion. Any request for equitable adjustment that fails to fully comply with the certification requirements will not be reviewed by the County.

The monetary compensation provided for below constitutes full and complete payment for such additional work and the Contractor shall have no right to any additional monetary compensation for any direct or indirect costs or profit for any such additional work beyond that expressly provided below. The Contractor shall be entitled to a time extension only to the extent that the performance of any portion of the additional work is a controlling work item and the performance of such controlling work item actually extends completion of the project due to no fault of the Contractor. All time related costs for actual performance of such additional work are included in the compensation already provided below and any time extension entitlement hereunder will be without additional monetary compensation. The Contractor shall have no right to any monetary compensation or damages whatsoever for any direct or indirect delay to a controlling work item arising out of or in any way related to the circumstances leading up to or resulting from additional work (but not relating to the actual performance of the additional work, which is paid for as otherwise provided herein), except only as provided for under 5-12.6.2.1.

4-3.2.1 Allowable Costs for Extra Work: The Director may direct in writing that extra work be done and, at the Director's sole discretion, the Contractor will be paid pursuant to an agreed Supplemental Agreement or in the following manner:

1. Labor and Burden: The Contractor will receive payment for actual costs of direct labor and burden for the additional or unforeseen work. Labor includes foremen actually engaged in the work; and will not include project supervisory personnel nor necessary on-site clerical staff, except when the additional or unforeseen work is a controlling work item and the performance of such controlling work item actually extends completion of the project due to no fault of the Contractor. Compensation for project supervisory personnel, but in no case higher than a Project Manager's position, shall only be for the pro-rata time such supervisory personnel spent on the contract. In no case shall an officer or director of the Company, nor those persons who own

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more than 1% of the Company, be considered as project supervisory personnel, direct labor or foremen hereunder.

Payment for burden shall be limited solely to the following:

Table 4-3.2.1			
Item	Rate		
FICA	Rate established by Law		
FUTA/SUTA	Rate established by Law		
Medical Insurance	Actual		
Holidays, Sick & Vacation benefits	Actual		
Retirement benefits	Actual		
Workers Compensation	Rates based on the National Council on Compensation Insurance basic rate tables adjusted by Contractor's actual experience modification factor in effect at the time of the additional work or unforeseen work.		
Per Diem	Actual but not to exceed State of Florida's rate		
Insurance*	Actual		
*Companyation for Insurance is limited	solaly to Ganaral Liability Covarage and does not include any other insurance covarage		

^{*}Compensation for Insurance is limited solely to General Liability Coverage and does not include any other insurance coverage (such as, but not limited to, Umbrella Coverage, Automobile Insurance, etc.).

At the Pre-construction conference, certify to the Director the

following:

a. A listing of on-site clerical staff, supervisory personnel and their pro-rated time assigned to the contract,

- b. Actual Rate for items listed in Table 4-3.2.1,
- c. Existence of employee benefit plan for Holiday, Sick and

Vacation benefits and a Retirement Plan, and,

d. Payment of Per Diem is a company practice for instances when compensation for Per Diem is requested.

Such certification must be made by an officer or director of the Contractor with authority to bind the Contractor. Timely certification is a condition precedent to any right of the Contractor to recover compensations for such costs, and failure to timely submit the certification will constitute a full, complete, absolute and irrevocable waiver by the Contractor of any right to recover such costs. Any subsequent changes shall be certified to the Director as part of the cost proposal or seven calendar days in advance of performing such extra work.

- 2. Materials and Supplies: For materials accepted by the Director and used on the project, the Contractor will receive the actual cost of such materials incorporated into the work, including Contractor paid transportation charges (exclusive of equipment as hereinafter set forth). For supplies reasonably needed for performing the work, the Contractor will receive the actual cost of such supplies.
- 3. Equipment: For any machinery or special equipment (other than small tools), including fuel and lubricant, the Contractor will receive 100% of the "Rental Rate Blue Book" for the actual time that such equipment is in operation on the work, and 50% of the "Rental Rate Blue Book" for the time the equipment is directed to standby and remain on the project site,

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to be calculated as indicated below. The equipment rates will be based on the latest edition (as of the date the work to be performed begins) of the "Rental Rate Blue Book for Construction Equipment" as published by EquipmentWatch division of Informa Business Media, Inc., using all instructions and adjustments contained therein and as modified below. On all projects, the Director will adjust the rates using regional adjustments and Rate Adjustment Tables according to the instructions in the "Rental Rate Blue Book."

Allowable Equipment Rates will be established as set out below:

- a. Allowable Hourly Equipment Rate = Monthly Rate/176 x Adjustment Factors x 100%.
- b. Allowable Hourly Operating Cost = Hourly Operating Cost x 100%.
 - c. Allowable Rate Per Hour = Allowable Hourly Equipment Rate + Allowable Hourly Operating Cost.
- d. Standby Rate = Allowable Hourly Equipment Rate x 50%.

The Monthly Rate is The Basic Machine Rate Plus Any Attachments. Standby rates will apply when equipment is not in operation and is directed by the Director to standby at the project site when needed again to complete work and the cost of moving the equipment will exceed the accumulated standby cost. Standby rates will not apply on any day the equipment operates for eight or more hours. Standby payment will be limited to only that number of hours which, when added to the operating time for that day equals eight hours. Standby payment will not be made on days that are not normally considered work days on the project.

The County will allow for the cost of transporting the equipment to and from the location at which it will be used. If the equipment requires assembly or disassembly for transport, the County will pay for the time to perform this work at the rate for standby equipment.

Equipment may include vehicles utilized only by Labor, as defined

above.

4. Indirect Costs, Expenses, and Profit: Compensation for all indirect costs, expenses, and profit of the Contractor, including but not limited to overhead of any kind, whether jobsite, field office, division office, regional office, home office, or otherwise, is expressly limited to the greater of either (a) or (b) below:

a. Solely a mark-up of 17.5% on the payments in (1) through (3),

above.

1. Bond: The Contractor will receive compensation for any premium for acquiring a bond for such additional or unforeseen work at the original Contract bond rate paid by the Contractor. No compensation for bond premium will be allowed for additional or unforeseen work paid by the County via initial contingency pay item.

2. The Contractor will be allowed a markup of 10% on the first \$50,000 and a markup of 5% on any amount over \$50,000 on any subcontract directly related to the additional or unforeseen work. Any such subcontractor mark-up will be allowed only by the prime Contractor and a first tier subcontractor, and the Contractor must elect the markup for any eligible first tier subcontractor to do so.

b. Solely the formula set forth below and only as applied solely as to such number of calendar days of entitlement that are in excess of ten cumulative calendar days as defined below.

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$$D = \frac{A \times C}{B}$$

Where A = Original Contract Amount

B = Original Contract Time

C = 8%

D = Average Overhead Per Day

Cumulative Calendar Days is defined as the combined total number of calendar days granted as time extensions due to either extra work, excluding overruns to existing contract items, that extend the duration of the project or delay of a controlling work item caused solely by the County, or the combined total number of calendar days for which a claim of entitlement to a time extension due to delay of a controlling work item caused solely by the County is otherwise ultimately determined to be in favor of the Contractor.

No compensation, whatsoever, will be paid to the Contractor for any jobsite overhead and other indirect impacts when the total number of calendar days granted for time extension due to delay of a controlling work item caused solely by the County is, or the total number of calendar days for which entitlement to a time extension due to delay of a controlling work item caused solely by the County is otherwise ultimately determined in favor of the Contractor to be, equal to or less than ten calendar days and the Contractor also fully assumes all monetary risk of any and all partial or single calendar day delay periods, due to delay of a controlling work item caused solely by the County, that when combined together are equal to or less than ten calendar days and regardless of whether monetary compensation is otherwise provided for hereunder for one or more calendar days of time extension entitlement for each calendar day exceeding ten calendar days. All calculations under this provision shall exclude weather days, Holidays, and Special Events.

Further, for (a) or (b) above, in the event there are concurrent delays to one or more controlling work items, one or more being caused by the County and one or more being caused by the Contractor, the Contractor shall be entitled to a time extension for each day that a controlling work item is delayed by the County but shall have no right to nor receive any monetary compensation for any indirect costs for any days of concurrent delay.

4-3.2.2 Subcontracted Work: Compensation for the additional or unforeseen work performed by a subcontractor shall be limited solely to that provided for in 4-3.2.1 (1), (2), (3) and (4)(a). In addition, the Contractor compensation is expressly limited to the greater of the total provided in either 4-3.2.1(4)(a) or (4)(b), except that the Average Overhead Per-Day calculation is as follows:

$$Ds = \frac{As \times C}{B}$$

Where As = Original Contract Amount minus Original

Subcontract amounts(s)*

B = Original Contract Time

C = 8%

Ds = Average Overhead Per-Day

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subcontractor(s) performing the work

The subcontractor may receive compensation for any premium for acquiring a bond for the additional or unforeseen work; provided, however, that such payment for additional subcontractor bond will only be paid upon presentment to the County of clear and convincing proof that the subcontractor has actually submitted and paid for separate bond premiums for such additional or unforeseen work in such amount and that the subcontractor was required by the Contractor to acquire a bond.

The Contractor shall require the subcontractor to submit a certification, in accordance with 4-3.2.1 (1), as part of the cost proposal and submit such to the Director. Such certification must be made by an officer or director of the subcontractor with authority to bind the subcontractor. Timely certification is a condition precedent to any right of the Contractor to recover compensation for such subcontractor costs, and failure to timely submit the certification will constitute a full, complete, absolute and irrevocable waiver by the Contractor of any right to recover such subcontractor costs.

- **4-3.3 No Waiver of Contract:** Changes made by the Director will not be considered to waive any of the provisions of the Contract, nor may the Contractor make any claim for loss of anticipated profits because of the changes, or by reason of any variation between the approximate quantities and the quantities of work actually performed. All work shall be performed as directed by the Director and in accordance with the Contract Documents.
- 4-3.4 Conditions Requiring a Supplemental Agreement or Unilateral Payment: A Supplemental Agreement or Unilateral Payment will be used to clarify the Plans and Specifications of the Contract; to provide for unforeseen work, grade changes, or alterations in the Plans which could not reasonably have been contemplated or foreseen in the original Plans and Specifications; to change the limits of construction to meet field conditions; to provide a safe and functional connection to an existing pavement; to settle documented Contract claims; to make the project functionally operational in accordance with the intent of the original Contract and subsequent amendments thereto.

A Supplemental Agreement or Unilateral Payment may be used to expand the physical limits of the project only to the extent necessary to make the project functionally operational in accordance with the intent of the original Contract. The cost of any such agreement extending the physical limits of the project shall not exceed \$100,000 or 10% of the original Contract price, whichever is greater.

Except for Work included within a Field Directive Change Order, perform no work to be covered by a Supplemental Agreement or Unilateral Payment before written authorization is received from the Director. The Director's written authorization will set forth sufficient work information to allow the work to begin. The work activities, terms and conditions will be reduced to written Supplemental Agreement or Unilateral Payment form promptly thereafter. No payment will be made on a Supplemental Agreement or Unilateral Payment prior to the County's approval of the document.

4-3.5 Extra Work: Extra work authorized in writing by the Director will be paid in accordance with the formula in 4-3.2. Such payment will be the full extent of all monetary compensation entitlement due to the Contractor for such extra work. Any entitlement to a time extension due to extra work will be limited solely to that provided for in 4-3.2 for additional work.

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4-3.6 Connections to Existing Pavement, Drives and Walks: Generally adhere to the limits of construction at the beginning and end of the project as detailed in the Plans. However, if the Director determines that it is necessary to extend the construction in order to make suitable connections to existing pavement, the Director will authorize such a change in writing.

For necessary connections to existing walks and drives that are not indicated in the Plans, the Director will submit direction regarding the proper connections in accordance with the Standard Plans.

4-3.7 Differing Site Conditions: During the progress of the work, if subsurface or latent physical conditions are encountered at the site differing materially from those indicated in the Contract, or if unknown physical conditions of an unusual nature differing materially from those ordinarily encountered and generally recognized as inherent in the work provided for in the Contract are encountered at the site, the party discovering such conditions shall promptly notify the other party in writing of the specific differing conditions before the Contractor disturbs the conditions or performs the affected work.

Upon receipt of written notification of differing site conditions from the Contractor, the Director will investigate the conditions, and if it is determined that the conditions materially differ and cause an increase or decrease in the cost or time required for the performance of any work under the Contract, an adjustment will be made, excluding loss of anticipated profits, and the Contract will be modified in writing accordingly. The Director will notify the Contractor whether or not an adjustment of the Contract is warranted.

The Director will not allow a Contract adjustment for a differing site condition unless the Contractor has submitted the required written notice.

The Director will not allow a Contract adjustment under this clause for any effects caused to any other County or non-County projects on which the Contractor may be working.

4-3.8 Changes Affecting Utilities: The Contractor shall be responsible for identifying and assessing any potential impacts to a utility that may be caused by the changes proposed by the Contractor, and the Contractor shall at the time of making the request for a change notify the County in writing of any such potential impacts to utilities.

County approval of a Contractor proposed change does not relieve the Contractor of sole responsibility for all utility impacts, costs, delays or damages, whether direct or indirect, resulting from Contractor initiated changes in the design or construction activities from those in the original Contract Specifications, Design Plans (including Traffic Control Plans) or other Contract Documents and which effect a change in utility work different from that shown in the Utility Plans, joint project agreements or utility relocation schedules.

4-3.9 Cost Savings Initiative Proposal:

4-3.9.1 Intent and Objective:

- 1. This Subarticle applies to any cost reduction proposal (hereinafter referred to as a Proposal) that the Contractor initiates and develops for the purpose of refining the Contract to increase cost effectiveness or significantly improve the quality of the end result. County Potential Proposals will be discussed as an agenda item at the pre-construction meeting. This Subarticle does not, however, apply to any such proposal unless the Contractor identifies it at the time of its submission to the County as a proposal submitted pursuant to this Subarticle.
- 2. The County will consider Proposals that would result in net savings to the County by providing a decrease in the cost of the Contract. Proposals must result in savings without impairing essential functions and characteristics such as safety, service, life, reliability, economy of operation, ease of maintenance, aesthetics and necessary standard design features.

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However, nothing herein prohibits the Contractor from submitting Proposals when the required functions and characteristics can be combined, reduced or eliminated because they are nonessential or excessive. The County will not recognize the Contractor's correction of plan errors that result in a cost reduction, as a Proposal. Deletions of work, approved by the Engineer, that are the sole objective of the Proposal will include a cost sharing percentage with the Contractor as defined in Subarticle 4-3.9.7.

- 3. The County shall have the right to reject, at it's discretion, any Proposal submitted that proposes a change in the design of the pavement system or that would require additional right-of-way. Pending the County's execution of a formal supplemental agreement implementing an approved Proposal, the Contractor shall remain obligated to perform the work in accordance with the terms of the existing Contract. The County may grant time extensions to allow for the time required to develop and review a Proposal.
- 4. For potential Proposals not discussed at the Cost Savings Initiative Workshop, a mandatory concept meeting will be held for the Contractor and County to discuss the potential Proposal prior to development of the Proposal.
- **4-3.9.2 Subcontractors:** The County encourages the Contractor to include the provisions of this Subarticle in Contracts with subcontractors and to encourage submission of Proposals from subcontractors. However, it is not mandatory to submit Proposals to the County or to accept or transmit subcontractor proposed Proposals to the County.
- **4-3.9.3 Data Requirements:** As a minimum, submit the following information with each Proposal:
- 1. a description of the difference between the existing Contract requirement, including any time extension request, and the proposed change, and the comparative advantages and disadvantages.
- 2. separate detailed cost estimates for both the existing Contract requirement and the proposed change. Break down the cost estimates by pay item numbers indicating quantity increases or decreases and deleted pay items. Identify additional proposed work not covered by pay items within the Contract, by using pay item numbers in the Basis of Estimates Manual. In preparing the estimates, include overhead, profit, and bond within pay items in the Contract. Separate pay item(s) for the cost of overhead, profit, and bond will not be allowed.
- 3. an itemization of the changes, deletions or additions to Plan details, plan sheets, Standard Plans and Specifications that are required to implement the Proposal if the County adopts it. Submit preliminary plan drawings sufficient to describe the proposed changes.
- 4. engineering or other analysis in sufficient detail to identify and describe specific features of the Contract that must be changed if the County accepts the Proposal with a proposal as to how these changes can be accomplished and an assessment of their effect on other project elements. The County may require that engineering analyses be performed by a prequalified consultant in the applicable class of work. Support all design changes that result from the Proposal with drawings and computations signed and sealed by the Contractor's Engineer of Record. Written documentation or drawings will be submitted clearly delineating the responsibility of the Contractor's Engineer of Record.
- 5. the date by which the County must approve the Proposal to obtain the total estimated cost reduction during the remainder of the Contract, noting any effect on the Contract completion time or delivery schedule.

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6. a revised project schedule that would be followed upon approval of the Proposal. This schedule would include submittal dates and review time for the County and Peer reviews.

4-3.9.4 Processing Procedures: Submit Proposals to the Director or his duly authorized representative. The County will process Proposals expeditiously; however, the County is not liable for any delay in acting upon a Proposal submitted pursuant to this Subarticle. The Contractor may withdraw, in whole or in part, a Proposal not accepted by the County within the period specified in the Proposal. The County is not liable for any Proposal development cost in the case where the County rejects or the Contractor withdraws a Proposal.

The Director is the sole judge of the acceptability of a Proposal and of the estimated net savings in construction costs from the adoption of all or any part of such proposal. In determining the estimated net savings, the County reserves the right to disregard the Contract bid prices if, in the judgment of the Director, such prices do not represent a fair measure of the value of work to be performed or to be deleted.

Prior to approval, the Director may modify a Proposal, with the concurrence of the Contractor, to make it acceptable. If any modification increases or decreases the net savings resulting from the Proposal, the County will determine the Contractor's fair share upon the basis of the Proposal as modified and upon the final quantities. The County will compute the net savings by subtracting the revised total cost of all bid items affected by the Proposal from the total cost of the same bid items as represented in the original Contract.

Prior to approval of the Proposal that initiates the supplemental agreement, submit acceptable Contract-quality plan sheets revised to show all details consistent with the Proposal design.

4-3.9.5 Computations for Change in Contract Cost of Performance: If the Proposal is adopted, the Contractor's share of the net savings as defined hereinafter represents full compensation to the Contractor for the Proposal.

The County will not include its costs to process and implement a Proposal in the estimate. However, the County reserves the right, where it deems such action appropriate, to require the Contractor to pay the County's cost of investigating and implementing a Proposal as a condition of considering such proposal. When the County imposes such a condition, the Contractor shall accept this condition in writing, authorizing the County to deduct amounts payable to the County from any monies due or that may become due to the Contractor under the Contract.

4-3.9.6 Conditions of Acceptance for Major Design Modifications of Category 2 Bridges: A Proposal that proposes major design modifications of a category 2 bridge, as determined by the Director, shall have the following conditions of acceptance:

All bridge Plans relating to the Proposal shall undergo an independent peer review conducted by a single independent engineering firm referred to for the purposes of this article as the Independent Review Engineer who is not the originator of the Proposal design, and is pre-qualified by the County in accordance with Rule 14-75, Florida Administrative Code. The independent peer review is intended to be a comprehensive, thorough verification of the original work, giving assurance that the design is in compliance with all County requirements. The Independent Review Engineer's comments, along with the resolution of each comment, shall be submitted to the County. The Independent Review Engineer shall sign and seal the submittal cover letter stating that all comments have been adequately addressed and the design is in compliance with the County requirements. If there are any unresolved comments the Independent Review Engineer shall specifically list all unresolved issues in the signed and sealed cover letter.

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The Contractor shall designate a primary engineer responsible for the Proposal design and as such will be designated as the Contractor's Engineer of Record for the Proposal design. The County reserves the right to require the Contractor's Engineer of Record to assume responsibility for design of the entire structure.

New designs and independent peer reviews shall be in compliance with all applicable County, FHWA and AASHTO criteria requirements including bridge load ratings.

4-3.9.7 Sharing Arrangements: If the County approves a Proposal, the Contractor shall receive up to 50% of the net reduction in the cost of the performance of the Contract. The net reduction in the cost of the performance of the Contract will be determined by subtracting the reasonable documented engineering costs incurred by the contractor to design and develop a Proposal, from the gross reduction in the cost of the performance of the Contract. The reasonable documented engineering costs incurred by the contractor will be paid for as part of the negotiated Supplemental. Engineering costs incurred by the Contractor will be based on the consultant's certified invoice and may include the costs of the Independent Review Engineer in 4-3.9.6. The total engineering costs will be limited to 25% of the gross reduction in the cost of the performance of the Contract and shall not include any markup by the Contractor or the costs for engineering services performed by the Contractor.

If the Department determines that the parties identified in 337.11(17) Florida Statutes have contributed to the reduction in the cost of the performance of the contract, the contractor's share may be 45% of the net reduction.

If the Department approves a Proposal where deletions of work are the sole objective of the Proposal, the Contractor shall receive 14.5% of the net reduction in the cost of the performance of the Contract.

4-3.9.8 Notice of Intellectual Property Interests and County's Future Rights to a Proposal:

4-3.9.8.1 Notice of Intellectual Property Interests: The Contractor's Proposal submittal shall identify with specificity any and all forms of intellectual property rights that either the Contractor or any officer, shareholder, employee, consultant, or affiliate, of the Contractor, or any other entity who contributed in any measure to the substance of the Contractor's Proposal development, have or may have that are in whole or in part implicated in the Proposal. Such required intellectual property rights notice includes, but is not limited to, disclosure of any issued patents, copyrights, or licenses; pending patent, copyright or license applications; and any intellectual property rights that though not yet issued, applied for or intended to be pursued, could nevertheless otherwise be subsequently the subject of patent, copyright or license protection by the Contractor or others in the future. This notice requirement does not extend to intellectual property rights as to stand-alone or integral components of the Proposal that are already on FDOT's Approved Product List (APL) or Standard Plans, or are otherwise generally known in the industry as being subject to patent or copyright protection.

4-3.9.8.2 County's Future Rights to a Proposal: Notwithstanding 7-3 nor any other provision of the Standard Specifications, upon acceptance of a Proposal, the Contractor hereby grants to the County and its contractors (such grant being expressly limited solely to any and all existing or future County construction projects and any other County projects that are partially or wholly funded by or for the County) a royalty-free and perpetual license under all forms of intellectual property rights to manufacture, to use, to design, to construct, to disclose, to reproduce, to prepare and fully utilize derivative works, to distribute, display and publish, in whole or in part, and to permit others to do any of the above, and to otherwise in any manner and for any

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purpose whatsoever do anything reasonably necessary to fully utilize any and all aspects of such Proposal on any and all existing and future construction projects and any other County projects.

Contractor shall hold harmless, indemnify and defend the County and its contractors and others in privity therewith from and against any and all claims, liabilities, other obligations or losses, and reasonable expenses related thereto (including reasonable attorneys' fees), which are incurred or are suffered by any breach of the foregoing grants, and regardless of whether such intellectual property rights were or were not disclosed by the Contractor pursuant to 4-3.9.8.1, unless the County has by express written exception in the Proposal acceptance process specifically released the Contractor from such obligation to hold harmless, indemnify and defend as to one or more disclosed intellectual property rights.

4-4 Unforeseeable Work.

When the County requires work that is not covered by a price in the Contract and such work does not constitute a "Significant Change" as defined in 4-3.1, and the County finds that such work is essential to the satisfactory completion of the Contract within its intended scope, the County will make an adjustment to the Contract. The Director will determine the basis of payment for such an adjustment in a fair and equitable amount.

4-5 Rights in and Use of Materials Found on the Site of the Work.

4-5.1 Ownership and Disposal of Existing Materials: Take ownership and dispose of all materials that are not designated as the property of other parties, in both roadway and structures, found on the right-of-way, and all material in structures designated for removal. Such materials do not include earth or other excavated material required for the construction of the project. During construction, the Contractor may use materials from existing structures that are required to be removed and that are designated to remain the property of the County. Do not cut or otherwise damage such material during removal unless the Director gives permission to do so. Store material in an accessible location as the Director directs. The County is not responsible for the quality or quantity of any material salvaged.

4-5.2 Ornamental Trees and Shrubs: Take ownership of all ornamental trees or shrubs existing in the right-of-way that are required to be removed for the construction operations and which are not specifically designated in the Plans to be reset, or to be removed by others prior to the construction operations.

4-6 Final Cleaning Up of Right-of-Way.

Upon completion of the work, and before the County accepts the work and makes final payment, remove from the right-of-way and adjacent property all falsework, equipment, surplus and discarded materials, rubbish and temporary structures; restore in an acceptable manner all property, both public and private, that has been damaged during the prosecution of the work; and leave the waterways unobstructed and the roadway in a neat and presentable condition throughout the entire length of the work under Contract. Do not dispose of materials of any character, rubbish or equipment, on abutting property, with or without the consent of the property owners. The Director will allow the Contractor to temporarily store equipment, surplus materials, usable forms, etc., on a well-kept site owned or leased by the Contractor, adjacent to the project. However, do not place or store discarded equipment, materials, or rubbish on such a site.

Shape and dress areas adjacent to the project right-of-way that were used as plant sites, materials storage areas or equipment yards when they are no longer needed for such purposes.

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Restore these areas in accordance with 7-11.1 and 7-11.2. Grass these areas when the Director directs.

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SECTION 5 CONTROL OF THE WORK

5-1 Plans and Working Drawings.

- **5-1.1 Contract Documents:** Have available the Contract Documents on the worksite at all times.
- **5-1.2 County Plans:** Plans consist of general drawings showing such details as are necessary to give a comprehensive idea of the construction contemplated. In general, roadway plans will show alignment, profile grades, typical sections and general plan view details. Cross sectional views maybe provided or created from provided surface models. In general, structure plans will show in detail all dimensions of the work contemplated. When the structure plans do not show the dimensions in detail, they will show general features and such details as are necessary to give a comprehensive idea of the structure.

Elevations and B.M. Datum shown are North American Vertical Datum 1988 (NAVD-1988), National Geodetic Vertical Datum of 1929 (NGVD-1929), or other datum as noted in the Plans.

5-1.3 Alterations in Plans: The County will issue, in writing, all authorized alterations affecting the requirements and information given on the approved Plans.

The existing surface is a combination of the following:

- 1. The natural ground or the original ground line,
- 2. The bottom of the existing pavement,
- 3. The bottom of existing features removed by clearing and grubbing,
- 4. The bottom of the existing base, if the base is to be removed,

The finished graded surface includes the completed grades of side slopes, unpaved shoulders, and the bottom of the base for flexible or rigid pavement.

5-1.4 Shop Drawings:

- **5-1.4.1. Definitions:** In addition to the definitions below, also refer to Section 1, Definitions and Terms.
- 1. Bracing: Temporary structural member(s) placed between beams, girders, piles, precast columns, etc. to provide stability during construction activities.
- 2. Construction Affecting Public Safety: Construction that may jeopardize public safety such as structures and construction operations spanning over or adjacent to functioning vehicular roadways, pedestrian walkways, railroads, navigable waterways and walls supporting fill sections or excavations immediately adjacent to functioning roadways. Construction Affecting Public Safety may also apply to the construction or demolition of a bridge with continuous beams or girders if traffic is being placed under one of the spans within the unit. It does not apply to those areas of the site outside the limits of normal public access. Adjacent as used above applies to any project or property where normal construction operations could impact functioning vehicular roadways, pedestrian walkways, railroads, and navigable waterways.
- 3. Contractor Originated Designs: Items which the Contract Documents require the Contractor to design, detail and incorporate into the permanent works.
- 4. Detailer: The steel detailer that prepares the steel shop drawings for the fabrication, geometry and fit-up for all steel members in accordance with the Plans.
- 5. Falsework: Any temporary construction work used to support the permanent structure until it becomes self-supporting. Falsework includes steel or timber beams, girders, columns, bracing, piles and foundations, and any proprietary equipment including modular shoring frames, post shores, and adjustable horizontal shoring.
- 6. Formwork: Any structure or mold used to retain plastic or fluid concrete in its designated shape until it hardens. Formwork may be comprised of common materials such as wood or metal sheets, battens, soldiers and walers, ties, proprietary forming systems such as

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stay-in-place metal forms, and proprietary supporting bolts, hangers and brackets. Formwork may be either permanent formwork requiring a shop drawing submittal such as stay-in-place metal or concrete forms, or may be temporary formwork which requires certification by the Specialty Engineer for Construction Affecting Public Safety and for Major and Unusual Structures.

- 7. Major and Unusual Structures: Bridges of complex design. Generally, this includes the following types of structures:
 - a. Bridges with an individual span longer than 300 feet.
 - b. Structurally continuous superstructures with spans over 150 feet.
 - c. Steel box and plate girder bridges.
 - d. Concrete or steel straddle piers and straddle pier caps.
- e. Steel truss bridges including proprietary pedestrian steel truss spans not satisfying the Category 1 conditions of FDOT Design Manual 266.4.
- f. Concrete segmental, post-tensioned girder bridges and post-tensioned substructures.
 - g. Cable stayed, extradosed or suspension bridges.
 - h. Arch bridges.
 - i. Tunnels.
 - j. All movable bridges (including specifically structural, electrical and

mechanical components).

k. Rehabilitation, widening, lengthening or jacking of any of the above

structures.

- 8. Permanent Works: All the permanent structures and parts thereof required of the completed Contract.
- 9. QA/QC Shop Drawing Check Points: The Engineer of Record is responsible for conducting a review of all shop drawings regardless of whether the shop drawing is originated by the Engineer of Record or by others. QA/QC Shop Drawing Check Prints shall consist of highlighting items that the EOR is able to verify based on the EOR's plans and design information on each sheet reviewed. Each sheet shall be initialed by the reviewer. QA/QC Shop Drawing Check Prints shall be submitted to the Department along with the stamped Shop Drawing.
- 10. Scaffolding: An elevated work platform used to support workers, materials and equipment, but not intended to support the structure.
- 11. Shop Drawings: A shop drawing is a drawing or set of drawings produced by the contractor, supplier, manufacturer, subcontractor, or fabricator for prefabricated components. Shop drawings also include all working drawings, erection plans, associated trade literature, material cut-sheets, calculations, schedules, erection manuals, geometry control manuals and other manuals and similar documents submitted by the Contractor to define some portion of the project work. The type of work includes both permanent and temporary works as appropriate to the project.
- 12. Shoring: A component of falsework such as horizontal, vertical or inclined support members. In this Section, this term is interchangeable with falsework.
- 13. Special Erection Equipment: Includes launching gantries, beam and winch equipment, form travelers, segment lifters, beam shifters, erection trusses, launching noses or similar items made purposely for construction of the structure. It does not apply to commonly available proprietary construction equipment such as cranes.
- 14. Temporary Works: Any temporary construction work necessary for the construction of the permanent works. This includes but is not limited to bracing, falsework, formwork, scaffolding, shoring, stability towers, strong-backs, counterweights, temporary earthworks, sheeting, cofferdams, and special erection equipment.

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5-1.4.2 Shop Drawing Submittal and Review Requirements: See table below for shop drawing submittal and review requirements.

Table 5-1						
	Submittal and Review Requirements					
Shop Drawing for:	Originated by Specialty Engineer Not Signed and Sealed	Originated by Detailer Not Signed and Sealed	Originated by Specialty Engineer Signed and Sealed	Originated by Contractor's EOR Signed and Sealed	Requires Review, QA/QC Shop Drawing Check prints and disposition stamp by Design	
					EOR	
Steel Fabrication Drawings		Originator			Reviewer	
Steel Erection Plan			Originator		Reviewer	
Geometry Control Manual				Originator	Reviewer	
Segmental Erection Manual				Originator	Reviewer	
Segmental Shop Drawings					Reviewer	
Post-tensioning Mock-up Plan			Originator		Reviewer	
Post-tensioning Systems ₁			Originator		Reviewer	
Pretensioned Prestressed Concrete Products Containing FRP Bars or Strands Excluding Standard Piles and Sheet Piles			Originator		Reviewer	
Temporary Works Affecting Public Safety ₂			Originator		Reviewer	

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	Table 5-1					
Submittal and Review Requirements						
Shop Drawing for:	Originated by Specialty Engineer Not Signed and Sealed	Originated by Detailer Not Signed and Sealed	Originated by Specialty Engineer Signed and Sealed	Originated by Contractor's EOR Signed and Sealed	Requires Review, QA/QC Shop Drawing Check prints and disposition stamp by	
					Design EOR	
Demolition Plans of Bridges with Continuous Beams or Girders Where One Span Within the Unit is Over Traffic			Originator		Reviewer	
Prefabricated Bridge Elements and System Connection Mock-Up Plans			Originator		Reviewer	
Bridge Formwork Including SIP Forms			Originator		Reviewer	
Construction Equipment Placed on Existing Bridges				Originator	Reviewer	
Bridge components not fully detailed in the Plans, i.e. post-tensioning details, handrails, temporary operating systems for movable bridges etc.				Originator	Reviewer	
Retaining Wall Systems			Originator		Reviewer	

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Table 5-1					
Submittal and Review Requirements					
Shop Drawing for:	Originated by Specialty Engineer Not Signed and Sealed	Originated by Detailer Not Signed and Sealed	Originated by Specialty Engineer Signed and Sealed	Originated by Contractor's EOR Signed and Sealed	Requires Review, QA/QC Shop Drawing Check prints and disposition stamp by Design EOR
Precast Box Culverts			Originator		Reviewer
Non-standard structures and components for drainage, lighting, signalization and signing			Originator		Reviewer
Building structures			Originator 3		Reviewer 4
Non-standard crash cushions and other nonstructural items			Originator		Reviewer
Design and structural details furnished by the Contractor in compliance with the Contract				Originator	Reviewer
Material or Product Cut- Sheets	Originator				Reviewer

^{1.} Include integration details of the post-tensioning system.

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^{2.} Does not include formwork complying with Standard Plans, Index 102-600 (concrete placement is not permitted directly over traffic). Also, does not include critical temporary walls that are fully detailed in the plans unless redesigned by the Contractor. Does not include specialized equipment if traffic is removed from under equipment while equipment is being loaded, launched, and while loads are being transported by equipment.

^{3.} In lieu of a Specialty Engineer, originator may be a licensed Architect.

^{4.} In lieu of the Design Engineer of Record, the reviewer may be the Design Architect of Record.

5-1.4.3 Schedule of Submittals: Prepare and submit a schedule of submittals that identifies the work for which shop drawings apply. For each planned submittal, define the type, and approximate number of drawings or other documents that are included and the planned submittal date, considering the processing requirements herein. Submit the schedule of submittals to the CEI Consultant within 60 days of the start of the Contract, and prior to the submission of any shop drawings.

Coordinate subsequent submittals with construction schedules to allow sufficient time for review, resubmittal and approval prior to beginning fabrication as necessary.

5-1.4.4 Style, Numbering, and Material of Submittals:

5-1.4.4.1 Drawings: Submit all shop drawings that are necessary to complete the structure in compliance with the design shown in the Plans. Prepare all shop drawings using the same units of measure as those used in the Plans. Consecutively number each sheet in the submittal series, and indicate the total number in the series (i.e., 1 of 12, 2 of 12... 12 of 12). Include on each sheet the following items as a minimum requirement: the complete Project Number, Financial Project Identification Number (if applicable), Bridge Number(s), drawing title and number, a title block showing the names of the fabricator or producer and the Contractor for which the work is being done, the initials of the person(s) responsible for the drawing, the date on which the drawing was prepared, the location of the item(s) within the project, the Contractor's approval stamp with date and initials, and, when applicable, the documents shall be signed and sealed by the Specialty Engineer or Contractor's Engineer of Record. A re-submittal will be requested when any of the required information is not included.

Shop drawings shall be submitted in Portable Document Format (PDF) files, formatted on sheets 11 by 17 inches.

5-1.4.4.2 Other Documents: Submit PDF files of other documents such as trade literature, catalogue information, calculations, and manuals formatted on sheets no larger than 11 by 17 inches. Clearly label and number each sheet in the submittal to indicate the total number of sheets in the series (i.e., 1 of 12, 2 of 12... 12 of 12).

Prepare all documents using the same units of measure as the Plans and include a Table of Contents cover sheet. List on the cover sheet the total number of pages and appendices, and include the complete Project Number, Financial Project Identification Number (if applicable), a title referencing the submittal item(s), the name of the firm and person(s) responsible for the preparation of the document, the Contractor's approval stamp with date and initials, and, when applicable, the documents shall be signed and sealed by the Specialty Engineer or Contractor's Engineer of Record.

Submit appropriately prepared and checked calculations and manuals that clearly outline the design criteria. Include on the internal sheets the complete Financial Project Identification Number and the initials of the person(s) responsible for preparing and checking the document.

Clearly label trade literature and catalogue information on the front cover with the title, Financial Project Identification Number, date and name of the firm and person(s) responsible for that document.

5-1.4.5 Submittal Paths:

5-1.4.5.1 General: Shop drawings are not required for items on the Approved Products List used as intended in the relevant Standard Plans and Standard Specifications. For non-prequalified items, details of the submittal path and protocol to be followed will be established by the CEI Consultant and communicated at the preconstruction conference.

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Shop drawing review will be performed by the Engineer of Record for the project feature associated with each submittal and communicated through the CEI Consultant. Shop drawing submittals shall include other information such as catalog data, procedure manuals, fabrication/welding procedures, and maintenance and operating procedures when required by the work. Submit material certifications and material tests to the CEI Consultant. The Contractor is responsible for checking and verifying any necessary field dimensions required in the development of shop drawings.

5-1.4.5.2 Building Structures: Submit shop drawings, and all correspondence related to building structures to the CEI Consultant for review and approval.

5-1.4.5.3 Contractor-Originated Design: Submit shop drawings and applicable calculations to the CEI Consultant for review. The shop drawings and applicable calculations must be signed and sealed by the Specialty Engineer or the Contractor's Engineer of Record. Submit in accordance with the requirements of 5-1.4.1 through 5-1.4.3, as appropriate.

5-1.4.5.4 Temporary Works: For Construction Affecting Public Safety, submit to the CEI Consultant shop drawings and the applicable calculations for the design of special erection equipment, bracing, falsework, scaffolding, etc. The shop drawings and applicable calculations must be signed and sealed by the Specialty Engineer. Submit in accordance with the requirements of 5-1.4.1 through 5-1.4.3, as appropriate.

5-1.4.5.5 Demolition Plans of Bridges with Continuous Beams or Girders when Traffic is Under Any of the Spans of the Unit During Demolition Activities: For demolition plans of bridges with continuous beams or girders when traffic is placed under any of the spans of the unit during demolition activities, the Specialty Engineer shall prepare signed and sealed demolition plans and applicable calculations including a step-by-step sequence of demolition, etc. Clearly denote any traffic restrictions for all demolition steps. Submit in accordance with the requirements of 5-1.4. 1 through 5-1.4. 3, as appropriate.

5-1.4.5.6 Falsework Founded on Shallow Foundations: When vertical displacement limits are provided in the Plans for falsework founded on shallow foundations such as spread footings and mats, submit to the CEI Consultant shop drawings and applicable calculations of the falsework system including subsurface conditions and settlement estimates. The shop drawings and applicable calculations must be signed and sealed by the Specialty Engineer. Submit in accordance with the requirements of 5-1.4.5.1 through 5-1.4.5.3, as appropriate.

5-1.4.5.7 Formwork and Scaffolding: The Contractor is solely responsible for the safe installation and use of all formwork and scaffolding. The County does not require any formwork or scaffolding submittals unless such work would be classified as Construction Affecting Public Safety. For formwork, scaffolding, or other temporary works affecting public safety; develop the required designs in accordance with the AASHTO Guide Design Specifications for Bridge Temporary Works, the AASHTO Construction Handbook for Bridge Temporary Works, and Chapter 11 of the Structures Design Guidelines (SDG) using wind loads specified in the SDG.

5-1.4.5.8 Beam, Girder and Column Temporary Bracing: The Contractor is solely responsible for ensuring stability of beams, girders and columns during all handling, storage, shipping and erection. Adequately brace beams, girders and columns to resist wind, weight of forms and other temporary loads, especially those eccentric to the vertical axis of the products, considering actual beam geometry and support conditions during all stages of erection and deck construction. At a minimum, provide temporary bracing at each end of each beam or girder. Develop the required bracing designs in accordance with the AASHTO LRFD

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Bridge Design Specifications (LRFD) and Chapter 11 of the SDG using wind loads specified in the SDG. For information not included in the SDG or LRFD, refer to the AASHTO Guide Design Specifications for Bridge Temporary Works and the AASHTO Construction Handbook for Bridge Temporary Works.

For Construction Affecting Public Safety, when temporary bracing requirements are shown in the Plans, submit plans and calculations signed and sealed by a Specialty Engineer for the design of temporary bracing members and connections based on the forces shown in the Plans. In addition, submit a written certification that construction loads do not exceed the assumed loads shown in the Plans.

For Construction Affecting Public Safety, when temporary bracing requirements are not shown in the Plans or an alternate temporary bracing system is proposed, submit plans and calculations signed and sealed by a Specialty Engineer including the stability analysis and design of temporary bracing members and connections.

5-1.4.5.9 Erection Plan, Geometry Control Manual and Erection Manual: Submit, for the Director's review, an Erection Plan that meets the specific requirements of Sections 450, 452 and 460 and this section. Submit in writing for the Engineer's review, an Erection Manual and Geometry Control Manual that meets the specific requirements of Section 462 and this Section. For all Erection Plans and Erection Manuals refer to Standard Plans, Index-102-600 for construction activities not permitted over traffic. For construction activities not covered in Index 102-600, clearly denote what additional construction steps are not allowed over traffic.

5-1.4.5.10 Other Miscellaneous Design and Structural Details Furnished by the Contractor in Compliance with the Contract: The CEI Consultant shall review all shop drawings and the applicable calculations for miscellaneous design and structural details as required by the Contract. The shop drawings and applicable calculations will be signed and sealed by the Specialty Engineer. Submit in accordance with the requirements of 5-1.4.1 through 5-1.4.3, as appropriate.

5-1.4.5.10 Project Shop Drawing Package: Upon completion of the work, but prior to authorization of final payment, the Contractor shall furnish the Director one complete, indexed and cataloged PDF file containing all of the Contractors, Subcontractors, and manufacturers shop drawings and catalog data as finally checked and reviewed by the Director with all modifications accepted by the Director subsequent thereto, showing the work as actually completed.

5-1.4.6 Processing of Shop Drawings:

5-1.4.6.1 Contractor Responsibility for Accuracy and Coordination of

Shop Drawings: Coordinate, schedule, and control all submittals, with a regard for the required priority, including those of the various subcontractors, suppliers, and engineers, to provide for an orderly and balanced distribution of the work.

Coordinate, review, date, stamp, approve and sign all shop drawings prepared by the Contractor or agents (subcontractor, fabricator, supplier, etc.) prior to submitting them to the CEI Consultant. Submittal of the drawings confirms verification of the work requirements, units of measurement, field measurements, construction criteria, sequence of assembly and erection, access and clearances, catalog numbers, and other similar data. Indicate on each series of drawings the specification section and sheet or drawing number of the Contract Plans to which the submission applies. Indicate on the shop drawings all deviations from the

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Contract drawings and itemize all deviations in the letter of transmittal. Likewise, whenever a submittal does not deviate from the Contract Plans, clearly state so in the submittal.

Schedule the submission of shop drawings to allow for a 45 calendar day review period for all submittals associated with a category 2 bridge; tolling components identified in the current FDOT General Tolling Requirements (GTR) Part 3; and the tolling-related signing, DMS and ITS infrastructure. Schedule the submission of shop drawings to allow for a 25 calendar day review period for all other items. The review period commences upon the CEI Consultant's receipt of the valid submittal or valid re-submittal and terminates upon the transmittal of the submittal back to the Contractor. A valid submittal includes all the minimum requirements outlined in 5-1.4.4.

Submit shop drawings to facilitate expeditious review. The Contractor is discouraged from transmitting voluminous submittals of shop drawings at one time. For submittals transmitted in this manner, allow for the additional review time that may result.

Only shop drawings distributed with the approval stamps are valid and all work that the Contractor performs in advance of approval will be at the Contractor's risk. Work affecting Public Safety may not be performed prior to approval of appropriate submittals and work may not proceed at the Contractor's risk.

5-1.4.6.2 Scope of Review by Engineer of Record: The Engineer of Record's review of the shop drawings is for conformity to the requirements of the Contract Documents and to the intent of the design. The Engineer of Record's review of shop drawings which include means, methods, techniques, sequences, and construction procedures are limited to the effects on the permanent works. The Engineer of Record's review of submittals which include means, methods, techniques, sequences, and construction procedures does not include an in-depth check for the ability to perform the work in a safe or efficient manner.

5-1.4.6.3 Special Review by Engineer of Shop Drawings for Construction Affecting Public Safety: The Engineer may request copies of shop drawings related to Construction Affecting Public Safety for review and comment. When shop drawings are requested do not proceed with construction of the permanent works until receiving the Engineer's written approval.

5-1.4.7 Other Requirements for Shop Drawings for Bridges:

5-1.4.7.1 Shop Drawings for Structural Steel and Miscellaneous Metals:

Submit shop drawings for structural steel and miscellaneous metals. Shop drawings shall consist of shop and erection drawings, welding procedures, and other working plans, showing details, dimensions, sizes of material, and other information necessary for the complete fabrication and erection of the metal work.

5-1.4.7.2 Shop Drawings for Concrete Structures: Submit shop drawings for concrete components that are not cast-in-place and are not otherwise exempted from submittal requirements. Also, submit shop drawings for all details that are required for the effective execution of the concrete work and are not included in the Contract Documents such as: special erection equipment, masonry layout diagrams, and diagrams for bending reinforcing steel, in addition to any details required for concrete components for the permanent work.

5-1.4.7.3 Shop Drawings for Major and Unusual Structures: In addition to any other requirements, within 60 days from the Notice to Proceed, submit information to the Director outlining the integration of the Major and Unusual Structure into the overall approach to the project. Where applicable to the project, include, but do not limit this information to:

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- 1. The overall construction program for the duration of the Contract. Clearly show the Milestone dates. (For example, the need to open a structure by a certain time for traffic operations.)
- 2. The overall construction sequence. The order in which individual structures are to be built, the sequence in which individual spans of girders or cantilevers are erected, and the sequence in which spans are to be made continuous, and the order that components are to be installed (such as mechanical and electrical devices in moveable bridges).
- 3. The general location of any physical obstacles to construction that might impose restraints or otherwise affect the construction, and an outline of how to deal with such obstacles while building the structure(s). (For example, obstacles might include road, rail and waterway clearances, temporary diversions, transmission lines, utilities, property, and the Contractor's own temporary works, such as haul roads, cofferdams, plant clearances and the like.)
- 4. The approximate location of any special lifting equipment in relation to the structure, including clearances required for the operation of the equipment. (For example, crane positions, operating radii and the like.)
- 5. The approximate location of any temporary falsework, and the conceptual outline of any special erection equipment. Provide the precise locations and details of attachments, fixing devices, loads, etc. in later detailed submittals.
- 6. An outline of the handling, transportation, and storage of fabricated components, such as girders or concrete segments. Provide the precise details in later detailed submittals.
- 7. Any other information pertinent to the proposed scheme or intended approach.

Clearly and concisely present the above information on as few drawings as possible in order to provide an overall, integrated summary of the intended approach to the project. The County will use these drawings for information, review planning, and to assess the Contractor's approach in relation to the intent of the original design. Submittal to and receipt by the Director does not constitute any County acceptance or approval of the proposals shown thereon. Include the details of such proposals on subsequent detailed shop drawing submittals. Submit timely revisions and re-submittals for all variations from these overall scheme proposals.

5-1.4.8 Cost of Shop Drawings: Include the cost of shop drawings submittal in the Contract prices for the work requiring the shop drawings. The County will not pay the Contractor additional compensation for such drawings.

5-1.5 Certifications:

- **5-1.5.1 Special Erection Equipment:** Prior to its use, ensure that the Specialty Engineer personally inspects the special erection equipment and submits a written certification to the Director that the equipment has been fabricated in accordance with the submitted drawings and calculations. In addition, after assembly, ensure that the Specialty Engineer observes the equipment in use and submits a written certification to the Director that such equipment is being used as intended and in accordance with the submitted drawings and calculations. In each case, the Specialty Engineer must sign and seal the letter of certification.
- **5-1.5.2 Falsework and Shoring Requiring Shop Drawings:** After its erection or installation but prior to the application of any superimposed load, ensure that a Specialty Engineer or a designee inspects the falsework and certifies to the Director in writing that the falsework has been constructed in accordance with the materials and details shown on the submitted drawings and calculations. The letter of certification must be signed and sealed by the Specialty Engineer.

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Where so directed in the shop drawings, ensure all welds are performed by welders qualified under AWS D1.5 for the type of weld being performed.

5-1.5.3 Temporary Formwork: For Construction Affecting Public Safety and for Major and Unusual Structures, prior to the placement of any concrete, ensure that a Specialty Engineer or a designee inspects the formwork and submits a written certification to the Director that the formwork has been constructed to safely withstand the superimposed loads to which it will be subjected. The Specialty Engineer must sign and seal the letter of certification.

5-1.5.4 Erection: For Construction Affecting Public Safety, submit an erection plan signed and sealed by the Specialty Engineer to the Director at least four weeks prior to erection commencing. Include, as part of this submittal, signed and sealed calculations and details for any falsework, bracing or other connection supporting the structural elements shown in the erection plan. Unless otherwise specified in the Plans, erection plans are not required for simple span precast prestressed concrete girder bridges with spans of 170 feet or less.

At least two weeks prior to beginning erection, conduct a Pre-erection meeting to review details of the plan with the Specialty Engineer that signed and sealed the plan, and any Specialty Engineers that may inspect the work and the Director.

After erection of the elements, but prior to opening of the facility below the structure, ensure that a Specialty Engineer or a designee has inspected the erected member. Ensure that the Specialty Engineer has submitted a written certification to the Director that the structure has been erected in accordance with the signed and sealed erection plan.

For structures without temporary supports but with temporary girder bracing systems, perform, as a minimum, weekly inspections of the bracing until all the diaphragms and cross frames are in place. For structures with temporary supports, perform daily inspections until the temporary supports are no longer needed as indicated in the erection plans. Submit written documentation of the inspections to the Director within 24 hours of the inspection.

5-1.6 Request for Correction: For work that the Contractor constructs incorrectly or does not meet the requirements of the Contract Documents, the Contractor has the prerogative to submit an acceptance proposal to the Director for review and disposition. The acceptance proposal shall describe the error or defect and either describe remedial action for its correction or propose a method for its acceptance. In either case, the acceptance proposal shall address structural integrity, aesthetics, maintainability, and the effect on Contract Time. The County will judge any such proposal for its effect on these criteria and for its effect on Contract Administration.

When the Director judges that a proposal infringes on the structural integrity or maintainability of the structure, the Contractor's Engineer of Record will perform a technical assessment and submit it to the Director for approval. Do not take any corrective action without the Director's written approval.

Carry out all approved corrective construction measures at no expense to the County.

Notwithstanding any disposition of the compensation aspects of the defective work, the Director's decision on the technical merits of a proposal is final.

5-1.7 Request for Information: Submit Requests for Information in writing to the Director to request clarification where a provision, detail or drawing in the Contract Documents seems to have more than one meaning, have an unclear meaning, or have conflicts between Plans and Specifications. A Request for Information is not considered a Notice of Claim. Notices of Claim must be submitted in accordance with 5-12.2.

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5-1.8 Request for Modification: Where the Director allows the Contractor to make modifications to the permanent works for the purposes of expediting the Contractor's chosen construction methods, the Contractor shall submit proposals to the Director for review and approval prior to modifying the works. Submit proposals for minor modifications under the shop drawing process. Indicate on all drawings the deviations from the Contract Documents and itemize all deviations in the letter of transmittal. Major modifications must be submitted as a Cost Savings Initiative Proposal.

Minor modifications are those items that, in the opinion of the Director, do not significantly affect the quantity of measured work, or the integrity or maintainability of the structure or its components.

The Director's decision on the delineation between a minor and a major modification and the disposition of a proposal is final.

5-2 Coordination of Contract Documents.

These Specifications, the Plans, Special Provisions, and all supplementary documents are integral parts of the Contract Documents; a requirement occurring in one is as binding as though occurring in all. All parts of the Contract Documents are complementary and describe and provide for a complete work. In addition to the work and materials specified in the Specifications as being included in any specific pay item, include in such pay items additional, incidental work, not specifically mentioned, when so shown in the Plans, or if indicated, or obvious and apparent, as being necessary for the proper completion of the work under such pay item and not stipulated as being covered under other pay items.

In cases of discrepancy, the governing order of the documents is as follows:

- 1. Special Provisions.
- 2. Technical Special Provisions.
- 3. Plans.
- 4. Standard Plans.
- 5. Developmental Specifications.
- 6. Supplemental Specifications.
- 7. Standard Specifications.

Computed dimensions govern over scaled dimensions.

5-3 Conformity of Work with Contract Documents.

Perform all work and furnish all materials in reasonably close conformity with the lines, grades, models, dimensions, and material requirements, including tolerances, as specified in the Contract Documents.

In the event that the Director finds that the Contractor has used material or produced a finished product that is not in reasonably close conformity with the Contract Documents, but that the Contractor has produced reasonably acceptable work, the Director will determine if the County will accept the work in place. In this event, the Director will document the basis of acceptance by Contract modification, which provides for an appropriate reduction in the Contract price for such work or materials included in the accepted work as deemed necessary to conform to the determination based on engineering judgment.

In the event that the Director finds that the Contractor has used material or produced a finished product that is not in reasonably close conformity with the Contract Documents, and that the Contractor has produced an inferior or unsatisfactory product, the Contractor shall remove and replace or otherwise correct the work or materials at no expense to the County.

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For base and surface courses, the County will allow the finished grade to vary as much as 0.1 foot from the grade shown in the Plans, provided that the Contractor's work meets all templates and straightedge requirements and contains suitable transitions.

5-4 Errors or Omissions in Contract Documents.

Do not take advantage of any apparent error or omission discovered in the Contract Documents, but immediately notify the Director in writing of such discovery. The Director will then make such corrections and interpretations as necessary to reflect the actual spirit and intent of the Contract Documents.

5-5 Authority of the Director.

Perform all work to the satisfaction of the Director.

The Director will decide all questions, difficulties, and disputes, of whatever nature, that may arise relative to the interpretation of the Plans, construction, prosecution, and fulfillment of the Contract, and as to the character, quality, amount, and value of any work done, and materials furnished, under or by reason of the Contract.

5-6 Authority and Duties of Director's Assistants.

The Director may appoint such assistants and representatives as desired. These assistants and representatives are authorized to inspect all work done and all materials furnished. Such inspection may extend to all or any part of the work and to the manufacture, preparation, or fabrication of the materials to be used. Such assistants and representatives are not authorized to revoke, alter, or waive any requirement of these Specifications. Rather, they are authorized to call to the attention of the Contractor any failure of the work or materials to meet the Contract Documents, and have the authority to reject materials or suspend the work until any questions at issue can be referred to and decided by the Director. The Director will immediately submit written notification to the Contractor of any such suspension of the work, stating in detail the reasons for the suspension. The presence of the inspector or other assistant in no way lessens the responsibility of the Contractor.

5-7 Engineering and Layout.

5-7.1 Control Points Furnished by the County: The Director will provide control points at various locations along the project alignment (Begin Project, End Project, PIs, PTs, etc.) and benchmarks along the line of the project to facilitate the proper layout of the work. Control points and benchmarks provided by the engineer, if any, will be indicated in the Plans. Preserve all control points and benchmarks that the County furnishes. Any points carelessly or willfully disturbed or destroyed shall be reset at the sole expense of the Contractor.

As an exception to the above, for projects where the Plans do not show a centerline or other survey control line for construction of the work (e.g., resurfacing, safety modifications, etc.) the Director may provide only points marking the beginning and ending of the project, and all exceptions.

Prior to commencing the work, the Contractor shall perform a quality control check of all horizontal and vertical control points provided by the County and carefully compare all lines depicted in the plans with existing lines and levels, and shall call any discrepancies to the attention of the Director for resolution. Upon resolution of any discrepancies, the Contractor shall submit a letter to the County accepting the control points and bench marks for use. In any event, the Contractor shall be responsible for the accuracy of the Work and shall make good any work

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performed in error, at no cost to the County. All construction surveying and layout work to be provided herein shall be coordinated with and subject to the approval of the Director.

- **5-7.1.1 Third Party Survey Monumentation:** The Contractor is responsible for the protection and preservation of any third party survey monumentation (National Geodetic Survey points, property corners, etc.) located within the project limits. Any points carelessly or willfully disturbed or destroyed shall be reset at the sole expense of the Contractor. Any third party survey monumentation designated by the Director to be removed and re-established will be paid for at the unit prices set forth in the Contract, or if no such item exists in accordance with Section 4-3.2.1.
- **5-7.2 Furnishing of Stake Materials:** Furnish all stakes, templates, and other materials necessary for establishing and maintaining the lines and grades necessary for control and construction of the work.
- **5-7.3 Layout of Work:** Utilizing the control points and bench marks furnished by the County and accepted by the Contractor in accordance with 5-7.1, establish all horizontal and vertical controls necessary to construct the work in conformity to the Contract Documents. Perform all calculations required, and set all stakes needed such as grade stakes, offset stakes, reference point stakes, slope stakes, and other reference marks or points necessary to provide lines and grades for construction of all roadway, bridge, and miscellaneous items.

When performing utility construction as part of the project, establish all horizontal and vertical controls necessary to carry out such work.

5-7.4 Specific Staking Requirements: When performing new base construction as part of the project, set stakes to establish lines and grades for subgrade, base, curb, and related items at intervals along the line of the work. If Automated Machine Guidance is utilized, set stakes as needed. If Automated Machine Guidance is not utilized, set stakes no greater than 50 feet on tangents and 25 feet on curves. Set grade stakes at locations that the Director directs to facilitate checking of subgrade, base, and pavement elevations in crossovers, intersections, and irregular shaped areas.

For bridge construction stakes and other control, set references at sufficiently frequent intervals to ensure construction of all components of a structure in accordance with the lines and grades shown in the Plans.

For projects where the Plans do not show a centerline or other survey control line for construction of the work (resurfacing, safety modifications, etc.), provide only such stakes as necessary for horizontal and vertical control of work items.

For resurfacing and resurfacing-widening type projects, establish horizontal controls adequate to ensure that the asphalt mix added matches with the existing pavement. In tangent sections, set horizontal control points at 100-foot intervals by an instrument survey. In curve sections, set horizontal control points at 25-foot intervals by locating and referencing the centerline of the existing pavement. Alternate intervals may be used on resurfacing projects with prior written approval of the Director.

Establish by an instrument survey, and mark on the surface of the finished pavement at 25-foot intervals, the points necessary for striping of the finished roadway. As an exception, for resurfacing and resurfacing/widening projects, establish these points in the same manner as used for horizontal control of paving operations. Mark the pavement with white paint. If performing striping, the Director may approve an alternate method for layout of striping provided that the Contractor achieves an alignment equal to or better than the alignment that would be achieved using an instrument survey.

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For projects that include temporary or permanent striping of "no passing zones", provide the location and length of these zones as shown in the Plans, except projects where the vertical or horizontal alignment is new or altered from preconstruction alignment. For projects that consist of new or altered vertical or horizontal alignment, the County will provide the location and length of the "no passing zones" during construction. For these projects, submit written notification to the Director not less than 21 calendar days prior to beginning striping.

For all projects, set a station identification stake at each right-of-way line at 100-foot intervals and at all locations where a change in right-of-way width occurs, or as otherwise approved by the Director. Mark each of these stakes with painted numerals, of a size readable from the roadway, corresponding to the project station at which it is located. As an exception to the above, for projects where Plans do not show right-of-way lines, set station identification stakes at locations and intervals appropriate to the type of work being done. For resurfacing and resurfacing/widening projects, set station identification stakes at 200-foot intervals, or as otherwise approved by the Director.

5-7.4.1 As-Built Drawings and Certified Surveys: The Contractor shall maintain one record copy of all specifications, plans, addenda, and shop drawings on site and in good order, annotated in red to depict all changes made during construction and exact location of underground or otherwise concealed components of the project, and any modifications to material types from that specified in the bid plans and specifications ("red line documents"). All subsurface improvements shall be as-built prior to backfilling. As-built red line plans shall be maintained on 11-inch by 17-inch prints and red line annotations shall be completed in a neat draftsman-like manner.

As-built red lines shall include both authorized and unauthorized changes to all project features, including but not limited to: horizontal pavement dimensions; finished pavement grades; finish dimensions, elevations, and alignment of all storm sewer, drainage structures, ponds, water main, sanitary sewer, force main, service lines, conduit, wiring, traffic loops, and signal interconnects; signal poles; light poles; and signs.

Demonstrating proper maintenance of as-built drawings shall be a precedent to each progress payment. The Contractor shall make available to Director, at any time requested, as-built information through the date of the request. If the Director determines the as-built information is inaccurate, inadequate, or untimely payment may be withheld until such time that the Contractor cures any noted deficiencies.

Upon completion of all work, but prior to authorization of final payment, the Contractor shall deliver to the Director one complete set as-built red line documents and certified surveys providing verification of all as-built dimensions and grades for review and approval. The certified survey shall include, but not be limited to:

- 1. Level Circuit: the survey shall include a final bench mark level circuit indicating the accuracy of vertical closure.
- 2. Control structure bench marks: the Contractor shall establish and document the location and elevation of bench marks on or within 100-feet of each control structure constructed or modified as part of the project. Each control structure bench mark elevation shall be clearly and permanently indicated on the bench mark.
- 3. Cross-sections: as-built finished cross-sections shall be performed at intervals not exceeding 100 feet, extending from right-of-way to right-of-way, but also including temporary or permanent easements

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- as may be applicable. Cross sections shall include all elevation break points, and shall include edge of pavement and centerlines for all pavements.
- 4. Discharge structures: structure identification number, type, locations (latitude and longitude), dimensions, and elevations of all, including weirs, bleeders, orifices, gates, pumps, pipes, and oil and grease skimmers.
- 5. Side bank and underdrain filters, or exfiltration trenches: locations, dimensions and elevations of all, including clean-outs, pipes, connections to control structures and points of discharge to receiving waters.
- 6. Storage areas for treatment and attenuation: storage area identification number, dimensions, elevations, contours, or cross-sections of all, sufficient to determine stage-storage relationships of the storage area and the permanent pool depth and volume below the control elevation for normally wet systems.
- 7. System grading: dimensions, elevations, contours, and final grades or cross-sections to determine contributing drainage areas, flow directions, and conveyance of runoff to the system discharge points.
- 8. Conveyance: dimensions, elevations, contours, final grades or cross-sections of systems utilized to divert off-site runoff around or through the new system.
- 9. Water levels: existing water elevations and the date recorded.
- 10. South Florida Water Management District (SFWMD): as-built surveys shall conform to any additional requirements and special conditions listed in the SFWMD's Environmental Resource Permit and any applicable local permit(s).
- 11. Bridge clearances: for projects under the authority of a U.S. Coast Guard bridge permit, as-built clearances as described in the U.S. Coast Guard Owner's Certification of Bridge Completion. For bridges spanning roadways, provide a full as-built clearance envelope across the full width of the lower roadway(s).
- 12. Projects under the authority of a U.S. Army Corps of Engineers permit: as-built surveys shall satisfy all of the requirements and special conditions listed in the U.S. Army Corps of Engineers permit.

All as-built survey information shall be signed and sealed by a licensed Professional Surveyor and Mapper duly registered in the State of Florida. No direct payment will be made for the cost of preparing, maintaining, and furnishing as-built plans and surveys as specified in this Article, the costs thereof shall be included in other items of work.

5-7.5 Personnel, Equipment, and Record Requirements: Employ only competent personnel and use only suitable equipment in performing layout work. Do not engage the services of any person or persons in the employ of the County for performance of layout work. All construction surveying and layout work, including dimensions and elevations associated with asbuilts, shall be completed under the responsible charge of a licensed Professional Surveyor and Mapper duly registered in the State of Florida.

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Keep adequate field notes and records while performing as layout work. Make these field notes and records available for the Director's review as the work progresses, and submit to the Director at the time of completion of the project. The Director's inspection, checking, or acceptance of the Contractor's field notes or layout work does not relieve the Contractor of his responsibility to achieve the lines, grades, and dimensions shown in the Contract Documents.

Prior to final acceptance of the project, mark, in a permanent manner on the surface of the completed work, all horizontal control points originally furnished by the County.

- 5-7.6 Global Navigation Satellite Systems (GNSS) Work Plan: If used, submit a comprehensive written GNSS Work Plan to the Director for County review and acceptance at the preconstruction conference or at least 30 days before starting work using GNSS. Update the plan as necessary during construction and notify the County of all changes. The GNSS Work Plan shall describe how GNSS enabled Automated Machine Guidance technology will be integrated into other technologies employed on the project. At a minimum, the GNSS Work Plan will include the following:
- 1. Designate which portions of the Contract will be done using GNSS enabled Automated Machine Guidance and which portions will be constructed using conventional survey methodology.
- 2. Describe the manufacturer, model, and software version of the GNSS equipment.
- 3. Provide information on the qualifications of Contractor staff. Include formal training and field experience. Designate a single staff person as the primary contact for GNSS technology issues.
- 4. Describe how project control will be established. Include a list and map showing control points enveloping the site.
- 5. Describe site calibration procedures. Include a map of the control points used for site calibration and control points used to validate the site calibration. Describe the frequency of site calibration and how site calibration will be documented. At a minimum, verify the site calibration twice daily.
- 6. Describe the Contractor's quality control procedures for verifying mechanical calibration and maintenance of construction and guidance equipment. Include the frequency and type of verification performed to ensure the constructed grades conform to the Contract Documents.

Keep on site and provide upon request, a copy of the project's most up to date GNSS Work Plan at the project site.

5-7.7 Payment: Include the cost of performing layout work as described above in the Contract unit prices for the various items of work that require layout.

5-8 Contractor's Supervision.

- **5-8.1 Prosecution of Work:** Give the work the constant attention necessary to ensure the scheduled progress, and cooperate fully with the Director and with other contractors at work in the vicinity.
- **5-8.2 Contractor's Superintendent:** Maintain a competent superintendent at the site at all times while work is in progress to act as the Contractor's agent. Provide a superintendent who is a competent superintendent capable of properly interpreting the Contract Documents and is thoroughly experienced in the type of work being performed. Provide a superintendent with the full authority to receive instructions from the Director and to execute the orders or directions of

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the Director, including promptly supplying any materials, tools, equipment, labor, and incidentals that may be required. Provide such superintendence regardless of the amount of work sublet.

Provide a superintendent who speaks and understands English, and maintain at least one other responsible person who speaks and understands English, on the project during all working hours.

5-8.3 Supervision for Emergencies: Provide a responsible person, who speaks and understands English, and who is available at or reasonably near the worksite on a 24-hour basis, seven days a week. Designate this person as the point of contact for emergencies and in cases that require immediate action to maintain traffic or to resolve any other problem that might arise. Submit the phone numbers and names of personnel designated to be contacted in cases of emergencies, along with a description of the project location, to the Florida Highway Patrol and all other local law enforcement agencies.

5-9 General Inspection Requirements.

- **5-9.1 Cooperation by Contractor:** Do not perform work or furnish materials without obtaining inspection by the Director. Provide the Director with safe means of access to the work, so the Director can determine whether the work performed and materials used are in accordance with the requirements and intent of the Contract Documents. For bridge projects with construction operations accessible only by watercraft, provide safe passage and transport to facilitate the Engineer's inspection of the Work. If the Director so requests at any time before final acceptance of the work, remove or uncover such portions of the finished work as directed. After examination, restore the uncovered portions of the work to the standard required by the Contract Documents. If the Director determines that the work so exposed or examined is unacceptable, perform the uncovering or removal, and the replacing of the covering or making good of the parts removed, at no expense to the County. However, if the Director determines that the work thus exposed or examined is acceptable, the County will pay for the uncovering or removing, and the replacing of the covering or making good of the parts removed in accordance with Section 4-4.
- **5-9.2 Failure of Director to Reject Work During Construction:** If, during or prior to construction operations, the Director fails to reject defective work or materials, whether from lack of discovery of such defect or for any other reason, such initial failure to reject in no way prevents the later rejection when such defect is discovered, or obligates the County to final acceptance. The County is not responsible for losses suffered due to any necessary removals or repairs of such defects.
- **5-9.3 Failure to Remove and Renew Defective Materials and Work:** If the Contractor fails or refuses to remove and renew any defective materials used or work performed, or to make any necessary repairs in an acceptable manner and in accordance with the requirements of the Contract within the time indicated in writing, the Director has the authority to repair, remove, or renew the unacceptable or defective materials or work as necessary, all at the Contractor's expense. The County will obtain payment for any expense it incurs in making these repairs, removals, or renewals, that the Contractor fails or refuses to make, by deducting such expenses from any moneys due or which may become due the Contractor, or by charging such amounts against the Contract bond.
- **5-9.4 Inspection by Federal Government:** When the United States Government or the State of Florida pays a portion of the cost of construction, its representatives may inspect the construction work as they deem necessary. However, such inspection will in no way make the Federal Government or the State of Florida a party to the Contract.

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5-10 Final Inspection.

5-10.1 Maintenance until Acceptance: Maintain all Work until the Director has given final acceptance in accordance with 5-11.

5-10.2 Inspection for Acceptance: Upon submittal of written notification that all Contract Work, or all Contract Work on the portion of the Contract scheduled for acceptance, has been completed, the Director will make an inspection for acceptance. The inspection will be made within seven days of such notification. If the Director finds that all work has been satisfactorily completed, the County will consider such inspection as the final inspection. If any or all of the Work is found to be unsatisfactory, the Director will detail the remedial work required to achieve acceptance. Immediately perform such remedial work. Subsequent inspections will be made on the remedial work until the Director accepts all Work.

Upon satisfactory completion of the Work, the County will submit written notice of acceptance, either partial or final, to the Contractor.

Until final acceptance in accordance with 5-11, replace or repair any damage to the accepted Work. Payment of such work will be as provided in 7-14.

5-10.3 Partial Acceptance: At the Director's sole discretion, the Director may accept any portion of the Work under the provisions of 5-10.2.

5-10.4 Conditional Acceptance: The Director will not make, or consider requests for conditional acceptance of a project.

5-11 Final Acceptance.

When, upon completion of the final construction inspection of the entire project, the Director determines that the Contractor has satisfactorily completed the work, the Director will submit written notice of final acceptance to the Contractor.

5-12 Claims by Contractor.

5-12.1 General: When the Contractor deems that extra compensation or a time extension is due beyond that agreed to by the Director, whether due to delay, additional work, altered work, differing site conditions, breach of Contract, or for any other cause, the Contractor shall follow the procedures set forth herein for preservation, presentation and resolution of the claim.

Submission of timely notice of intent to file a claim, preliminary time extension request, time extension request, and the certified written claim, together with full and complete claim documentation, are each a condition precedent to the Contractor bringing any circuit court, arbitration, or other formal claims resolution proceeding against the County for the items and for the sums or time set forth in the Contractor's certified written claim. The failure to provide such notice of intent, preliminary time extension request, time extension request, certified written claim and full and complete claim documentation within the time required shall constitute a full, complete, absolute and irrevocable waiver by the Contractor of any right to additional compensation or a time extension for such claim.

5-12.2 Notice of Claim:

5-12.2.1 Claims For Extra Work: Where the Contractor deems that additional compensation or a time extension is due for work or materials not expressly provided for in the Contract or which is by written directive expressly ordered by the Director pursuant to 4-3, the Contractor shall submit written notification to the Director of the intention to make a claim for additional compensation before beginning the work on which the claim is based, and if seeking a time extension, the Contractor shall also submit a preliminary request for time extension pursuant to 8-7.3.2 within ten calendar days after commencement of a delay and a request for Contract Time

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extension pursuant to 8-7.3.2 within thirty calendar days after the elimination of the delay. If such written notification is not submitted and the Director is not afforded the opportunity for keeping strict account of actual labor, material, equipment, and time, the Contractor waives the claim for additional compensation or a time extension. Such notice by the Contractor, and the fact that the Director has kept account of the labor, materials and equipment, and time, shall not in any way be construed as establishing the validity of the claim or method for computing any compensation or time extension for such claim. On projects with an original Contract amount of \$3,000,000 or less within 90 calendar days after final acceptance of the project in accordance with 5-11, and on projects with an original Contract amount greater than \$3,000,000 within 180 calendar days after final acceptance of the project in accordance with 5-11, the Contractor shall submit full and complete claim documentation as described in 5-12.3 and duly certified pursuant to 5-12.9. However, for any claim or part of a claim that pertains solely to final estimate quantities disputes the Contractor shall submit full and complete claim documentation as described in 5-12.3 and duly certified pursuant to 5-12.9, as to such final estimate claim dispute issues, within 90 or 180 calendar days, respectively, of the Contractor's receipt of the County's final estimate.

If the Contractor fails to submit a certificate of claim as described in 5-12.9, the County will so notify the Contractor in writing. The Contractor shall have ten calendar days from receipt of the notice to resubmit the claim documentation, without change, with a certificate of claim as described in 5-12.9, without regard to whether the resubmission is within the applicable 90 or 180 calendar day deadline for submission of full and complete claim documentation. Failure by the Contractor to comply with the ten-calendar day notice shall constitute a waiver of the claim.

5-12.2.2 Claims For Delay: Where the Contractor deems that additional compensation or a time extension is due on account of delay, differing site conditions, breach of Contract, or any other cause other than for work or materials not expressly provided for in the Contract (Extra Work) or which is by written directive of the Director expressly ordered by the Director pursuant to 4-3, the Contractor shall submit a written notice of intent to the Director within ten days after commencement of a delay to a controlling work item expressly notifying the Director that the Contractor intends to seek additional compensation, and if seeking a time extension, the Contractor shall also submit a preliminary request for time extension pursuant to 8-7.3.2 within ten calendar days after commencement of a delay to a controlling work item, as to such delay and providing a reasonably complete description as to the cause and nature of the delay and the possible impacts to the Contractor's work by such delay, and a request for Contract Time extension pursuant to 8-7.3.2 within thirty calendar days after the elimination of the delay. On projects with an original Contract amount of \$3,000,000 or less within 90 calendar days after final acceptance of the project in accordance with 5-11, and on projects with an original Contract amount greater than \$3,000,000 within 180 calendar days after final acceptance of the project in accordance with 5-11, the Contractor shall submit full and complete documentation as described in 5-12.3 and duly certified pursuant to 5-12.9.

If the Contractor fails to submit a certificate of claim as described in 5-12.9, the County will so notify the Contractor in writing. The Contractor shall have ten calendar days from receipt of the notice to resubmit the claim documentation, without change, with a certificate of claim as described in 5-12.9, without regard to whether the resubmission is within the applicable 90 or 180 calendar day deadline for submission of full and complete claim documentation. Failure by the Contractor to comply with the ten-calendar day notice shall constitute a waiver of the claim.

There shall be no Contractor entitlement to any monetary compensation or time extension for any delays or delay impacts, whatsoever, that are not to a controlling work item,

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and then as to any such delay to a controlling work item entitlement to any monetary compensation or time extension shall only be to the extent such is otherwise provided for expressly under 4-3 or 5-12, except that in the instance of delay to a non-controlling item of work the Contractor may be compensated for the direct costs of idle labor or equipment only, at the rates set forth in 4-3.2.1(1) and (3), and then only to the extent the Contractor could not reasonably mitigate such idleness.

If the Contractor provides the written notice of intent, the preliminary request for time extension, and the request for Contract Time extension in compliance with the aforementioned time and content requirements, the Contractor's claim for delay to a controlling work item will be evaluated as of the date of the elimination of the delay even if the Contractor's performance subsequently overcomes the delay. If the claim for delay has not been settled, the Contractor must also comply with 5-12.3 and 5-12.9 to preserve the claim.

- **5-12.3 Content of Written Claim:** As a condition precedent to the Contractor being entitled to additional compensation or a time extension under the Contract, for any claim, the Contractor shall submit a certified written claim to the County which will include for each individual claim, at a minimum, the following information:
- 1. A detailed factual statement of the claim providing all necessary dates, locations, and items of work affected and included in each claim;
- 2. The date or dates on which actions resulting in the claim occurred or conditions resulting in the claim became evident;
- 3. Identification of all pertinent documents and the substance of any material oral communications relating to such claim and the name of the persons making such material oral communications;
- 4. Identification of the provisions of the Contract which support the claim and a statement of the reasons why such provisions support the claim, or alternatively, the provisions of the Contract which allegedly have been breached and the actions constituting such breach;
- 5. A detailed compilation of the amount of additional compensation sought and a breakdown of the amount sought as follows:
 - a. documented additional job site labor expenses;
 - b. documented additional cost of materials and supplies;
- c. a list of additional equipment costs claimed, including each piece of equipment and the rental rate claimed for each;
 - d. any other additional direct costs or damages and the documents in support
 - e. any additional indirect costs or damages and all documentation in support

thereof.

thereof;

6. A detailed compilation of the specific dates and the exact number of calendar days sought for a time extension, the basis for entitlement to time for each day, all documentation of the delay, and a breakout of the number of days claimed for each identified event, circumstance or occurrence.

Further, the Contractor shall be prohibited from amending either the bases of entitlement or the amount of any compensation or time stated for any and all issues claimed in the Contractor's written claim submitted hereunder, and any circuit court, arbitration, or other formal claims resolution proceeding shall be limited solely to the bases of entitlement and the amount of any compensation or time stated for any and all issues claimed in the Contractor's written claim submitted hereunder. This shall not, however, preclude a Contractor from withdrawing or reducing

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any of the bases of entitlement and the amount of any compensation or time stated for any and all issues claimed in the Contractor's written claim submitted hereunder at any time.

5-12.4 Action on Claim: The Director will respond in writing on projects with an original Contract amount of \$3,000,000 or less within 90 calendar days of receipt of a complete claim submitted by a Contractor in compliance with 5-12.3, and on projects with an original Contract amount greater than \$3,000,000 within 120 calendar days of receipt of a complete claim submitted by a Contractor in compliance with 5-12.3. Failure by the Director to respond to a claim in writing within 90 or 120 days, respectively, after receipt of a complete claim submitted by the Contractor in compliance with 5-12.3 constitutes a denial of the claim by the Director. If the Director finds the claim or any part thereof to be valid, such partial or whole claim will be allowed and paid for to the extent deemed valid and any time extension granted, if applicable, as provided in the Contract. No circuit court proceedings on any claim, or a part thereof, may be filed until after final acceptance per 5-11 of all Contract work by the County or denial hereunder, whichever occurs last.

5-12.5 Pre-Settlement and Pre-Judgment Interest: Entitlement to any pre-settlement or pre-judgment interest on any claim amount determined to be valid subsequent to the County's receipt of a certified written claim in full compliance with 5-12.3, whether determined by a settlement or a final ruling in formal proceedings, the County shall pay to the Contractor simple interest calculated at the Prime Rate (as reported by the Wall Street Journal as the base rate on corporate loans posted by at least 75% of the nation's 30 largest banks) as of the 60th calendar day following the County's receipt of a certified written claim in full compliance with 5-12.3, such interest to accrue beginning 60 calendar days following the County's receipt of a certified written claim in full compliance with 5-12.3 and ending on the date of final settlement or formal ruling.

5-12.6 Compensation for Extra Work or Delay:

5-12.6.1 Compensation for Extra Work: Notwithstanding anything to the contrary contained in the Contract Documents, the Contractor shall not be entitled to any compensation beyond that provided for in 4-3.2.

5-12.6.2 Compensation for Delay: Notwithstanding anything to the contrary contained in the Contract Documents, the additional compensation set forth in 5-12.6.2.1 shall be the Contractor's sole monetary remedy for any delay other than to perform extra work caused by the County unless the delay shall have been caused by acts constituting willful or intentional interference by the County with the Contractor's performance of the work and then only where such acts continue after Contractor's written notice to the County of such interference. The parties anticipate that delays may be caused by or arise from any number of events during the term of the Contract, including, but not limited to, work performed, work deleted, supplemental agreements, work orders, disruptions, differing site conditions, utility conflicts, design changes or defects, time extensions, extra work, right-of-way issues, permitting issues, actions of suppliers, subcontractors or other contractors, actions by third parties, suspensions of work by the Director pursuant to 8-6.1, shop drawing approval process delays, expansion of the physical limits of the project to make it functional, weather, weekends, holidays, special events, suspension of Contract Time, or other events, forces or factors sometimes experienced in construction work. Such delays or events and their potential impacts on the performance by the Contractor are specifically contemplated and acknowledged by the parties in entering into this Contract, and shall not be deemed to constitute willful or intentional interference with the Contractor's performance of the work without clear and convincing proof that they were the result of a deliberate act, without reasonable and good-faith basis, and specifically intended to disrupt the Contractor's performance.

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5-12.6.2.1 Compensation for Direct Costs, Indirect Costs, Expenses,

and Profit thereon, of or from Delay: For any delay claim, the Contractor shall be entitled to monetary compensation for the actual idle labor (including supervisory personnel) and equipment, and indirect costs, expenses, and profit thereon, as provided for in 4-3.2.1(4) and solely for costs incurred beyond what reasonable mitigation thereof the Contractor could have undertaken.

- **5-12.7 Mandatory Claim Records:** After submitting to the Director a notice of intent to file a claim for extra work or delay, the Contractor must keep daily records of all labor, material and equipment costs incurred for operations affected by the extra work or delay. These daily records must identify each operation affected by the extra work or delay and the specific locations where work is affected by the extra work or delay, as nearly as possible. The Director may also keep records of all labor, material and equipment used on the operations affected by the extra work or delay. The Contractor shall, once a notice of intent to claim has been timely filed, and not less than weekly thereafter as long as appropriate, submit the Contractor's daily records to the Director and be likewise entitled to receive the County's daily records. The daily records to be submitted hereunder shall be done at no cost to the recipient.
- **5-12.8 Claims for Acceleration:** The County shall have no liability for any constructive acceleration of the work, nor shall the Contractor have any right to make any claim for constructive acceleration nor include the same as an element of any claim the Contractor may otherwise submit under this Contract. If the Director gives express written direction for the Contractor to accelerate its efforts, such written direction will set forth the prices and other pertinent information and will be reduced to a written Contract Document promptly. No payment will be made on a Supplemental Agreement for acceleration prior to the County's approval of the documents.
- **5-12.9 Certificate of Claim:** When submitting any claim, the Contractor shall certify under oath and in writing, in accordance with the formalities required by Florida law, that the claim is made in good faith, that the supportive data are accurate and complete to the Contractor's best knowledge and belief, and that the amount of the claim accurately reflects what the Contractor in good faith believes to be the County's liability. Such certification must be made by an officer or director of the Contractor with the authority to bind the Contractor.
- **5-12.10 Non-Recoverable Items:** The parties agree that for any claim the County will not have liability for the following items of damages or expense:
 - 1. Loss of profit, incentives or bonuses;
 - 2. Any claim for other than extra work or delay;
- 3. Consequential damages, including, but not limited to, loss of bonding capacity, loss of bidding opportunities, loss of credit standing, cost of financing, interest paid, loss of other work or insolvency;
- 4. Acceleration costs and expenses, except where the County has expressly and specifically directed the Contractor in writing "to accelerate at the County's expense"; nor
 - 5. Attorney fees, claims preparation expenses and costs of litigation.
- **5-12.11 Exclusive Remedies:** Notwithstanding any other provision of this Contract, the parties agree that the County shall have no liability to the Contractor for expenses, costs, or items of damages other than those which are specifically identified as payable under 5-12. In the event any legal action for additional compensation, whether on account of delay, acceleration, breach of contract, or otherwise, the Contractor agrees that the County's liability will be limited to those items which are specifically identified as payable in 5-12.
- **5-12.12 Settlement Discussions:** The content of any discussions or meetings held between the County and the Contractor to settle or resolve any claims submitted by the Contractor against

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the County shall be inadmissible in any legal, equitable, or administrative proceedings brought by the Contractor against the County for payment of such claim.

5-12.13 Personal Liability of Public Officials: In carrying out any of the provisions of the Contract, Director or any of their respective employees or agents, there shall be no liability on behalf of any employee, officer or official of the County for which such individual is responsible, either personally or as officials or representatives of the County. It is understood that in all such matters such individuals act solely as agents and representatives of the County.

5-12.14 Auditing of Claims: All claims filed against the County shall be subject to audit at any time following the filing of the claim, whether or not such claim is part of a suit pending in the Courts of this State. The audit may be performed, at the County's sole discretion, by employees of the County or by any independent auditor appointed by the County, or both. The audit may begin after ten days written notice to the Contractor, subcontractor, or supplier. The Contractor, subcontractor, or supplier shall make a good faith effort to cooperate with the auditors. As a condition precedent to recovery on any claim, the Contractor, subcontractor, or supplier must retain sufficient records, and provide full and reasonable access to such records, to allow the County's auditors to verify the claim and failure to retain sufficient records of the claim or failure to provide full and reasonable access to such records shall constitute a waiver of that portion of such claim that cannot be verified and shall bar recovery thereunder. Further, and in addition to such audit access, upon the Contractor submitting a written claim, the County shall have the right to request and receive, and the Contractor shall have the affirmative obligation to submit to the County any and all documents in the possession of the Contractor or its subcontractors, materialmen or suppliers as may be deemed relevant by the County in its review of the basis, validity or value of the Contractor's claim.

Without limiting the generality of the foregoing, the Contractor shall upon written request of the County make available to the County's auditors, or upon the County's written request, submit at the County's expense, any or all of the following documents:

- 1. Daily time sheets and foreman's daily reports and diaries;
- 2. Insurance, welfare and benefits records;
- 3. Payroll register;
- 4. Earnings records:
- 5. Payroll tax return;
- 6. Material invoices, purchase orders, and all material and supply

acquisition contracts;

- 7. Material cost distribution worksheet;
- 8. Equipment records (list of company owned, rented or other equipment

used);

- 9. Vendor rental agreements and subcontractor invoices;
- 10. Subcontractor payment certificates;
- 11. Canceled checks for the project, including, payroll and vendors;
- 12. Job cost report;
- 13. Job payroll ledger;
- 14. General ledger, general journal, (if used) and all subsidiary ledgers and journals together with all supporting documentation pertinent to entries made in these ledgers and journals;
 - 15. Cash disbursements journal;

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- 16. Financial statements for all years reflecting the operations on this project;
 - 17. Income tax returns for all years reflecting the operations on this project;
- 18. All documents which reflect the Contractor's actual profit and overhead during the years this Contract was being performed and for each of the five years prior to the commencement of this Contract;
- 19. All documents related to the preparation of the Contractor's bid including the final calculations on which the bid was based;
- 20. All documents which relate to each and every claim together with all documents which support the amount of damages as to each claim;
- 21. Worksheets used to prepare the claim establishing the cost components for items of the claim including, but not limited to, labor, benefits and insurance, materials, equipment, subcontractors, and all documents that establish which time periods and individuals were involved, and the hours and rates for such individuals.

5-13 Recovery Rights, Subsequent to Final Payment.

The County reserves the right, if it discovers an error in the partial or final estimates, or if it discovers that the Contractor performed defective work or used defective materials, after the final payment has been made, to claim and recover from the Contractor or his surety, or both, by process of law, such sums as may be sufficient to correct the error or make good the defects in the work and materials.

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SECTION 6 CONTROL OF MATERIALS

6-1 Acceptance Criteria.

- **6-1.1 General:** Acceptance of materials is based on the following criteria. All requirements may not apply to all materials. Use only materials in the work that meet the requirements of these Specifications. The Director may inspect and test any material, at points of production, distribution and use.
- **6-1.2 Sampling and Testing:** Use the FDOT's current sample identification and tracking system to provide related information and attach the information to each sample. Restore immediately any site from which material has been removed for sampling purposes to the presampled condition with materials and construction methods used in the initial construction, at no additional cost to the County.

Ensure when a material is delivered to the location as described in the Contract Documents, there is enough material delivered to take samples, at no expense to the County.

- **6-1.2.1 Pretest by Manufacturers:** Submit certified manufacturer's test results to the Director for qualification and use on County projects. Testing will be as specified in the Contract Documents. The County may require that manufacturers submit samples of materials for independent verification purposes.
- **6-1.2.2 Point of Production Test:** Test the material during production as specified in the Contract Documents.
- **6-1.2.3 Point of Distribution Test:** Test the material at Distribution facilities as specified in the Contract Documents.
- **6-1.2.4 Point of Use Test:** Test the material immediately following placement as specified in the Specifications. After delivery to the project, the County may require the retesting of materials that have been tested and accepted at the source of supply, or may require the testing of materials that are to be accepted by manufacturer certification. The County may reject all materials that, when retested, do not meet the requirements of these Specifications.

6-1.3 Certification:

6-1.3.1 Manufacturer Material Certification: Submit material certifications for all materials to the Director for approval when required by the Specifications. Materials will not be considered for payment when not accompanied by a material certification. Sample material certification forms are available on FDOT's website at the following URL: https://www.fdot.gov/materials/administration/resources/library/publications/certifications/sampleforms.shtm. Ensure that the material certification follows the format of the sample form, is submitted on the manufacturer's letterhead and is signed by a legally responsible person employed by the manufacturer.

6-1.3.1.1 FDOT Approved Product List: This list provides assurance to Contractors, consultants, designers, and Department personnel that specific products and materials are approved for use on Department facilities. The Department will limit the Contractor's use of products and materials that require use of APL items to those listed on the APL effective at the time of placement. Where the terms Qualified Products List (QPL) appear in the Contract Documents, they will be synonymous with Approved Product List (APL).

Manufacturers seeking to have a product evaluated for the APL must submit an application, available on the Department's website at the following URL:

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https://www.fdot.gov/programmanagement/ProductEvaluation/Default.shtm. Applications must include the following documentation:

1. Supporting documentation as required by the

Specifications, Standard Plans, and APL approval process. A sample may be requested to verify the product, in accordance with the specifications.

2. A photograph displaying the product as shipped with

packaging.

3. A list displaying all components within the shipped

packaging, if applicable.

4. Installation instructions and materials, if applicable.

5. Product packaging or product labels as required by the

Specifications.

6. Construction material percentages and country source of

materials.

7. Last two manufacturing steps and country of

manufacture.

8. Manufacturer name and material designation (product name, product model/part number/style number, etc.) must be as identified on the product, product packaging, and product labels.

9.Applications must be signed by a legally responsible person employed by the manufacturer of the product.

Required test reports must be conducted by an independent laboratory or other independent testing facility. Required drawings and calculations must be signed and sealed by a Professional Engineer licensed in the State of Florida.

Products that have successfully completed the Department's evaluation process are eligible for inclusion on the APL. Manufacturers are required to submit requests to the Department for approval of any modifications or alterations made to a product listed on the APL. This includes, but is not limited to, design, raw material, or manufacturing process modifications. Modification or alteration requests must be submitted along with supporting documentation that the product continues to meet Section 6, the Specification, or Standard Plans requirements. A product sample and additional product testing and documentation may be required for the modification evaluation. Any marked variations from original test values, failure to notify the Department of any modifications or alterations, or any evidence of inadequate performance of a product may result in removal of the product from the APL.

Manufacturers must submit supporting documentation to the Department for a periodic review and re-approval of their APL products on or before the product's original approval anniversary. APL products that are not re-approved may be removed from the APL. Documentation requirements for the product review and re-approval, including schedule and criteria, are available on the Department's website at the following URL:

https://www.fdot.gov/programmanagement/ProductEvaluation/Default.shtm.

6-1.3.2 Contractor Installation Certification: Submit installation certifications as required by the Contract Documents.

6-2 Applicable Documented Authorities Other Than Specifications.

6-2.1 General: Details on individual materials are identified in various material specific Sections of the Specifications that may refer to other documented authorities for requirements. When specified, meet the requirements as defined in such references.

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- **6-2.2 Test Methods:** Methods of sampling and testing materials are in accordance with the Florida Methods (FM). If an FM does not exist for a particular test, perform the testing in accordance with the method specified in the Specification. When test methods or other standards are referenced in the Specifications without identification of the specific time of issuance, use the most current issuance, including interims or addendums thereto, at the time of bid opening.
- **6-2.3 Construction Aggregates:** Aggregates used on County projects must be in accordance with Rule-14-103,-FAC.

6-3 Storage of Materials and Samples.

- **6-3.1 Method of Storage:** Store materials in such a manner as to preserve their quality and fitness for the work, to facilitate prompt inspection, and to minimize noise impacts on sensitive receivers. More detailed specifications concerning the storage of specific materials are prescribed under the applicable Specifications. The County may reject improperly stored materials.
- **6-3.2** Use of Right-of-Way for Storage: If the Director allows, the Contractor may use a portion of the right-of-way for storage purposes and for placing the Contractor's plant and equipment. Use only the portion of the right-of-way that is outside the clear zone, which is the portion not required for public vehicular or pedestrian travel. When used, restore the right-of-way to pre-construction condition at no additional cost to the County or as specified in the Contract Documents. Provide any additional space required at no expense to the County.
- **6-3.3 Responsibility for Stored Materials:** Accept responsibility for the protection of stored materials. The County is not liable for any loss of materials, by theft or otherwise, or for any damage to the stored materials.
- **6-3.4 Storage Facilities for Samples:** Provide facilities for storage of samples as described in the Contract Documents and warranted by the test methods and Specifications.

6-4 Defective Materials.

Materials not meeting the requirements of these Specifications will be considered defective. The Director will reject all such materials, whether in place or not. Remove all rejected material immediately from the site of the work and from storage areas, at no expense to the County.

Do not use material that has been rejected, until the Director has approved the material's use. Upon failure to comply promptly with any order of the Director made under the provisions of this Article, the Director has the authority to have the defective material removed and replaced by other forces and deduct the cost of removal and replacement from any moneys due or to become due the Contractor.

- **6-4.1 Engineering Analysis:** As an exception to the above, within 30 calendar days of the termination of the LOT or rejection of the material, the Contractor may submit to the Director a proposed Engineering Analysis Scope to determine the disposition of the material. The Engineering Analysis Scope must contain at a minimum:
 - 1. Description of the defective materials.
- 2. Supporting information, testing or inspection reports with nonconformities, pictures, drawings, and accurately dimensioned deficiency maps as necessary. For cracked elements, provide drawings showing the location, average width, depth, length, and termination points of each crack along the surfaces. Provide the distance from each termination point to a fixed reference point on the component, such as beam end or edge of flange.
 - 3. Proposed approach of investigation and analysis.
- 4. Name and credentials of the proposed Specialty Engineer or Contractor's Engineer of Record who will perform the engineering analysis.

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5. Proposed testing laboratories, qualified in accordance with

Section 105-7.

repair.

Upon approval of the Engineering Analysis Scope by the Director, the Specialty Engineer or Contractor's Engineer of Record may perform the engineering analysis as defined in the approved scope and submit a signed and sealed Engineering Analysis Report (EAR) to the Director. The EAR must contain at a minimum:

- 1. The approved Engineering Analysis Scope.
- 2. Any investigations performed and the associated results obtained.
- 3. Analysis and conclusion.
- 4. Proposed disposition of the material, addressing the performance and durability of the proposed action.

Provide as appropriate:

- 1. Written evidence of a previously approved comparable deficiency and its
- 2. Documented research demonstrating the effectiveness of the proposed
- repair.

 3. Engineering calculations.

A Specialty Engineer, who is an independent consultant, or the Contractor's Engineer of Record as stated within each individual Section shall perform any such analysis within 45 calendar days of the Director's approval of the Engineering Analysis Scope, complete and submit the EAR. The EAR must be signed and sealed by the Specialty Engineer or the Contractor's Engineer of Record that performed the engineering analysis. Allow for a 45 calendar day review period for all EARs associated with a category 2 bridge; tolling components identified in the current FDOT General Tolling Requirements (GTR) Part 3; and the tolling-related signing, DMS and ITS infrastructure. Allow for a 25 calendar day review period for all other items. The Director will determine the final disposition of the material after review of the EAR. No additional monetary compensation or time extension will be granted for the impact of any such analysis or review.

6-5 Products and Source of Supply.

6-5.1 Source of Supply–Convict Labor (Designated Federal-Aid Contracts Only): Do not use materials that were produced after July 1, 1991, by convict labor for Federal-aid highway construction projects unless the prison facility has been producing convict-made materials for Federal-aid highway construction projects before July 1, 1987.

Use materials that were produced prior to July 2, 1991, by convicts on Federal-aid highway construction projects free from the restrictions placed on the use of these materials by 23 U.S.C. 114. The County will limit the use of materials produced by convict labor for use in Federal-aid highway construction projects to:

- 1. Materials produced by convicts on parole, supervised release, or probation from a prison or,
 - 2. Materials produced in a qualified prison facility.

The amount of such materials produced for Federal-aid highway construction during any 12-month period shall not exceed the amount produced in such facility for use in such construction during the 12-month period ending July 1, 1987.

6-5.2 Source of Supply (Designated State or Federal-Aid Contracts Only): Comply with 2 CFR 184 and 2 CFR 200.322, which includes the Buy America Sourcing Preferences of the

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Build America, Buy America Act (BABA). Domestic compliance for all affected products will be listed on the APL.

- 6-5.2.1 Steel and Iron: Use steel and iron manufactured in the United States, in accordance with the Buy America provisions of 23 CFR 635.410, as amended. Ensure that all manufacturing processes for this material occur in the United States. As used in this specification, a manufacturing process is any process that modifies the chemical content, physical shape or size, or final finish of a product, beginning with the initial melting and continuing through the final shaping and coating. If a steel or iron product is taken outside the United States for any manufacturing process, it becomes foreign source material. When using steel or iron materials as a component of any manufactured product (e.g., concrete pipe, prestressed beams, corrugated steel pipe, etc.), these same provisions apply. Foreign steel and iron may be used when the total actual cost of such foreign materials does not exceed 0.1% of the total Contract amount or \$2,500, whichever is greater. These requirements are applicable to all steel and iron materials incorporated into the finished work but are not applicable to steel and iron items that the Contractor uses but does not incorporate into the finished work. Submit a certification from the manufacturer of steel or iron, or any product containing steel or iron, stating that all steel or iron furnished or incorporated into the furnished product was produced and manufactured in the United States or a statement that the product was produced within the United States except for minimal quantities of foreign steel and iron valued at \$ (actual cost). Submit each such certification to the Director prior to incorporating the material or product into the project. Prior to the use of foreign steel or iron materials on a project, submit invoices to document the actual cost of such material, and obtain the Director's written approval prior to incorporating the material into the project.
- **6-5.2.2 Manufactured Products:** Use Manufactured Products that are consumed in, incorporated into, or affixed to an infrastructure project that are manufactured in the United States, in accordance with BABA requirements and applicable waivers.
- **6-5.2.3 Construction Materials:** Use non-ferrous metals, plastic and polymerbased products, glass, lumber, and drywall articles, materials, and supplies that are consumed in, incorporated into, or affixed to an infrastructure project that are manufactured in the United States, in accordance with BABA requirements.
- **6-5.2.4 Exemptions to Build America, Buy America:** Temporary devices, equipment, and other items removed at or before the completion of the project are exempt from BABA funding eligibility requirements. Aggregates, cementitious materials, and aggregate binding agents or additives are exempted from BABA funding eligibility requirements.
- **6-5.3 Contaminated, Unfit, Hazardous, and Dangerous Materials:** Do not use any material that, after approval and/or placement, has in any way become unfit for use. Do not use materials containing any substance that has been determined to be hazardous by the State of Florida County of Environmental Protection or the U.S. Environmental Protection Agency (EPA). Provide workplaces free from serious recognized hazards and to comply with occupational safety and health standards, as determined by the U.S. County of Labor Occupational Safety and Health Administration (OSHA).

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SECTION 7 LEGAL REQUIREMENTS AND RESPONSIBILITY TO THE PUBLIC

7-1 Laws to be Observed.

7-1.1 General: Become familiar with and comply with all Laws and Regulations, including all Federal, State, and Local Rules and Regulations that control the action or operation of those engaged or employed in the work or that affect material used. Pay particular attention called to the safety regulations promulgated by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA). In addition, comply with Chapter 403, of the Florida Statutes, regarding control of air pollution. Direct special attention to that portion of Chapter 62-256, Rules of the Department of Environmental Protection, Florida Administrative Code, pertaining to open burning in land clearing operations. Where work or structures included in the Contract are in "Navigable Waters of the U.S.," (reference 33 of the Code of Federal Regulations, Part 329); "Waters of the U.S.," (reference Part 4, Chapters 253 and 373 of the Florida Statutes and Section 62-340 of the Florida Administrative Code); comply with the regulatory provisions of Section 404 of the Federal Clean Water Act of 1977; Sections 9 and 10 of the Federal River and Harbor Act of 1899; Chapter 161 of the Florida Statutes; and any local authority having jurisdiction over such waters.

Obtain certification from the Construction Industry Licensing Board as required by Part I, Chapter 489, of the Florida Statutes, regardless of exemptions allowed by subsection 489.103, prior to removing underground pollutant storage tanks. Dispose of tanks and pollutants in accordance with the requirements and regulations of any Federal, State, or local, agency having jurisdiction.

Prior to building construction or renovation, submit current registrations or certifications issued by the Florida Construction Industry Licensing Board in accordance with Chapter 489, for the appropriate category of construction.

Corporations must be registered with the State of Florida, Department of State, Division of Corporations, and hold a current State Corporate Charter Number in accordance with Chapter 607, Florida Statutes.

The Contractor or the authorized subcontractor applying the roofing material must be licensed or be an approved dealer and applicator of the proposed roofing material.

Indemnify, defend, and save harmless the County and all of its officers, agents, and employees, in the amount of the Contract price, against all claims or liability arising from or based on the violation of any such Federal, State, and Local Rules and Regulations, whether by himself or his employees.

The Contractor shall comply with all environmental permits, including measures identified in the National Pollutant Discharge Elimination System (NPDES) Stormwater Pollution Prevention Plan and Sediment and Erosion Control Plan for the work. The Contractor's attention is also directed to the applicable regulations of the South Florida Water Management District.

The Lee County Noise Control Ordinance is in effect regulating noise generated from construction activity associated with the project. The Contractor shall comply with the requirements therein.

The Contractor shall exert every reasonable and diligent effort to ensure that all labor employed by the Contractor and his subcontractors for work on the project work

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harmoniously and compatibly with all labor used by other building and construction contractors now or hereafter on the site of the work covered by this Contract. Include this provision in all subcontracts, and require all subcontractors to include it in their subcontracts with others. However, do not interpret or enforce this provision so as to deny or abridge, on account of membership or non-membership in any labor union or labor organization, the right of any person to work as guaranteed by Article I, Section 6 of the Florida Constitution.

Comply with Chapter 556 of the Florida Statutes during the performance of excavation or demolition operations.

The Executive Order 11246 Electronic version, dated September 24, 1965 is posted on FDOT's website at the following URL address:

https://fdotwww.blob.core.windows.net/sitefinity/docs/default-

<u>source/programmanagement/implemented/urlinspecs/files/deo11246.pdf.</u> Take responsibility to obtain the information posted on this website up through five calendar days before the opening of bids and comply with the provisions contained in Executive Order 11246.

If the FDOT's website cannot be accessed, contact the FDOT's Specifications Office Web Coordinator at (850) 414-4101.

7-1.2 Plant Quarantine Regulations: The U.S. Department of Agriculture and the Florida Department of Agriculture and Consumer Services have issued quarantine regulations pertaining to control of the nematodes of citrus, Rule 5B-44, Florida Administrative Code, and other plant pests. Contact the local (or other available) representatives of the Animal and Plant Health Inspection Service of the U.S. Department of Agriculture, and the Division of Plant Industry of the Florida Department of Agriculture and Consumer Services to ascertain all current restrictions regarding plant pests that are imposed by these agencies. Keep advised of current quarantine boundary lines throughout the construction period.

These restrictions may affect operations in connection with such items as clearing and grubbing, earthwork, grassing and mulching, sodding, landscaping, and other items which might involve the movement of materials containing plant pests across quarantine lines.

Obtain quarantine regulations and related information from the following:

Animal and Plant Health Inspection Service U.S. Department of Agriculture 3029 Lake Alfred Road Winter Haven, Florida 33881

Director, Division of Plant Industry Florida Department of Agriculture and Consumer Services Post Office Box 147100 Gainesville, Florida 32614-7100

7-1.3 Introduction or Release of Prohibited Aquatic Plants, Plant Pests, or Noxious

Weeds: Do not introduce or release prohibited aquatic plants, plant pests, or noxious weeds into the project limits as a result of clearing and grubbing, earthwork, grassing and mulching, sodding, landscaping, or other such activities. Immediately notify the Director upon discovery of all prohibited aquatic plants, plant pests, or noxious weeds within the project limits. Do not move prohibited aquatic plants, plant pests, or noxious weeds within the project limits or to locations outside of the project limits without the Director's permission. Maintain all borrow material brought onto the project site free of prohibited aquatic plants, plant pests, noxious weeds, and their

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reproductive parts. Refer to Rule 16C-52 and Rule 5B-57, of the Florida Administrative Code for the definition of prohibited aquatic plants, plant pests, and noxious weeds.

7-1.4 Compliance with Federal Endangered Species Act and other Wildlife Regulations: The Federal Endangered Species Act requires that the County investigate the potential impact to a threatened or endangered species prior to initiating an activity performed in conjunction with a road construction project. If the County's investigation determines that there is a potential impact to a protected, threatened or an endangered species, the County will conduct an evaluation to determine what measures may be necessary to mitigate such impact. When mitigation measures and/or special conditions are necessary, these measures and conditions will be addressed in the Contract Documents or in permits as identified in 7-2.1.

In addition, in cases where certain protected, threatened or endangered species are found or appear within close proximity to the project boundaries, the County has established guidelines that will apply when interaction with certain species occurs, absent of any special mitigation measures or permit conditions otherwise identified for the project.

These guidelines are posted at the following URL address:

https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/implemented/urlinspecs/files/endangeredwildlifeguidelines.pdf?sfvrsn=e27baf3f_4.

Take responsibility to obtain this information and take all actions and precautions necessary to comply with the conditions of these guidelines during all project activities.

Prior to establishing any off-project activity in conjunction with a project, notify the Director of the proposed activity. Covered activities include but are not necessarily limited to borrow pits, concrete or asphalt plant sites, disposal sites, field offices, and material or equipment storage sites. Include in the notification the Project Number, Financial Project ID, a description of the activity, the location of the site by township, range, section, county, and city, a site location map including the access route, the name of the property owner, and a person to contact to arrange a site inspection. Submit this notification at least 30 days in advance of planned commencement of the off-site activity, to allow for the County to conduct an investigation without delaying job progress.

Do not perform any off-project activity without obtaining written clearance from the Director. In the event the County's investigation determines a potential impact to a protected, threatened or endangered species and mitigation measures or permits are necessary, coordinate with the appropriate resource agencies for clearance, obtain permits and perform mitigation measures as necessary. Immediately notify the Director in writing of the results of this coordination with the appropriate resource agencies. Additional compensation or time will not be allowed for permitting or mitigation, associated with Contractor initiated off-project activities. The Contractor shall maintain at the jobsite written proof of authorization for the use of any off-project property in conjunction with the project. All off-project properties shall be maintained in a neat and orderly fashion and then restored to the property owner's satisfaction upon terminating the use associated with the project.

7-1.5 Occupational Safety and Health Requirements: The Contractor shall take all precautions necessary for the protection of life, health, and general occupational welfare of all persons, including employees of both the Contractor and the County, until the Contractor has completed the work required under the Contract as provided in 5-10 and 5-11.

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Comply at all times with applicable Federal, State, and local laws, provisions, and policies governing safety and health, including 29 CFR 1926, including all subsequent revisions and updates.

7-1.6 Discovery of an Unmarked Human Burial: When an unmarked human burial is discovered, immediately cease all activity that may disturb the unmarked human burial and notify the Director. Do not resume activity until specifically authorized by the Director.

7-1.7 Insecticides, Herbicides and Fertilizers:

7-1.7.1 Insecticides and Herbicides: Use products found on the following website, https://www.npirs.org/state/, approved by the Florida Department of Agriculture and Consumer Services. The use of restricted products is prohibited. Do not use any products in the sulfonylurea family of chemicals. Herbicide application by broadcast spraying is not allowed.

Procure any necessary licenses, pay all charges and fees, and give all notices necessary for lawful performance of the work.

Ensure that all insecticides and herbicides are applied in accordance with Chapter 5E-9, Florida Administrative Code. Submit a copy of current certificates to the Director upon request.

Ensure that employees who work with herbicides comply with all applicable Federal, State, and local regulations.

Comply with all regulations and permits issued by any regulatory agency within whose jurisdiction work is being performed. Post all permit placards in a protected, conspicuous location at the work site.

Acquire any permits required for work performed on the rights-of-way within the jurisdiction of National Forests in Florida. Contact the Local National Forest Ranger District, or the United States Department of Agriculture (USDA) office for the proper permits and subsequent approval.

Acquire all permits required for aquatic plant control as outlined in Chapter 62C-20, Florida Administrative Code, Rules of the Florida Department of Environmental Protection. Contact the Regional Field Office of Bureau of Invasive Plant Management of the Florida Department of Environmental Protection for proper permits and subsequent approval. If application of synthetic organo-auxin herbicides is necessary, meet the requirements of Chapter 5E-2, Florida Administrative Code.

7-1.7.2 Fertilizer: Ensure that all employees applying fertilizer, possess a current Florida Department of Agriculture and Consumer Services Commercial Applicator license in accordance with Section 482.1562, F.S. Upon request, submit the current certificates to the Director.

7-1.8 Compliance with Section 4(f) of the USDOT Act (Designated State or Federal-Aid Contracts Only): Section 4(f) of the USDOT Act prohibits the U. S. Secretary of Transportation from approving a project which requires the use of publicly owned land of a public park, recreation area or a wildlife and waterfowl refuge, or of any historic site of national, state, or local significance unless there is no prudent or feasible alternative to using that land and the program or project includes all possible planning to minimize the harm to the site resulting from the use.

Before undertaking any off-project activity associated with any federally assisted undertaking, ensure that the proposed site does not represent a public park, recreation area, wildlife or waterfowl refuge, or a historic site (according to the results of the Cultural Resources Survey discussed in 120-6.2). If such a site is proposed, notify the Director and provide a description of

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the proposed off-site activity, Project Number, Financial Project ID, the location of the site by township, range, section, a county or city map showing the site location, including the access route and the name of the property. It is the Contractor's responsibility to submit justification for use of Section 4(f) property that is sufficient for the County, the Florida Department of Transportation and the Federal Highway Administration to make a Section 4(f) determination. Submit this notification sufficiently in advance of planned commencement of the off-site activity to allow a reasonable time for the Director to conduct an investigation without delaying job progress. Do not begin any off-project activity without obtaining written clearance from the Director.

7-1.9 Reserved.

7-2 Permits and Licenses.

7-2.1 General: Pursuant to Section 218.80, Florida Statutes, the County will pay for all County permits and fees, including license fees, permit fees, impact fees or inspection fees applicable to the Work. Contractor is not responsible for paying for permits issued by the County wherein the Work is to be performed, but is responsible for acquiring all other permits. The County may require the Contractor to deliver internal budget transfer documents to applicable County agencies when the Contractor is acquiring permits. Except for permits procured by the County, as incorporated by Special Provision expanding this Subarticle, if any, the Contractor will procure all permits and licenses, pay all charges and fees, and give all notices necessary and incidental to the due and lawful prosecution of the work.

The County will also acquire any modifications or revisions to an original permit incorporated by Special Provision to this Subarticle when the Contractor requires such modifications or revisions to complete the construction operations specified in the Plans or Special Provisions and within the right-of-way limits.

Acquire all permits for work performed outside the right-of-way or easements for the project.

In carrying out the work in the Contract, when under the jurisdiction of any environmental regulatory agency, comply with all regulations issued by such agencies and with all general, special, and particular conditions relating to construction activities of all permits issued to the County as though such conditions were issued to the Contractor. Post all permit placards in a protected location at the worksite.

The Contractor shall be fully responsible for the execution and adherence to all directives, instructions, conditions, special conditions, and limiting conditions contained in permits specifically issued for the Work and which pertain to or affect the construction phase of this project, and shall be solely responsible for issuance of any Notices required thereby.

In case of a discrepancy between any permit condition and other Contract Documents, the more stringent condition shall prevail.

7-2.2 Work or Structures in Navigable Waters of the U.S., Waters of the U.S., and Waters of the State: In general, one or more governmental agencies will exercise regulatory authority over work or structures, including related construction operations, in all tidal areas (channelward of the mean high water lines on the Atlantic and Gulf Coast); in the ocean and gulf waters to the outer limits of the continental shelf; in all rivers, streams, and lakes to the ordinary high water line; in marshes and shallows that are periodically inundated and normally characterized by aquatic vegetation capable of growth and reproduction; in all artificially created channels and canals used for recreational, navigational, or other purposes that are connected to navigable waters; and in all tributaries of navigable waters up to their headwaters.

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Whenever the work under or incidental to the Contract requires structures or dredge/fill/construction activities in "Navigable Waters of the U.S.," "Waters of the U.S.," and "Waters of the State," the Federal, State, county, and local regulatory agencies may require the County to obtain a permit. For such dredge/fill /construction specified in the Plans to be accomplished within the limits of the project, or for any dredge/fill/construction within the limits of County-furnished borrow areas, the County will procure the necessary permits prior to advertising for bids.

7-2.3 Reserved.

7-3 Patented Devices, Materials and Processes.

Include all royalties and costs arising from patents, trademarks, and copyrights, in any way involved in the work in the Contract price. Whenever using any design, device, material, or process covered by letters patent or copyright, obtain the right for such use by suitable legal agreement with the patentee or owner of the copyright. File a copy of such agreement with the Director. However, whether or not such agreement is made or filed as noted, the Contractor and the surety in all cases shall indemnify, defend, and save harmless, the County from all claims for infringement by reason of the use of any such patented design, device, material, or process on work under the Contract, and shall indemnify the County for all costs, expenses, and damages that it may be obliged to pay by reason of any such infringement, at any time during the prosecution or after the completion of the work.

7-4 Right-of-Way Furnished by the County.

Except as otherwise stipulated in these Specifications or as shown in the Plans, the County will furnish all rights-of-way necessary for the proper completion of the work at no expense to the Contractor.

Should County-furnished areas for obtaining borrow material, contain limerock material do not remove such material from the pit unless the Director gives specific approval.

Use of County owned right-of-way for the purpose of equipment or material storage, lay-down facilities, pre-cast material fabrication sites, batch plants for the production of asphalt, concrete or other construction related materials, or other similar activities, shall require advance written approval by the County prior to making use of said County owned right of way. Use of County owned right of way for these purposes is expressly limited to the storage of equipment and materials for the Project or production of materials or products for the Project. As a precedence to Final Acceptance of the project, any County owned right-of-way used by the Contractor shall be restored to the condition existing prior to construction, or as otherwise approved by the Director.

The County reserves the right to allow parties other than the Contractor, upon presentation of a duly authorized and satisfactory Lee County Department of Transportation Right-of-Way Permit, to perform work within the limits of construction. In all such instances, the Contractor will afford parties bearing such permits reasonable accommodation for the proper execution of the work described under the permit, including the right to store materials and equipment. All parties authorized to perform work within the right-of-way shall make, in an acceptable manner, all necessary repairs due to such work ordered by the Director and shall be subject to the conditions specified in Section 11-12 of the Lee County Administrative Code, as amended.

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7-5 Reserved.

7-6 Sanitary Provisions.

The Contractor shall provide and maintain, in a neat and sanitary condition, such accommodations for the use of his employees as are necessary to comply with the requirements and regulations of the State and local boards of health. Commit no public nuisance.

7-7 Control of the Contractor's Equipment.

- **7-7.1 Traffic Interference:** Do not allow equipment, while it is on or traversing a road or street, to unreasonably interfere with traffic.
- **7-7.2 Overloaded Equipment:** Do not operate on any road, street or bridge including a County owned temporary bridge, any hauling unit or equipment loaded in excess of:
- 1. the maximum weights specified in the Florida Highway Patrol, Commercial Motor Vehicle Manual (Trucking Manual), or
- 2. lower weight limits legally established and posted for any section of road or bridge by FDOT, the County or other local authorities.

The governmental unit having jurisdiction over a particular road or bridge may provide exceptions by special permit under the provisions of 7-7.3.

This restriction applies to all roads and bridges inside and outside the Contract limits as long as these roads and bridges are open for public use. The Contractor may overload roads and bridges which are to be demolished after they are permanently closed to the public. The Contractor is responsible for all loss or damages resulting from equipment operated on a structure permanently closed to the public.

- 7-7.3 Crossings: Where it is necessary to cross an existing road or street, including specifically the existing traveled lanes of a divided highway within the limits of the project, obtain permits from the County, for crossing overloaded or oversized equipment. Cross existing roads or streets only at Director-designated points. The Director may require the Contractor to protect the pavement or Roadway at the crossing by using lumber, planks, or fill. Provide flagging and watchman service, or approved signal devices, for the protection of traffic at all such crossings, in accordance with an approved written plan for that activity. Movement of equipment around the project site must be in accordance with requirements of the Standard Plans and not create an undue hazard to the traveling public or workers.
- **7-7.4 Protection from Damage by Tractor-Type Equipment:** Take positive measures to ensure that tractor-type equipment does not damage the road. If any such damage should occur, repair it without delay, at no expense to the County and subject to the Director's approval.
- **7-7.5 Contractor's Equipment on Bridge Structures:** The Contractor's Engineer of Record shall analyze the effect of imposed loads on bridge structures, including County owned temporary bridges, within the limits of a construction contract, resulting from the following operations:
 - 1. Overloaded Equipment as defined in 7-7.2:
 - a. Operating on or crossing over completed bridge structures.
 - b. Operating on or crossing over partially completed bridge structures.
 - 2. Equipment within legal load limits:
 - a. Operating on or crossing over partially completed bridge structures.
 - 3. Construction cranes:
 - a. Operating on completed bridge structures.
 - b. Operating on partially completed bridge structures.

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4. Asphalt Milling Equipment:

a. In excess of 90,000 lbs crossing bridge structures.

b. Less than 90,000 lbs crossing bridge structures listed on the overweight routing map CRN-2 located on the Office of Maintenance Over-Weight Dimension Permits website at https://www.fdot.gov/maintenance/owod-permit-documents#BlanketAttachments.

Any pipe culvert(s) or box culvert(s) qualifying as a bridge under 1-3 is excluded from the requirements above.

A completed bridge structure is a bridge structure in which all elemental components comprising the load carrying assembly have been completed, assembled, and connected in their final position. The components to be considered shall also include any related members transferring load to any bridge structure.

The Contractor's Engineer of Record shall determine the effect that equipment loads have on the bridge structure and develop the procedures for using the loaded equipment without exceeding the structure's design load capacity.

Submit to the County for approval the design calculations, layout drawings, and erection drawings showing how the equipment is to be used so that the bridge structure will not be overstressed. The Contractor's Engineer of Record shall sign and seal the drawings and the cover sheet of the calculations for the County's Record Set.

7-7.6 Posting of the Legal Gross Vehicular Weight: Display the maximum legal gross weight, as specified in the Florida Uniform Traffic Code, in a permanent manner on each side of any dump truck or dump type tractor-trailer unit hauling embankment material, construction aggregates, road base material, or hot bituminous mixture to the project over any public road or street. Display the weight in a location clearly visible to the scale operator, in numbers that contrast in color with the background and that are readily visible and readable from a distance of 50 feet.

7-8 Structures over Navigable Waters.

7-8.1 Compliance with Federal and Other Regulations: When working on structures in, adjacent to, or over, navigable waters, observe all regulations and instructions of Federal and other authorities having control over such waters. Do not obstruct navigation channels without permission from the proper authority, and provide and maintain navigation lights and signals in accordance with the Federal requirements for the protection of the structure, of false work, and of navigation.

When working on moveable bridges, requests for temporarily changing the operating requirements for the moveable bridge must be submitted in writing to the appropriate Coast Guard District Bridge Branch, 90 days before the start of any action.

For all other bridges, notify the appropriate Coast Guard District Bridge Branch, at least 60 days prior to the start of any operations including construction and 30 days prior to any channel operations, closures, or opening restrictions.

When work platforms are indicated in the permit for construction, submit work platform construction plans to the appropriate Coast Guard District for approval. Obtain approval prior to beginning construction on the platform.

7-8.2 Maintenance of Channel: Where the work includes the excavation of a channel or other underwater areas to a required section, maintain the section from shoaling or other encroachment until final acceptance of the project.

In the event of accidental blocking of the navigation channel, immediately notify the U.S. Coast Guard of the blockage and upon removal of the blockage.

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7-9 Use of Explosives.

When using explosives for the prosecution of the work, exercise the utmost care not to endanger life or property, including new work. The Contractor is responsible for all damage resulting from the use of explosives. Any use of explosives shall be subject to the prior written authorization of the Director.

Store all explosives in a secure manner in compliance with all laws and ordinances, and clearly mark all such storage places with the words: "DANGEROUS - EXPLOSIVES". Place such storage in the care of a competent watchman. Where no local laws or ordinances apply, provide storage satisfactory to the Director and, in general, not closer than 1,000 feet from the road or from any building, camping area, or place of human occupancy.

Notify each public utility company having structures in proximity to the site of the work of the intention to use explosives. Give such notice sufficiently in advance to enable the companies to take precautionary steps to protect their property from injury.

7-10 Forest Protection.

7-10.1 Compliance with State and Federal Regulations: In carrying out work within or adjacent to State or National forests or parks, comply with all of the regulations of the State or Federal authority having jurisdiction, governing the protection of and the carrying out of work in forests or parks, and observe all sanitary laws and regulations with respect to the performance of work in these areas. Keep the areas in an orderly condition, dispose of all refuse, and obtain permits for the construction, installation, and maintenance of any construction camps, living quarters, stores, warehouses, sanitary facilities, and other structures; all in accordance with the requirements of the forest or park official.

7-10.2 Prevention and Suppression of Forest Fires: Take all reasonable precautions to prevent and suppress forest fires. Require employees and subcontractors, both independently and at the request of forest officials, to do all reasonably within their power to prevent and suppress forest fires. Assist in preventing and suppressing forest fires, and make every possible effort to notify a forest official at the earliest possible moment of the location and extent of all fires. Extinguish the fire if practicable.

7-11 Preservation of Existing Property.

7-11.1 General: Preserve from damage all existing property within the project limits of or in any way affected by the Work, the removal or destruction of which is not specified in the Plans. This applies to, but is not limited to, public and private property, public and private utilities (except as modified by the provisions of 7-11.5), trees, shrubs, crops, sod, signs, monuments, fences, guardrail, pipe and underground structures, Intelligent Transportation Systems (ITS) facilities, traffic control signals and devices, highway lighting, and public highways (except natural wear and tear of highway resulting from legitimate use thereof by the Contractor).

County owned underground facility locations shown in the Plans are approximate. Unless otherwise shown in the Plans, County owned underground facilities will not be located by the County nor through notification to "Sunshine 811". Locate all fiber optic cables. Provide a fiber optic cable locator in accordance with Section 633.

Whenever the Contractor's activities damage such existing property, immediately restore it to a condition equal to or better than that existing at the time such damage occurred, at no expense to the County. Temporary repairs may be used to immediately restore ITS facilities and traffic control signals and devices. Permanent repairs to ITS facilities and traffic control signals and devices shall be made within 90 days of any temporary repairs and prior to final

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acceptance of the project. Submit permanent ITS facility repair plans to the Director prior to beginning repair work.

Protect existing bridges during the entire construction period from damage caused by the Work. Immediately repair, at no expense to the County, all damage to existing bridges caused by the Work, prior to continuing the Work. The County will not require the Contractor to provide routine repairs or maintenance for such structures.

Direct special attention to the protection of all geodetic monuments, horizontal or vertical, and Public Land Survey Corners located within the project. If any geodetic monument or Public Land Survey Corner, located within the project, is at risk of being damaged or destroyed, immediately notify the Director. Locate and replace any damaged or destroyed geodetic monuments or Public Land Survey Corners under the direction of a Professional Surveyor and Mapper registered in the State of Florida.

Whenever the actions of a third party damage such existing property and is not otherwise due to any fault or activities of the Contractor, either restore it to a condition equal to or better than that existing at the time such damage occurred or provide access and coordinate with the County's maintenance Contractor in accordance with 8-4.4 as directed by the Director. The County will compensate the Contractor for the costs associated with the repairs for restoring the existing property in accordance with 4-4. Theft and vandalism are considered damage caused by a third party.

7-11.2 Failure to Restore Damaged Existing Property: In case of failure on the part of the Contractor to restore such property, bridge, road or street, or to make good such damage or injury, the Director may, upon 48 hours notice, proceed to repair, rebuild, or otherwise restore such property, road, or street as may be deemed necessary, and the County will deduct the cost thereof from any monies due or which may become due the Contractor under the Contract. Nothing in this clause prevents the Contractor from receiving proper compensation for the removal, damage, or replacement of any public or private property, not shown in the Plans, that is made necessary by alteration of grade or alignment. The Director will authorize such work, provided that the Contractor, or his employees or agents, have not, through their own fault, damaged such property.

7-11.3 Contractor's Use of Streets and Roads:

7-11.3.1 Street and Road System: When hauling materials or equipment to the project over roads and bridges on the State Highway System, State park road system, county road system, or city street system, and such use causes damage, immediately, at no expense to the County, repair such road or bridge to as good a condition as before the hauling began.

The County may modify the above requirement in accordance with any agreement the Contractor might make with the governmental unit having jurisdiction over a particular road or bridge, provided that the Contractor submits written evidence of such agreement to the Director.

7-11.3.2 Reserved.

7-11.3.3 Within the Limits of a Construction Project: The County will not allow the operation of equipment or hauling units of such weight as to cause damage to previously constructed elements of the project, including but not necessarily limited to bridges, drainage structures, base course, and pavement. Do not operate hauling units or equipment loaded in excess of the maximum weights specified in 7-7.2 on existing pavements that are to remain in place (including pavement being resurfaced), cement-treated subgrades and bases, concrete pavement, any course of asphalt pavement, and bridges. The Director may allow exceptions to these weight

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restrictions for movement of necessary equipment to and from its worksite, for hauling of offsite fabricated components to be incorporated into the project, and for crossings as specified in 7-7.3.

7-11.4 Operations within Railroad Right-of-Way: Submit written advanced notification of the flagging services and railroad right-of-way access required, construction timeframe, and duration to the Engineer and District Rail Office at least 45 calendar days prior to beginning any operation within the limits of the railroad right-of-way or the adjoining 15 feet. Operations include the movement of employees, equipment, and trucks in areas other than public crossings or any traffic signal work within 500 feet of a signalized at-grade railroad crossing. The Railroad Company will notify the District Rail Office when flaggers are available for use in project scheduling.

No operations shall be conducted that affect railroad operations and property without written approval from the railroad.

7-11.4.1 Notification to the Railroad Company: Submit written notification to the Engineer, District Rail Office and the authorized Railroad Representative at least 72 hours before beginning any operation within the limits of the railroad right-of-way; any operation requiring movement of employees, trucks, or other equipment across the tracks of the railroad company at locations other than an established public crossing; and any other work that may affect railroad operations or property.

7-11.4.1.1 Florida East Coast Railway (FEC): Contact the FEC Signal Office at 904-279-3182 and FEC Railway at 1-800-342-1131, ext. 2377 in addition to the requirements in Section 7-11.4.1.

7-11.4.2 Contractor's Responsibilities: Unless instructed otherwise in writing by the Railroad Company, do not perform work within or adjacent to the railroad right-of-way without a flagger present (including temporary lane closures, lane shifts or detours). Comply with requirements deemed necessary by the railroad company's authorized representative to safeguard the railroad's property and operations.

The Contractor is responsible for all damages, delays, or injuries and all suits, actions, or claims brought on account of damages or injuries resulting from the Contractor's operations within or adjacent to railroad company right-of-way. The work includes all items necessary to relieve the flagger from providing protective services.

Costs incurred by the Railroad Company for Contractor-caused delays that adversely impact railway operations will be forwarded to the Contractor for payment. If the Contractor fails to pay said cost, the Department will deduct the amount from payments owed to the Contractor.

7-11.4.2.1 CSXT: Comply with the Construction Submission Criteria of the CSXT Public Project Information document and Construction Requirements sections of the CSXT Pipeline and Wireline Design and Construction Specifications prior to beginning work. These documents are available at the following URL:

https://www.fdot.gov/programmanagement/Implemented/URLinSpecs/CSXT.shtm .

Perform no work within the limits of the railroad right-of-way on CSXT holidays (except with permission of CSXT for emergencies such as natural disasters). CSXT holidays are New Year's Day, President's Day, Good Friday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and the following Friday, Christmas Eve, Christmas Day, and New Year's Eve. Holidays falling on Saturday are observed on Friday and those falling on Sunday are observed on Monday.

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7-11.4.2.2 Norfolk Southern (NS): Comply with the NS Special Provisions for Protection of Railway Interests (Appendix E) and the Construction Requirements (Appendix 4.3) of the NS Public Projects Manual document prior to beginning and during all work. These documents are available at the following

URL: http://www.nscorp.com/content/dam/nscorp/ship/shipping-tools/Public_Projects_Manual.pdf.

7-11.4.2.3 FEC: Complete the On-Track Contractor Roadway Worker Training Course for FEC Railway. Contact FEC Railway at 1-800-342-1131 for training information.

7-11.4.2.4 South Florida Rail Corridor (SFRC): Complete the On-Track Contractor Roadway Worker Training Course for South Florida Regional Transportation Authority (SFRTA) Railway. Contact SFRTA at 954-788-7920 for training information.

7-11.4.3 Watchman or Flagging Services: The railroad company will furnish protective services (i.e., watchman or flagging services) to ensure the safety of railroad operations during certain periods of the project. The Contractor will reimburse the railroad company for the cost thereof. Schedule work that affects railroad operations so as to minimize the need for protective services by the railroad company.

Submit construction schedules and schedule changes to the Engineer and District Rail Office which include an estimated start date, weekly construction schedule, daily hours of operation, and the calendar day duration for which flagging services will be necessary to perform work activities within railroad right-of-way in accordance with 8-3.2.

7-11.4.3.1 Central Florida Rail Corridor (CFRC) and SFRC: The Department will furnish protective services (i.e., watchman or flagging services) to ensure the safety of railroad operations.

7-11.5 Utilities:

7-11.5.1 Arrangements for Protection or Adjustment: Do not commence work at points where the construction operations are adjacent to utility facilities until all necessary arrangements have been made for removal, temporary removal, relocation, de-energizing, deactivation or adjustment with the utility facilities owner to protect against damage that might result in expense, loss, disruption of service, or other undue inconvenience to the public or to the owners. The Contractor is solely and directly responsible to the owners and operators of such properties for all damages, injuries, expenses, losses, inconveniences, or delays caused by the Contractor's operations.

Do not request utility removal, temporary removal, relocation, deenergizing, deactivation, or adjustment when work can be accomplished within the utility work schedules. In the event that removal, temporary removal, relocation, de-energizing, deactivation, or adjustment of a utility or a particular sequence of timing in the relocation of a utility is necessary and has not been addressed in a utility work schedule, the Director will determine the necessity for any such utility work. Coordinate such work as to cause the least impediment to the overall construction operations and utility service. The County is not responsible for utility removal, temporary removal, relocation, de-energizing, deactivation, or adjustment work where such work is determined not necessary by the Director or done solely for the benefit or convenience of the utility owner or its contractor, or the Contractor.

7-11.5.2 Cooperation with Utility Owners: Cooperate with the owners of all underground or overhead utility lines in their removal and rearrangement operations in order that these operations may progress in a reasonable manner, that duplication or rearrangement work

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may be reduced to a minimum, and that services rendered by the utility owners will not be unnecessarily interrupted.

In the event of interruption of water or other utility services as a result of accidental breakage, exposure, or lack of support, promptly notify the proper authority and cooperate with the authority in the prompt restoration of service. If water service is interrupted and the Contractor is performing the repair work, the Contractor shall work continuously until the service is restored. Do not begin work around fire hydrants until the local fire authority has approved provisions for continued service.

7-11.5.3 Utility Adjustments: Certain utility adjustments and reconstruction work may be underway during the progress of the Contract. Cooperate with the various utility construction crews who are maintaining utility service. Exercise due caution when working adjacent to relocated utilities. The Contractor shall repair all damage to the relocated utilities resulting from his operations at no expense to the County. The requirements of 7-11.1 and 7-11.5.2 outline the Contractor's responsibility for of protecting utility facilities. The County will include in the Contract the utility authorities who are scheduled to perform utility work on the project.

7-11.5.4 Weekly Meetings: Conduct weekly meetings on the job site with all the affected utility companies and the Director in attendance to coordinate project construction and utility relocation. Submit a list of all attendees one week in advance to the Director for approval.

Submit the approved Work Progress Schedule and Work Plan for the project, as specified in 8-3.2, to document the schedule and plan for road construction and utility adjustments.

When utility relocations no longer affect construction activities, the Contractor may discontinue the meetings with the Director's approval.

7-12 Reserved.

7-13 Reserved.

7-13.1 Reserved.

7-13.2 Reserved.

7-13.3 Reserved.

7-13.4 Insurance for Protection of Utility Owners: When the Contract involves work on or in the vicinity of utility-owned property or facilities, the utility shall be added along with the County as an Additional Insured on the policy/ies procured pursuant to subsection 7-13.2 above.

7-13.5 Marine General Liability Insurance: When the Contract involves work on bridges over navigable waters, carry Marine General Liability insurance providing continuous coverage for third-party personal injury and property damage caused by vessels used by the contractor in the performance of the work. Such insurance shall be no more restrictive than that provided by the latest occurrence form edition of the standard Commercial General Liability Coverage Form (ISO Form CG 00 01) as filed for use in the State of Florida. Cause the Department to be made an Additional Insured as to such insurance. Such coverage shall be on an "occurrence" basis and shall include Products/Completed Operations coverage. The coverage afforded to the Department as an Additional Insured shall be primary as to any other available insurance and shall not be more restrictive than the coverage afforded to the Named Insured. The limits of coverage shall not be less than \$1,000,000 for each occurrence and not less than a \$4,000,000 annual general aggregate, inclusive of amounts provided by an umbrella or excess policy. The limits of coverage described herein shall apply fully to the work or operations performed under the Contract, and may not be shared with or diminished by claims unrelated to the contract. The policy/ies and coverage

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described herein may be subject to a deductible. Pay all deductibles as required by the policy. No policy/ies or coverage described herein may contain or be subject to a Retention or a Self-Insured Retention. Prior to the execution of the Contract, and at all renewal periods which occur prior to final acceptance of the work, the Department shall be provided with an ACORD Certificate of Liability Insurance reflecting the coverage described herein. The Department shall be notified in writing within ten days of any cancellation, notice of cancellation, lapse, renewal, or proposed change to any policy or coverage described herein. The Department's approval or failure to disapprove any policy/ies, coverage, or ACORD Certificates shall not relieve or excuse any obligation to procure and maintain the insurance required herein, nor serve as a waiver of any rights or defenses the Department may have.

7-14 Contractor's Responsibility for Work.

The Contractor will take charge and custody of the Work, and take every necessary precaution against damage to the Work, by the action of the elements, third parties, or from any other cause whatsoever, until the County's final acceptance of the Work. The Contractor will rebuild, repair, restore, and make good all damage to any portion of the Work occasioned by any of the above causes before final acceptance of the Contract.

The County will have no obligation to pay any reimbursement for damage caused by the execution or nonexecution of the Work by the Contractor or its sub-contractors, or damage the Contractor was negligent in preventing.

The County may, at its sole discretion, reimburse the Contractor for the repair of damage to the Work not caused by a third party and due to unforeseeable causes beyond the control of and without the fault or negligence of the Contractor, including but not restricted to Acts of God, of the public enemy, or of governmental authorities.

7-15 Opening Sections of the Project to Traffic.

Whenever any section of the project is in acceptable condition for use, the Director may direct the Contractor to open it to vehicular or pedestrian traffic. The County's direction to open a section of the project does not constitute an acceptance of the project, or any part thereof, or waive any Contract provisions. Perform all necessary repairs or renewals, on any section of the project thus opened to traffic under direction from the Director, due to defective material or work or to any cause other than ordinary wear and tear, pending completion and the Director's acceptance of the project, or other work, at no expense to the County.

7-16 Wage Rates for Federal-Aid Projects (Designated Federal-Aid Contracts Only).

For all projects that include Federal-aid participation, the Special Provisions contain requirements with regard to payment of predetermined minimum wages. Predetermined Wage Rate Decisions (U.S. County of Labor provided Wage Rate Tables) exist for Heavy, Highway, and Building Construction Projects.

7-17 Supplemental Agreements.

Supplemental Agreements (Change Orders) shall be authorized in accordance with Procurement Policies adopted by the Lee County Board of County Commissioners.

7-18 Scales for Weighing Materials.

7-18.1 Applicable Regulations: When determining the weight of material for payment, use scales meeting the requirements of Chapter 531 of Florida Statutes, pertaining to

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specifications, tolerances, and regulations, as administered by the Bureau of Weights and Measures of the Florida Department of Agriculture.

7-18.2 Base for Scales: Place such scales on a substantial horizontal base to provide adequate support and rigidity and to maintain the level of the scales.

7-18.3 Protection and Maintenance: Maintain all scale parts in proper condition as to level and vertical alignment, and fully protect them against contamination by dust, dirt, and other matter that might affect their operation.

7-19 Source of Forest Products.

As required by Section 255.2575 of the Florida Statutes, where price, fitness and quality are equal, and when available, use only timber, timber piling, or other forest products that are produced and manufactured in the State of Florida. This provision does not apply to Federal-aid projects.

7-20 Regulations of Air Pollution from Asphalt Plants.

7-20.1 General: Perform all work in accordance with all Federal, State, and local laws and regulations regarding air pollution and burning. In particular, pay attention to Chapters 62-210 and 62-256, Rules of the Department of Environmental Protection, Florida Administrative Code, and to any part of the State Implementation Plan applicable to the project. See also 110-9.2 regarding burning of debris.

7-20.2 Dust Control: Control dust during the storage and handling of dusty materials by wetting, covering, or other means as approved by the Director.

7-20.3 Asphalt Material: Use only emulsified asphalt, unless otherwise stated in the Plans and allowed by Chapter 62-210, Rules of the Department of Environmental Protection, Florida Administrative Code. Store and handle asphalt materials and components so as to minimize unnecessary release of hydrocarbon vapors.

7-20.4 Asphalt Plants: Operate and maintain asphalt plants in accordance with Chapter 62-210, Rules of the Department of Environmental Protection, Florida Administrative Code. Provide the plant site with a valid permit as required under Chapter 62-210 prior to start of work.

7-21 Dredging and Filling.

Section 370.033 of the Florida Statutes, requires that all persons, who engage in certain dredge or fill activities in the State of Florida, obtain a certificate of registration from the Florida Department of Environmental Protection, Tallahassee, Florida 32301, and that they keep accurate logs and records of all such activities for the protection and conservation of the natural resources. Obtain details as to the application of this law from the Department of Environmental Protection.

7-22 Available Funds.

All funds for payment by the County under this Contract are subject to the availability of an annual appropriation for this purpose by the County. In the event of nonappropriation of funds by the County for the work provided under this Contract, the County will terminate the Contract, without termination charge or other liability, on the last day of the then current fiscal year or when the appropriation made for the then-current year for the services covered by this Agreement has been expended, whichever event occurs first. If at any time funds are not appropriated for the continuance of this Agreement, cancellation shall be accepted by the Contractor upon 30 days prior

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written notice, but failure to give such notice shall be of no effect and the County shall not be obligated under this Contract beyond the date of termination.

7-23 Contractor's Motor Vehicle Registration (Designated State Aid Projects Only).

The Contractor shall provide the County with proof that all motor vehicles operated or caused to be operated by such Contractor are registered in compliance with Chapter 320 of the Florida Statutes. Submit such proof of registration on FDOT Form 700-010-52 to the County.

The County will not make payment to the Contractor until the required proof of registration is on file with the Department.

If the Contractor fails to register any motor vehicle that he operates in Florida, pursuant to Chapter 320 of the Florida Statutes, the Department may disqualify the Contractor from bidding, or the Department may suspend and revoke the Contractor's certificates of qualification.

7-24 Disadvantaged Business Enterprise Program.

The County encourages the inclusion of Disadvantage Business Enterprise (DBE) participants as defined and certified by FDOT. The Contractor shall submit to the County with the final payment documents a DBE Participation Certification, indicating all DBE Subcontractor(s) and amount(s) utilized for the project. If the Contractor did not utilize the DBE firm(s) listed on the Bid Proposal, a letter of justification shall be submitted along with the DBE Participation Certification.

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LEGAL REQUIREMENTS AND RESPONSIBILITY TO THE PUBLIC (REV 8-24-23) (FA 5-7-24) (8-24)

ARTICLE 7-25 is deleted and the following substituted:

7-25 On-The-Job Training Requirements.

As part of the Contractor's equal employment opportunity affirmative action program, the Contractor shall provide training aimed at developing full journeymen in a trade or job classification involved on all applicable roadway and bridge construction projects receiving federal funds.

The anticipated minimum number of trainees will be initially derived from construction contract calendar days and dollar value as represented within the provided Table 7-1. A final training goal will be determined at the Training Evaluation Meeting based upon the Department's consideration of all relevant factors including qualitative evidence in the form of contractor efforts to advance equal employment opportunity beyond mere compliance with legal obligations; the availability of eligible trainees; potential for effective training; contractor workforce; project location; type of work and work items; and contractor participation in other approved training or workforce development programs.

No trainees will be required for Federal-aid Contracts administered with a Contract Time allowance of less than 275 calendar days. When the Contract Time allowance is 275 calendar days or more, the estimated required number of trainees shown in Table 7-1, with all other relevant factors, be the basis in determining totals. The ability of the contractor to successfully achieve completion of required training goals is desired. From consideration of all criteria presented during the Training Evaluation Meeting, the District Contract Compliance Manager may adjust the minimum number of trainees regarding those totals.

Table 7-1	
Estimated Contract Values	Anticipated Required Trainees
\$3,500,000 or less	0
Over \$3,500,000 to \$7,500,000	2
Over \$7,500,000 to \$12,000,000	3
Over \$12,000,000 to \$20,000,000	4
Over \$20,000,000 to \$30,000,000	6
Over \$30,000,000 to \$40,000,000	8
Over \$40,000,000 to \$60,000,000	10
Over \$60,000,000 to \$75,000,000	12
Over \$75,000,000 to \$90,000,000	14
Over \$90,000,000 to \$100,000,000	15
Over \$100,000,000 to \$125,000,000	17
Over \$125,000,000 to \$150,000,000	20
Over \$150,000,000 to \$175,000,000	22
Over \$175,000,000 to \$200,000,000	25
Over \$200,000,000* One additional trainee per \$10,000,000 additional Construction Contract amount	

Training and upgrading of minority, nonminority, women, and economically disadvantaged persons toward journeyman status is a primary objective of this Section. Accordingly, by conducting systematic and direct recruitment through public and private sources likely to yield minorities and

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women trainees the Contractor shall make every effort to enroll candidates to the extent such individuals are located and available within a reasonable area of recruitment. This training is not intended, and shall not be used, to discriminate against any applicant or prevent access of, whether minority, nonminority, woman, or persons believed economically disadvantaged.

The intent of these provisions is to provide training in construction crafts rather than clerical type positions. Training is permissible in lower-level management positions such as Office Engineers, Estimators etc., where the training is oriented toward construction applications. Training in the laborer classifications, except Common or General Laborer, may be permitted provided that significant and meaningful training plan is provided and approved by the District Contract Compliance Manager. Training as a Helper for any position, Rodman/Chainman, and Timekeeper classifications will not be approved for the On-The-Job Training Program.

The Contractor may incorporate the requirements of this Section, including responsibility for training a portion of trainees, in any such subcontract maintaining continued primary responsibility and satisfaction of requirements imposed by this Section.

The Department and the Contractor shall establish a training program which is tied to construction scope of work, length of operations, and satisfy all equal employment opportunity obligations of the Contractor. Other additionally recognized apprenticeship or training programs may be considered acceptable provided those are being administered in a manner consistent with the equal employment obligations of Federal-aid Highway Construction Contracts. Approval or acceptance of a training schedule shall be obtained from the Department prior to commencing work with classifications covered by such programs.

The Department and Contractor shall determine the training goal, classification types and minimum total hours needed during the Trainee Evaluation Meeting. An On-the-Job Training Schedule indicating number of training candidates and appropriate Proficiency Standards for each classification must be submitted by the Contractor within ten days after the meeting for approval by the Department.

This schedule may be subject to change and a revised schedule shall be submitted for approval by the Department if any of the following occur:

Start date on the approved On-The-Job Training Schedule or Plan has been missed by 14 or more days.

- 1. Start date on the approved On-The-Job Training Schedule or Plan is accelerated to commence earlier than 14 or more days.
 - 2. A change in previously approved classifications.
 - 3. Replacement trainees are added due to voluntary or involuntary termination.

The Contractor is responsible for identifying qualified candidates for enrollment and feasibly 25% of trainees in each occupation are in their first year of training. To ensure eligibility, the Contractor should include appropriate questions in the employee application or by other suitable means. Regardless of the method used, the Contractor's records should document the findings in each case. The Department will gather additional information regarding the proposed Candidates' previous work experience, training, as well as understanding of the On-the-Job Program and Proficiency Standards established for the classification.

The Trainee Enrollment and Notification of Personnel Action form is to be submitted fourteen days prior to the requested enrollment date. To be considered for enrollment, the proposed trainee candidate must meet the following criteria:

- 1. The candidate did not successfully complete a training course leading to journeyman status for the proposed classification.
- 2. The candidate did not gain sufficient experience by working in the proposed classification.

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- 3. The candidate was not hired as a journeyman in the proposed classification.
- 4. The candidate is not currently enrolled in the On-the-Job Program.

The Contractor shall compensate the trainee at no less than the laborer rate established in the Contract at the commencement of training. The compensation rate will be increased to the journeyman's wage upon graduation from the training program for the remainder of the time the trainee graduate works in the classification in which they were trained.

If an economically disadvantaged non-minority person is enrolled, such action shall be accompanied by a disadvantaged certification or a justification for such action acceptable to the Department. The Contractor will be responsible for, and provided an opportunity to identify actions and steps taken in pursuance thereof, prior to a determination of compliance with this Section being assessed the Contractor.

The Contractor may only enroll a trainee in one active classification per instance prior to approval of an additional classification for that trainee on the same project unless approved by the District Contract Compliance Manager. At beginning of training, the Contractor shall furnish the trainee a copy of the scheduled program they will follow during the intended training period and upon completion, award certification indicating type and total hours satisfactorily achieved.

To complete training, the transfer of trainees from project to project and from district to district is permitted. This includes transfers between multiple projects which could include non-FDOT government projects (City, County, etc.) provided there is the existence of an agreement to monitor the OJT Trainees in accordance with the OJT Program with the contractor, FDOT and other participating agencies. A trainee is only allowed to be enrolled on the original project.

The Contractor shall generate, maintain and furnish the District Contract Compliance Manager with the Monthly Time Report reflecting known training hours apart from other work hours performed by each individual trainee as part of this Contract. The report shall be submitted no later than the tenth day of the subsequent month and identify proficiency occurring.

Graduation to journeyman status will be based upon satisfactory accomplishment of:

- 1. Proficiency Demonstration being achieved upon conclusion of training as established for the specific training classification.
 - 2. Completion of the minimum hours in a training classification range.
- 3. The employer's satisfaction that the trainee does meet journeyman status in the classification of training.

The Contractor shall furnish the following documentation to the Department within seven days of successfully demonstrating proficiency:

- 1. Trainee Enrollment and Notification of Personnel Action form.
- 2. Proficiency Demonstration Verification Form signed by representatives of both the Contractor and the Department as well as the trainee indicating successful completion of each Proficiency Standard established for the classification.

The Contractor shall submit to the Department a copy of the Trainee Enrollment and Notification of Personnel Action form no later than seven days after the effective date when the candidate is voluntarily or involuntarily terminated from the program.

When approved in advance, the Department provides the Contractor the opportunity to participate in "Voluntary On-the-Job Training Program for Banking". Banking Certificates will be issued when the Contractor desires to preserve credit for a trainee. Further, if the Contractor or subcontractor requests to utilize banked trainees, the Banking Certificate will be validated allowing credit to the Contractor on a subsequent Federal-Aid Project. Banked credits of Prime Contractors

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working as Subcontractors may be accepted for credit. Voluntary On-the-Job Training Program for Banking can be considered under the following circumstances:

- 1. Federal-aid Projects Banking Certificates are issued for training of persons in excess of the required number of candidates based on the awarded Contract amount less items of work for which no training can be afforded.
- 2. State Funded Projects the Contractor will have the option to train employees on project for which On-the-Job Training Program mandates do not apply. However, the request to participate must be evaluated and will be considered if adequate Department staff are available to monitor compliance with the training criteria.

The following criteria will be used in determining if the Contractor has complied with the requirements of this specification:

- 1. Credit will be allowed for each trainee who satisfactorily completes training for the classification in which the trainee is enrolled.
- 2. Credit will be allowed for each trainee who continues training in the same job classification and who completes their training on a different contract.
- 3. Credit will be allowed for a trainee who is given the greatest practical amount of training on the contract; however, the trainee is unable to complete the training due to insufficient amount of work available in the classification.
- 4. Credit will be allowed for any position indicated in the approved On-the-Job Training Schedule or Plan, for which the Contractor can demonstrate that a good faith effort was made to provide training.
- 5. No credit will be allowed for a trainee whose employment by the Contractor is involuntarily terminated unless the Contractor can clearly demonstrate good cause for this action.
- 6. Banking certificates may be redeemed within five (5) years of issuance. The issuance and redemption of banking certificates are tracked by each District and the EEO.
- 7. Earned banking credits are redeemed by presenting the original banking certificate to the DCCM of the district where the project on which the credit is to be applied.
- 8. A contractor utilizing banking credit(s) to fulfill agreed upon trainee requirement(s), must present the original banking certificate for redemption. If the contractor has determined at the TEM that banked credits will be used to meet trainee requirements, then the certificate(s) is submitted with the initial training schedule. A prime contractor working as a subcontractor to another prime, may redeem their earned banking certificates for the prime.
- 9. If the contractor subsequently determines to use banked credit(s) to meet trainee requirements, then the certificate(s) are submitted with the revised training schedule.

The Contractor will have fulfilled the responsibilities of this Specification when acceptable training has been provided to the trainee as specified above.

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SECTION 8 PROSECUTION AND PROGRESS

8-1 Subletting or Assigning of Contracts.

Do not, sell, transfer, assign or otherwise dispose of the Contract or Contracts or any portion thereof, or of the right, title, or interest therein, without prior written consent of the County. If the Contractor chooses to sublet any portion of the Contract, the Contractor must submit a written request to sublet work on Form 6-Subcontractor List contained in the Proposal.

The Contractor shall provide the Director a list of all proposed subcontractors and major material suppliers at the preconstruction conference. A revised list shall be distributed each time a modification thereto is made.

Execute all agreements to sublet work in writing and include all pertinent provisions and requirements of the Contract. All other agreements must be in writing and reference all applicable Contract provisions. Upon request, submit to the County a copy of the subcontract and agreement. The subletting of work does not relieve the Contractor or the surety of their respective liabilities under the Contract.

The County recognizes a subcontractor only in the capacity of an employee or agent of the Contractor, and the Director may require the Contractor to remove the subcontractor as in the case of an employee.

8-2 Reserved.

8-3 Prosecution of Work.

8-3.1 Compliance with Time Requirements: Commence work in accordance with the accepted working schedule and provide sufficient labor, materials and equipment to complete the work within the time limit(s) set forth in the proposal. Should the Contractor fail to furnish sufficient and suitable equipment, forces, and materials, as necessary to prosecute the work in accordance with the required schedule, the Director may withhold all estimates that are, or may become due, or suspend the work until the Contractor corrects such deficiencies.

8-3.2 Submission of Contract Schedule: Within 21 calendar days after Contract award or at the preconstruction conference, whichever is earlier, submit to the Director a Contract Schedule for the project. The Director will review and respond to the Contractor within 15 calendar days of receipt.

Provide a Contract Schedule that shows the various activities of work in sufficient detail to demonstrate a reasonable and workable plan to complete the project within the Contract Time. Show the order and interdependence of activities and the sequence for accomplishing the work. Describe all activities in sufficient detail so that the Director can readily identify the work and measure the progress on of each activity. Show each activity with a beginning work date, a duration, and an ending work date. Include activities for procurement, fabrication, and delivery of materials, plant, and equipment, and review time for shop drawings and submittals. Include milestone activities when milestones are required by the Contract Documents. In a project with more than one phase, adequately identify each phase and its completion date, and do not allow activities to span more than one phase.

Conduct sufficient liaison and provide sufficient information to indicate coordination activities with utility owners that have facilities within the limits of construction requiring adjustment.

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Submit a working plan with the Contract Schedule, consisting of a concise written description of the construction plan.

The Director will return inadequate Contract Schedules to the Contractor for corrections. Resubmit a corrected schedule within 15 calendar days from the date of the Director's return transmittal.

Submit an updated Contract Schedule, for Director's acceptance, with each application for payment. The Director will review the updated schedule and respond within 7 calendar days of receipt.

By acceptance of the Contract Schedule, the Director does not endorse or otherwise certify the validity or accuracy of the activity durations or sequencing of activities. The Director will use the accepted schedule as the baseline against which to measure the progress.

If the Contractor fails to finalize either the initial or a revised Contract Schedule in the time specified, the Director will withhold all Contract payments until the Director accepts the schedule.

The Contract Schedule may indicate a completion date in advance of the expiration of Contract Time. However, the County will not be liable in any way for the Contractor's failure to complete the project prior to the expiration of Contract Time. Any additional costs, including extended overhead incurred between the Contractor's scheduled completion date and the expiration of Contract Time, shall be the responsibility of the Contractor. The Contractor shall not be entitled to claim or recover any such cost from the County.

- **8-3.3 Beginning Work:** Do not commence work under the Contract until after the County has issued a written Notice to Proceed. The Contract Time shall commence to run from the date specified in the Notice to Proceed. Issuance of the Notice to Proceed is contingent upon and will be done subsequent to the Contractor fully satisfying the County's stated insurance and bond submittal requirements. Until the Contractor receives the Department's Notice to Proceed, the Contractor is advised that the County will not be liable for any expenses which the Contractor may incur relative to the Contract before the written Notice to Proceed is issued.
- **8-3.4 Provisions for Convenience of Public:** Schedule construction operations so as to minimize any inconvenience to adjacent businesses or residences. Where necessary, the Director may require the Contractor to first construct the work in any areas along the project where inconveniences caused by construction operations would present a more serious handicap. In such critical locations, where there is no assurance of continuous effective prosecution of the work once the construction operations are begun, the Director may require the Contractor to delay removal of the existing (usable) facilities.

8-3.5 Preconstruction Conference: County After the award of the Contract but prior to the issuance of the written Notice-to-Proceed, a conference will be held to establish lines of communication; procedures for handling shop drawings, requests for information, applications for payment, and other submissions; and to establish a working understanding between the parties as to the Contractor's project management responsibilities.

Present at the conference will be the Contractor and his subcontractors, utility companies, CEI Consultant and the Director. The time and place of this conference will be set by the Director. The Contractor shall be represented at the conference by a person duly authorized to speak on behalf of and represent the Contractor, together with all of the Contractor's supervisory personnel who will be assigned to the project. The Contractor shall submit the following minimum information to the Director for his review and approval on or prior to the date established for the pre-construction conference:

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- a. Name of the Contractor's proposed project manager.
- b. Name of the Contractor's proposed full-time superintendent.
- c. Name of the Contractor's representative for implementing and maintaining the Maintenance of Traffic Plan during construction.
 - d. Personnel qualifications as may be requested by the County.
 - e. Listing/qualifications of the Contractor's proposed subcontractors.
 - f. Project Schedule.
 - g. Traffic Control Plan/Maintenance of Traffic Plan.
 - h. Applicable quality control plan(s).
- i. Name/qualifications of Contractor's Registered Professional Surveyor and Mapper in responsible charge of project layout.
 - i. Name/qualifications of Contractor's quality control technician.
- k. Schedule and plan for prevention, control and abatement of erosion and water pollution per Section 104-5 of the Standard Specifications.
- **8-3.6 Progress Meetings**: The Contractor shall attend regular progress meetings with and between the County's field representatives and those of the Contractor, subcontractors, utility companies, CEI Consultant and other parties having an interest in the Contract. The progress meetings shall be hosted by the County and shall be held at locations to be mutually agreed upon by the County and the Contractor at no less than two week intervals. The purpose of such meetings shall include, but not to be limited to, discussing all general aspects of the project and specifically addressing problem areas, schedules, progress payments, etc. The CEI Consultant shall be responsible for the preparation and distribution of the minutes.

8-4 Limitations of Operations.

8-4.1 Night Work: During active nighttime operations, furnish, place and maintain lighting sufficient to permit proper workmanship and inspection. Use lighting with 5 ft-cd minimum intensity. Arrange the lighting to prevent interference with traffic or produce undue glare to property owners. Operate such lighting only during active nighttime construction activities. Provide a light meter to demonstrate that the minimum light intensity is being maintained.

Lighting may be accomplished by the use of portable floodlights, standard equipment lights, existing street lights, temporary street lights, or other lighting methods approved by the Director.

Submit a lighting plan at the Preconstruction Conference for review and acceptance by the Director. Submit the plan as a PDF file, in the same scale as the Plans, and formatted on 11 inch by 17 inch sheets. Do not start night work prior to the Director's acceptance of the lighting plan.

During active nighttime operations, furnish, place and maintain variable message signs to alert approaching motorists of lighted construction zones ahead. Operate the variable message signs only during active construction activities.

Include compensation for lighting for night work in the Contract prices for the various items of the Contract. Take ownership of all lighting equipment for night work.

8-4.1.1 Holiday and Weekend Work: If work is authorized by the Director on holidays, weekends, or nights the Contractor shall notify the Director 72 hours in advance of the time and date on which the Contractor or any of his subcontractors propose to perform work during

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such time periods to afford the Director ample time to effectively schedule his inspection personnel in accordance with the Contractor's timetable.

- **8-4.2 Sequence of Operations:** Do not open up work to the prejudice of work already started. The Director may require the Contractor to finish a section on which work is in progress before starting work on any additional section. Specific requirements pertaining to the sequence of operations for constructing the project and maintaining traffic shall be included in the Contractor's work progress schedule.
- **8-4.3 Interference with Traffic:** At all times conduct the work in such manner and in such sequence as to ensure the least practicable interference with traffic. Operate all vehicles and other equipment safely and without hindrance to the traveling public. Park all private vehicles outside the clear zone. Place materials stored along the roadway so as to cause no obstruction to the traveling public as possible.

Where existing pavement is to be widened and stabilizing is not required, prevent any open trench from remaining after working hours by scheduling operations to place the full thickness of widened base by the end of each day. Do not construct widening strips simultaneously on both sides of the road, except where separated by a distance of at least 1/4 mile along the road and where either the work of excavation has not been started or the base has been completed.

8-4.4 Coordination with other Contractors: Sequence the Work and dispose of materials so as not to interfere with the operations of other Contractors engaged upon adjacent work; coordinate the Work, including the placement of work zone signs and temporary traffic control device, to that of others in a proper manner, in accordance with the spirit of the Contract Documents; and perform the work in the proper sequence in relation to that of other Contractors; all as may be directed by the Director.

Each Contractor is responsible for any damage done by it or its agents to the adjoining work being performed by another contractor.

- **8-4.5 Drainage:** Conduct the operations and maintain the work in such condition to provide adequate drainage at all times. Do not obstruct existing functioning storm sewers, gutters, ditches, and other run-off facilities. Maintain all existing storm sewers, gutters, ditches, and other run-off facilities in an operable condition as necessary to provide adequate drainage at all times.
- **8-4.6 Fire Hydrants:** Keep fire hydrants on or adjacent to the highway accessible to fire apparatus at all times, and do not place any material or obstruction within 15 feet of any fire hydrant.
- **8-4.7 Protection of Structures:** Do not operate heavy equipment close enough to pipe headwalls or other structures to cause their displacement.
- **8-4.8 Fencing:** Erect permanent fence as a first order of business on all projects that include fencing where the Director determines that the fencing is necessary to maintain the security of livestock on adjacent property, or for protection of pedestrians who are likely to gain access to the project from adjacent property.
- **8-4.9 Contaminated Materials:** When the construction operations encounter or expose any abnormal condition that may indicate the presence of a contaminated material, discontinue such operations in the vicinity of the abnormal condition and notify the Director immediately. Be alert for the presence of tanks or barrels; discolored or stained earth, metal, wood, ground water; visible fumes; abnormal odors; excessively hot earth; smoke; or other conditions that appear abnormal as possible indicators of the presence of contaminated materials. Treat these conditions with extraordinary caution.

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Make every effort to minimize the spread of any contaminated materials into uncontaminated areas.

Do not resume the construction operations in the vicinity of the abnormal conditions until so directed by the Director.

Dispose of the contaminated material in accordance with the requirements and regulations of any Local, State, or Federal agency having jurisdiction. Where the Contractor performs work necessary to dispose of contaminated material, and the Contract does not include pay items for disposal, the County will pay for this work as provided in 4-4.

The County agrees to hold harmless and indemnify the Contractor for damages when the Contractor discovers or encounters contaminated materials or pollutants during the performance of services for the County when the presence of such materials or pollutants were unknown or not reasonably discoverable. Such indemnification agreement is only effective if the Contractor immediately stops work and notifies the County of the contaminated material or pollutant problem.

Such indemnification agreement is not valid for damages resulting from the Contractor's willful, wanton, or intentional conduct or the operations of Contaminated and Hazardous Material Contractors.

8-5 Qualifications of Contractor's Personnel.

Provide competent, careful, and reliable superintendents, foremen, and workmen. Provide workmen with sufficient skill and experience to properly perform the work assigned to them. Provide workmen engaged on special work, or skilled work, such as bituminous courses or mixtures, concrete bases, pavements, or structures, or in any trade, with sufficient experience in such work to perform it properly and satisfactorily and to operate the equipment involved. Provide workmen that shall make due and proper effort to execute the work in the manner prescribed in the Contract Documents, or the Director may take action as prescribed below.

The Contractor shall assign a full-time superintendent to routinely and constantly supervise, manage, plan, monitor, schedule, and control the construction operations on behalf of the Contractor. Trade workers will not be considered to be a full-time superintendent. The Contractor's superintendent shall be present on the project at all times when the Contractor's work crews, or work crews of other parties authorized by the Director, are engaged in any activity whatsoever associated with the project. Should the Contractor fail to comply with the above condition, the Director may, at his discretion, deduct from the Contractor's partial monthly payment estimate, the amount of \$250 per hour for each hour lacking adequate superintendence. This deduction is to account for the County's loss of adequate supervision, not as a penalty, but as liquidated damages for services not rendered.

It is prohibited as a conflict of interest for a Contractor to subcontract with a Consultant to perform Contractor Quality Control when the Consultant is under contract with the County to perform work on any project described in the Contractor's Contract with the County. Prior to approving a Consultant for Contractor Quality Control, the Contractor shall submit to the County a Certificate from the proposed Consultant certifying that no conflict of interest exists.

Whenever the Director determines that any person employed by the Contractor is incompetent, unfaithful, intemperate, disorderly, or insubordinate, the Director will provide written notice and the Contractor shall discharge the person from the work. Do not employ any discharged person on the project without the written consent of the Director. If the Contractor fails to remove such person or persons, the Director may withhold all estimates that are or may become due, or suspend the work until the Contractor complies with such orders. Protect, defend,

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indemnify, and hold the County, its agents, officials, and employees harmless from all claims, actions, or suite arising from such removal, discharge, or suspension of employees.

8-6 Temporary Suspension of Contractor's Operations.

8-6.1 Authority to Suspend Contractor's Operations: The Director has the authority to suspend the Contractor's operations, wholly or in part. The Director will order such suspension in writing, giving in detail the reasons for the suspension. Contract Time will be charged during all suspensions of Contractor's operations. The County may grant an extension of Contract Time in accordance with 8-7.3.2 when determined appropriate in the County's sole judgment.

No additional compensation or time extension will be paid or granted to the Contractor when the operations are suspended for the following reasons:

- 1. The Contractor fails to comply with the Contract Documents.
- 2. The Contractor fails to carry out orders given by the Director.
- 3. The Contractor causes conditions considered unfavorable for continuing

the Work.

Immediately comply with any suspension order. Do not resume operations until authorized to do so by the Director in writing. Any operations performed by the Contractor, and otherwise constructed in conformance with the provisions of the Contract, after the issuance of the suspension order and prior to the Director's authorization to resume operations will be at no cost to the County. Further, failure to immediately comply with any suspension order will also constitute an act of default by the Contractor and is deemed sufficient basis in and of itself for the County to declare the Contractor in default, in accordance with 8-9, with the exception that the Contractor will not have ten calendar days to correct the conditions for which the suspension was ordered.

- **8-6.1.1 State of Emergency:** The Director has the authority to suspend the Contractor's operations, wholly or in part, pursuant to a Governor's Declaration of a State of Emergency. The Director will order such suspension in writing, giving in detail the reasons for the suspension. Contract Time will be charged during all suspensions of Contractor's operations. The County, at its sole discretion, may grant an extension of Contract Time and reimburse the Contractor for specific costs associated with such suspension. Further, in such instances, the County's determination as to entitlement to either time or compensability will be final, unless the Contractor can prove by clear and convincing evidence to a Disputes Review Board that the County's determination was without any reasonable factual basis.
- **8-6.2 Prolonged Suspensions:** If the Director suspends the Contractor's operations for an indefinite period, store all materials in such manner that they will not obstruct or impede the traveling public unnecessarily or become damaged in any way. Take every reasonable precaution to prevent damage to or deterioration of the work performed. Provide suitable drainage of the roadway by opening ditches, shoulder drains, etc., and provide any temporary structures necessary for public travel through the project.
- **8-6.3 Permission to Suspend Contractor's Operations:** Do not suspend operations or remove equipment or materials necessary for completing the work without obtaining the Director's written permission. Submit all requests for suspension of operations in writing to the Director, and identify specific dates to begin and end the suspension. The Contractor is not entitled to any additional compensation for suspension of operations during such periods.
- **8-6.4 Suspension of Contractor's Operations Holidays and Special Events:** Unless the Contractor submits a written request to work during one or more days of a Holiday or Special Event at least ten calendar days in advance of the beginning date of the Holiday or Special Event

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and receives written approval from the Director, the Contractor shall not work on the following days: Martin Luther King, Jr. Day; Memorial Day; the Saturday and Sunday immediately preceding Memorial Day; Independence Day; Independence Day (Observed); Labor Day; the Friday, Saturday, and Sunday immediately preceding Labor Day; Veterans Day; Veterans Day (Observed); the Wednesday immediately preceding Thanksgiving Day; Thanksgiving Day; the Friday, Saturday and Sunday immediately following Thanksgiving Day; December 24 through January 2, inclusive; and Special Events noted in the Plans. Contract Time will be charged during these Holiday and Special Event periods. Contract Time will be adjusted in accordance with 8-7.3.2. The Contractor is not entitled to any additional compensation beyond any allowed Contract Time adjustment for suspension of operations during such Holiday and Special Event periods.

During such suspensions, remove all equipment and materials from the clear zone, except those required for the safety of the traveling public and retain sufficient personnel at the job site to properly meet the requirements of Sections 102 and 104. The Contractor is not entitled to any additional compensation for removal of equipment from clear zones or for compliance with Section 102 and Section 104 during such Holiday and Special Event periods.

8-7 Computation of Contract Time.

8-7.1 General: Perform the contracted work fully, entirely, and in accordance with the Contract Documents within the Contract Time specified in the proposal, or as may be extended in accordance with the provisions herein below.

The County considers in the computation of the Contract Time the effect that utility relocation and adjustments have on job progress and the scheduling of construction operations required in order to adequately maintain traffic, as detailed in the Plans or as scheduled in the Special Provisions.

8-7.2 Date of Beginning of Contract Time: The date on which Contract Time begins is either the date on which the Contractor actually begins work, or the date for beginning the charging of Contract Time as set forth in the proposal; whichever is earlier.

8-7.3 Adjusting Contract Time:

8-7.3.1 Increased Work: The County may grant an extension of Contract Time when it increases the Contract amount due to overruns in original Contract items, adds new work items, or provides for unforeseen work. The County will base the consideration for granting an extension of Contract Time on the extent that the time normally required to complete the additional designated work delays the Contract completion schedule.

8-7.3.2 Contract Time Extensions: The County may grant an extension of Contract Time when a controlling item of work is delayed by factors not reasonably anticipated or foreseeable at the time of bid. The County may allow such extension of time only for delays occurring during the Contract Time period or authorized extensions of the Contract Time period. When failure by the County to fulfill an obligation under the Contract results in delays to the controlling items of work, the County will consider such delays as a basis for granting a time extension to the Contract.

Whenever the Director suspends the Contractor's operations, as provided in 8-6, for reasons other than the fault of the Contractor, the Director will grant a time extension for any delay to a controlling item of work due to such suspension. The County will not grant time extensions to the Contract for delays due to the fault or negligence of the Contractor.

The County does not include an allowance for delays caused by the effects of inclement weather or suspension of Contractor's operations as defined in 8-6.4, in establishing Contract Time. The Director will continually monitor the effects of weather and, when found

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justified, grant time extensions on either a bimonthly or monthly basis. The Director will not require the Contractor to submit a request for additional time due to the effects of weather.

The County will grant time extensions, on a day for day basis, for delays caused by the effects of rains or other inclement weather conditions, related adverse soil conditions or suspension of operations as defined in 8-6.4 that prevent the Contractor from productively performing controlling items of work resulting in:

- 1. The Contractor being unable to work at least 50% of the normal work day on pre-determined controlling work items; or
- 2. The Contractor must make major repairs to work damaged by weather, provided that the damage is not attributable to the Contractor's failure to perform or neglect; and provided that the Contractor was unable to work at least 50% of the normal workday on pre-determined controlling work items.

When the County grants a time extension due to rains or other inclement weather, the Contractor shall submit any objection to the additional time in writing within ten calendar days from receipt of written notice from the Engineer. Failure to submit a written appeal within ten calendar days from receipt of the written notice shall constitute a waiver of any and all rights to appeal the County's decision at a later time.

No additional compensation will be made for delays caused by the effects of inclement weather.

The County will consider the delays in delivery of materials or component equipment that affect progress on a controlling item of work as a basis for granting a time extension if such delays are beyond the control of the Contractor or supplier. Such delays may include an area-wide shortage, an industry-wide strike, or a natural disaster that affects all feasible sources of supply. In such cases, the Contractor shall submit substantiating letters from a representative number of manufacturers of such materials or equipment clearly confirming that the delays in delivery were the result of an area-wide shortage, an industry-wide strike, etc. No additional compensation will be made for delays caused by delivery of materials or component equipment.

The County will not consider requests for time extension due to delay in the delivery of custom manufactured equipment such as traffic signal equipment, highway lighting equipment, etc., unless the Contractor submits documentation that he placed the order for such equipment in a timely manner, the delay was caused by factors beyond the manufacturer's control, and the lack of such equipment caused a delay in progress on a controlling item of work. No additional compensation will be paid for delays caused by delivery of custom manufactured equipment.

The County will consider the effect of utility relocation and adjustment work on job progress as the basis for granting a time extension only if all the following criteria are met:

- 1. Delays are the result of either utility work that was not detailed in the Plans, or utility work that was detailed in the Plans but was not accomplished in reasonably close accordance with the schedule included in the Contract Documents.
- 2. Utility work actually affected progress toward completion of controlling work items.
- 3. The Contractor took all reasonable measures to minimize the effect of utility work on job progress, including cooperative scheduling of the Contractor's operations with the scheduled utility work at the preconstruction conference and providing

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adequate advance notification to utility companies as to the dates to coordinate their operations with the Contractor's operations to avoid delays.

The Department will consider requests for time extension due to delay in work operations within the limits of the railroad right-of-way, the adjoining 15 feet, or determined by the Railroad or Department to be able to potentially foul the tracks regardless of distance from railroad right-of-way on job progress as the basis for granting a time extension only if all the following criteria are met:

- 1. Delays are due to a lack of availability of Railroad protective services as required by 7-11.4.
- 2. Work within the limits of the railroad right-of-way or the adjoining 15 feet actually impacted progress toward completion of controlling work items.
- 3. The Contractor took all reasonable measures to minimize the effect of work operations within the limits of the railroad right-of-way or the adjoining 15 feet on job progress, including compliance with all provisions of 7-11.4 and 5-12, and cooperative scheduling of the Contractor's operations.

As a condition precedent to an extension of Contract Time the Contractor must submit to the Director:

A preliminary request for an extension of Contract Time must be submitted in writing to the Director within ten calendar days after the commencement of a delay to a controlling item of work. If the Contractor fails to submit this required preliminary request for an extension of Contract Time, the Contractor fully, completely, absolutely and irrevocably waives any entitlement to an extension of Contract Time for that delay. In the case of a continuing delay only a single preliminary request for an extension of Contract Time will be required. Each such preliminary request for an extension of Contract Time shall include as a minimum the commencement date of the delay, the cause of the delay, and the controlling item of work affected by the delay.

Furthermore, the Contractor must submit to the Director a request for a Contract Time extension in writing within 30 days after the elimination of the delay to the controlling item of work identified in the preliminary request for an extension of Contract Time. Each request for a Contract Time extension shall include as a minimum all documentation that the Contractor wishes the County to consider related to the delay, and the exact number of days requested to be added to Contract Time. If the Contractor contends that the delay is compensable, then the Contractor shall also be required to submit with the request for a Contract Time extension a detailed cost analysis of the requested additional compensation. If the Contractor fails to submit this required request for a Contract Time extension, with or without a detailed cost analysis, depriving the Director of the timely opportunity to verify the delay and the costs of the delay, the Contractor waives any entitlement to an extension of Contract Time or additional compensation for the delay.

Upon timely receipt of the preliminary request of Contract Time from the Contractor, the Director will investigate the conditions, and if it is determined that a controlling item of work is being delayed for reasons beyond the control of the Contractor the Director will take appropriate action to mitigate the delay and the costs of the delay. Upon timely receipt of the request for a Contract Time extension the Director will further investigate the conditions, and if it is determined that there was an increase in the time or the cost of performance of the controlling item of work beyond the control of the Contractor, then an adjustment of Contract Time will be

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made, and a monetary adjustment will be made, excluding loss of anticipated profits, and the Contract will be modified in writing accordingly.

The existence of an accepted schedule, including any required update(s), as stated in 8-3.2, is a condition precedent to the Contractor having any right to the granting of an extension of Contract Time or any monetary compensation arising out of any delay. Contractor failure to have an accepted schedule, including any required update(s), for the period of potential impact, or in the event the currently accepted schedule and applicable updates do not accurately reflect the actual status of the project or fail to accurately show the true controlling or non-controlling work activities for the period of potential impact, will result in any entitlement determination as to time or money for such period of potential impact being limited solely to the County's analysis and identification of the actual controlling or non-controlling work activities. Further, in such instances, the County's determination as to entitlement as to either time or compensability will be final, unless the Contractor can prove by clear and convincing evidence to a Disputes Review Board that the County's determination was without any reasonable factual basis.

8-8 Reserved

8-9 Default and Termination of Contract.

- **8-9.1 Determination of Default:** The following acts or omissions constitute acts of default and, except as to subparagraphs 9 and 11, the County will give notice, in writing, to the Contractor and his surety for any delay, neglect or default, if the Contractor:
- 1. fails to begin the work under the Contract within the time specified in the Notice to Proceed:
- 2. fails to perform the work with sufficient workmen and equipment or with sufficient materials to ensure prompt completion of the Contract;
- 3. performs the work unsuitably, or neglects or refuses to remove materials or to perform anew such work that the Director rejects as unacceptable and unsuitable;
- 4. discontinues the prosecution of the work, or fails to resume discontinued work within a reasonable time after the Director notifies the Contractor to do so;
- 5. becomes insolvent or is declared bankrupt, or files for reorganization under the bankruptcy code, or commits any act of bankruptcy or insolvency, either voluntarily or involuntarily;
- 6. allows any final judgment to stand against him unsatisfied for a period of ten calendar days;
 - 7. makes an assignment for the benefit of creditors;
- 8. fails to comply with Contract requirements regarding minimum wage payments or EEO requirements;
- 9. fails to comply with the Director's written suspension of work order within the time allowed for compliance and which time is stated in that suspension of work order; or
- 10. for any other cause whatsoever, fails to carry on the work in an acceptable manner, or if the surety executing the bond, for any reasonable cause, becomes unsatisfactory in the opinion of the County.
 - 11. fails to comply with 3-9.

For a notice based upon reasons stated in subparagraphs (1) through (8) and (10): if the Contractor, within a period of ten calendar days after receiving the notice described above, fails to correct the conditions of which complaint is made, the County will, upon written certificate

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from the Director of the fact of such delay, neglect, or default and the Contractor's failure to correct such conditions, have full power and authority, without violating the Contract, to take the prosecution of the work out of the hands of the Contractor and to declare the Contractor in default.

If the Contractor, after having received a prior notice described above for any reason stated in subparagraph (2), (3), (4), (5), (6) or (8), commits a second or subsequent act of default for any reason covered by the same subparagraph (2), (3), (4), (5), (6) or (8) as stated in the prior notice, and regardless whether the specific reason is the same, then, regardless of whether the Contractor has cured the deficiency stated in that prior notice, the County will, upon written certificate from the Director of the fact of such delay, neglect or default and the Contractor's failure to correct such conditions, have full power and authority, without any prior written notice to the Contractor and without violating the Contract, to take the prosecution of the work out of the hands of the Contractor and to declare the Contractor in default.

Regarding subparagraph (9), if the Contractor fails to comply with the Director's written suspension of work order within the time allowed for compliance and which time is stated in that suspension of work order, the County will, upon written certificate from the Director of the fact of such delay and the Contractor's failure to correct that condition, have full power and authority, without violating the Contract, to immediately take the prosecution of the work out of the hands of the Contractor and to declare the Contractor in default.

Regarding subparagraph (11), if the Contractor fails to comply with 3-9, the County will have full power and authority, without violating the Contract, to immediately take the prosecution of the work out of the hands of the Contractor and to declare the Contractor in default.

The County has no liability for anticipated profits for unfinished work on a Contract that the County has determined to be in default.

Notwithstanding the above, the County shall have the right to declare the Contractor (or its "affiliate") in default and immediately terminate this Contract, without any prior notice to the Contractor, in the event the Contractor (or its "affiliate") is at any time "convicted" of a "contract crime," as these terms are defined in Section 337.165(1), Florida Statutes. The County's right to default the Contractor (or its "affiliate") for "conviction" of a "contract crime" shall extend to and is expressly applicable to any and all County Contracts that were either advertised for bid; for which requests for proposals or letters of interest were requested; for which an intent to award was posted or otherwise issued; or for which a Contract was entered into, after the date that the underlying or related criminal indictment, criminal information or other criminal charge was filed against the Contractor (or its "affiliate") that resulted in the "conviction." In the event the County terminates this Contract for this reason, the Contractor shall hereby forfeit any claims for additional compensation, extra time, or anticipated profits. The Contractor shall only be paid for any completed work up to the date of termination. Further, the Contractor shall be liable for any and all additional costs and expenses the County incurs in completing the Contract work after such termination.

8-9.2 Termination of Contract for Convenience: The County may terminate the entire Contract or any portion thereof, if the Director determines that a termination is in the County's interest. The Director will deliver to the Contractor a Written Notice of Termination specifying the extent of termination and the effective date.

When the County terminates the entire Contract, or any portion thereof, before the Contractor completes all items of work in the Contract, the County will make payment for the actual number of units or items of work that the Contractor has completed, at the Contract unit price, and according to the formulas and provisions set forth in 4-3.2 for items of work partially

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completed, and such payments will constitute full and complete compensation for such work or items. No payment of any kind or amount will be made for items of work not started. The County will not consider any claim for loss of anticipated profits, or overhead of any kind (including home office and jobsite overhead or other indirect impacts) except as provided in 4-3.2 for partially completed work.

The County will consider reimbursing the Contractor for actual cost of mobilization (when not otherwise included in the Contract) including moving equipment to the job where the volume of the work that the Contractor has completed is too small to compensate the Contractor for these expenses under the Contract unit prices.

The County may purchase at actual cost acceptable materials and supplies procured for the work, that the County has inspected, tested, and approved and that the Contractor has not incorporated in the work. Submit the proof of actual cost, as shown by receipted bills and actual cost records, at such points of delivery as the Director may designate.

Termination of a contract or a portion thereof, under the provisions of this Subarticle, does not relieve the Contractor or the surety of its responsibilities for the completed portion of the Contract or its obligations for and concerning any just claims arising out of the work performed.

All Contractor claims for additional payment, due to the County's termination of the entire Contract or any portion thereof, must meet the requirements of 5-12.

8-9.3 Completion of Work by County: Upon declaration of default, the County will have full authority to appropriate or use any or all suitable and acceptable materials and equipment on the site and may enter into an agreement with others to complete the work under the Contract, or may use other methods to complete the work in an acceptable manner. The County will charge all costs that the County incurs because of the Contractor's default, including the costs of completing the work under the Contract, against the Contractor. If the County incurs such costs in an amount that exceeds the sum that would have been payable under the Contract, then the Contractor and the surety shall be liable and shall pay the County the amount of the excess.

If, after the ten day notice period and prior to any action by the County to otherwise complete the work under the Contract, the Contractor establishes his intent to prosecute the work in accordance with the County's requirements, then the County may allow the Contractor to resume the work, in which case the County will deduct from any monies due or that may become due under the Contract, any costs to the County incurred by the delay, or from any reason attributable to the delay.

8-10 Liquidated Damages for Failure to Complete the Work.

8-10.1 Reserved.

8-10.2 Amount of Liquidated Damages: Applicable liquidated damages are the amounts established in the following schedule:

Original Contract Amount Daily Charge Per C	Calendar Day
\$299,999 and under	\$904
\$300,000 but less than \$2,000,000	\$1,685
\$2,000,000 but less than \$5,000,000	\$2,667
\$5,000,000 but less than \$10,000,000	\$3,813
\$10,000,000 but less than \$20,000,000	\$5,021
\$20,000,000 but less than \$40,000,000	\$7,442
\$40,000,000 and over\$10,224 plus 0.0	00005 of any

- **8-10.3 Determination of Number of Days of Default:** For all contracts, regardless of whether the Contract Time is stipulated in calendar days or working days, the Director will count default days in calendar days.
- **8-10.4 Conditions under which Liquidated Damages are Imposed:** If the Contractor or, in case of his default, the surety fails to complete the work within the time stipulated in the Contract, or within such extra time that the County may have granted then the Contractor or, in case of his default, the surety shall pay to the County, not as a penalty, but as liquidated damages, the amount so due as determined in 8-10.2.
- **8-10.5 Right of Collection:** The County has the right to apply, as payment on such liquidated damages, any money the County owes the Contractor.
- **8-10.6 Allowing Contractor to Finish Work:** The County does not waive its right to liquidated damages due under the Contract by allowing the Contractor to continue and to finish the work, or any part of it, after the expiration of the Contract Time.
- **8-10.7 Completion of Work by County:** In the case of a default of the Contract and the completion of the work by the County, the Contractor and his surety are liable for the liquidated damages under the Contract, but the County will not charge liquidated damages for any delay in the final completion of the County's performance of the work due to any unreasonable action or delay on the part of the County.

8-11 Release of Contractor's Responsibility.

The County considers the Contract complete when the Contractor has completed all work and the County has accepted the work. The County will then release the Contractor from further obligation except as set forth in his bond, and except as provided in 5-13.

8-12 Recovery of Damages Suffered by Third Parties.

In addition to the damages provided for in 8-10.2 and pursuant to Section 337.18 of the Florida Statutes, when the Contractor fails to complete the work within the Contract Time the County may recover from the Contractor amounts that the County pays for damages suffered by third parties unless the failure to timely complete the work was caused by the County's act or omission.

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SECTION 9 MEASUREMENT AND PAYMENT

9-1 Measurement of Quantities.

- **9-1.1 Measurement Standards:** The Director will measure all work completed under the Contract in accordance with the United States Standard Measures.
- **9-1.2 Method of Measurements:** The Director will take all measurements horizontally or vertically.

9-1.3 Determination of Pay Areas:

- **9-1.3.1 Final Calculation:** When measuring items paid for on the basis of area of finished work, where the pay quantity is designated to be determined by calculation, the Director will use lengths and widths in the calculations based on the station to station dimensions shown in the Plans; the station to station dimensions actually constructed within the limits designated by the Director; or the final dimensions measured along the surface of the completed work within the neat lines shown in the Plans or designated by the Director. The Director will use the method or combination of methods of measurement that reflect, with reasonable accuracy, the actual surface area of the finished work as the Director determines.
- **9-1.3.2 Plan Quantity:** When measuring items paid for on the basis of area of finished work, where the pay quantity is designated to be the plan quantity, the Director will determine the final pay quantity based on the plan quantity subject to the provisions of 9-3.2. Generally, the Director will calculate the plan quantity using lengths based on station to station dimensions and widths based on neat lines shown in the Plans.
- **9-1.4 Construction Outside Authorized Limits:** The Director will not pay for surfaces constructed over a greater area than authorized, or for material that the Contractor has moved from outside of slope stakes and lines shown in the Plans, except where the Director provides written instruction for the Contractor to perform such work.
- **9-1.5 Truck Requirements:** Provide all trucks with numbers and certify that all trucks used have a manufacturer's certification or permanent decal showing the truck capacity rounded to the nearest tenth of a cubic yard placed on both sides of the truck. This capacity will include the truck body only and any side boards added will not be included in the certified truck body capacity. Ensure the lettering and numbers are legible for identification purposes at all times.
- **9-1.6 Ladders and Instrument Stands for Bridge Projects:** On bridge projects, in order to facilitate necessary measurements, provide substantial ladders to the tops of piers and bents, and place and move such ladders as the Director directs.

For bridge projects crossing water or marshy areas, supply fixed stands for instrument mounting and measurements, in accordance with the details stipulated in the Specifications for the project.

9-2 Scope of Payments.

9-2.1 Items Included in Payment: Accept the compensation as provided in the Contract as full payment for furnishing all materials and for performing all work contemplated and embraced under the Contract; also for all loss or damage arising out of the nature of the work or from the action of the elements, or from any unforeseen difficulties or obstructions which may arise or be encountered in the prosecution of the work until its final acceptance; also for all other costs incurred under the provisions of Division I.

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For any item of work contained in the proposal, except as might be specifically provided otherwise in the basis of payment clause for the item, include in the Contract unit price (or lump sum price) for the pay item or items the cost of all labor, equipment, materials, tools and incidentals required for the complete item of work, including all requirements of the Section specifying such item of work, except as specifically excluded from such payments.

9-2.1.1 Reserved

9-2.1.2 Bituminous Material: Prepare a Contractor's Certification of Quantities, using the FDOT's current approved form for Superpave Asphalt Base, Driveway Asphalt Base, Asphalt Treated Permeable Base, Superpave Asphaltic Concrete, Miscellaneous Asphalt Pavement, Asphalt Concrete Friction Course, and Asphalt Rubber Membrane Interlayer pay items. Submit this certification to the Director no later than Twelve O'clock noon Monday after the estimate cut-off or as directed by the Director, based on the quantity of asphalt produced and accepted on the roadway per Contract. Ensure the certification includes the Project Number, Contract Number, Financial Project Identification (FPID) Number (if applicable), Certification Date and Number, the period the certification represents and the tons produced for each asphalt pay item.

On Contracts having an original Contract Time of more than 365 calendar days, or more than 5,000 tons of asphalt concrete, the County will adjust the bid unit price for bituminous material, excluding cutback and emulsified asphalt to reflect increases or decreases in the Asphalt Price Index (API) of bituminous material from that in effect during the month in which bids were received. The Contractor will not be given the option of accepting or rejecting this adjustment. Bituminous adjustments will be made only when the current API (CAPI) varies by more than 5% of the API prevailing in the month when bids were received (BAPI), and then only on the portion that exceeds 5%.

The County will determine the API for each month by averaging quotations in effect on the first day of the month at all terminals that could reasonably be expected to furnish bituminous material to projects in the State of Florida.

The API will be available on the Construction Office website before the 15th day of each month at the following URL:

https://www.fdot.gov/construction/fuel-Bit/Fuel-Bit.shtm .

Payment on progress estimates will be adjusted to reflect adjustments in the prices for bituminous materials in accordance with the following:

\$ Adjustment = (ID)(Gallons)

Where $ID = Index\ Difference = [CAPI - 0.95(BAPI)]$ when the API has decreased between the month of bid and month of this progress estimate.

Where $ID = Index\ Difference = [CAPI - 1.05(BAPI)]$ when the API has increased between the month of bid and month of this progress estimate.

Payment will be made on the current progress estimate to reflect the index difference at the time work was performed.

For asphalt concrete items payable by the ton or square yard, the number of gallons will be determined assuming a mix design with 6.25% liquid asphalt weighing 8.58 pounds per gallon.

For asphalt concrete items payable by the cubic yard, the number of gallons will be determined assuming a mix design with 3% liquid asphalt weighing 8.58 pounds per gallon.

9-2.2 Non-Duplication of Payment: In cases where the basis of payment clause in these Specifications relating to any unit price in the bid schedule requires that the unit price cover and

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be considered compensation for certain work or material essential to the item, the County will not measure or pay for this same work or material under any other pay item that may appear elsewhere in these Specifications.

9-3 Compensation for Altered Quantities.

9-3.1 General: When alteration in Plans or quantities of work not requiring a supplemental agreement as hereinbefore provided for are offered and performed, the Contractor shall accept payment in full at Contract unit bid prices for the actual quantities of work done, and no allowance will be made for increased expense, loss of expected reimbursement, or loss of anticipated profits suffered or claimed by the Contractor, resulting either directly from such alterations, or indirectly from unbalanced allocation among the Contract items of overhead expense on the part of the bidder and subsequent loss of expected reimbursement therefore, or from any other cause.

Compensation for alterations in Plans or quantities of work requiring supplemental agreements shall be stipulated in such agreement, except when the Contractor proceeds with the work without change of price being agreed upon, the Contractor shall be paid for such increased or decreased quantities at the Contract unit prices bid in the Proposal for the items of work. If no Contract unit price is provided in the Contract, and the parties cannot agree as to a price for the work, the Contractor agrees to do the work in accordance with 4-3.2.

9-3.2 Payment Based on Plan Quantity:

of more than 5%,

9-3.2.1 Error in Plan Quantity: As used in this Article, the term "substantial error" is defined as the smaller of (1) or (2) below:

1. a difference between the original plan quantity and final quantity

2. a change in quantity which causes a change in the amount payable of more than \$5,000.

On multiple job Contracts, changes made to an individual pay item due to substantial errors will be based on the entire Contract quantity for that pay item.

Where the pay quantity for any item is designated to be the original plan quantity, the County will revise such quantity only in the event that the County determines it is in substantial error. In general, the County will determine such revisions by final measurement, plan calculations, or both, as additions to or deductions from plan quantities.

In the event that either the County or the Contractor contends that the plan quantity for any item is in error and additional or less compensation is thereby due, the claimant shall submit, at their own expense, evidence of such in the form of acceptable and verifiable measurements or calculations. The County will not revise the plan quantity solely on the basis of a particular method of construction that the Contractor selects. For earthwork items, the claimant must note any differences in the existing surfaces from that shown in the Plan that would result in a substantial error to the plan quantity, and must be properly documented by appropriate verifiable level notes, acceptable to both the Contractor and the County, prior to disturbance of the existing surface by construction operations. The claimant shall support any claim based upon a substantial error for differences in the existing surface by documentation as provided above.

9-3.2.2 Authorized Changes in Limits of Work: Where the County designates the pay quantity for any item to be the original plan quantity and authorizes a plan change which results in an increase or decrease in the quantity of that item, the County will revise the plan quantity accordingly. In general, the County will determine such revisions by final measurement, plan calculations or both.

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- **9-3.2.3 Specified Adjustments to Pay Quantities:** Do not apply the limitations specified in 9-3.2.1 and 9-3.2.2 to the following:
- 1. Where these Specifications or Special Provisions provide that the County determines the pay quantity for an item on the basis of area of finished work adjusted in accordance with the ratio of measured thickness to nominal thickness.
- 2. Where these Specifications provide for a deduction due to test results falling outside of the allowable specified tolerances.
 - 3. To payment for extra length fence posts, as specified in 550-6.3.

9-3.3 Lump Sum Quantities:

- 9-3.3.1 Error in Lump Sum Quantity: Where the County designates the pay quantity for an item to be a lump sum and the Plans show an estimated quantity, the County will adjust the lump sum compensation only in the event that either the Contractor submits satisfactory evidence or the County determines and furnishes satisfactory evidence that the lump sum quantity shown is in substantial error as defined in 9-3.2.1.
- 9-3.3.2 Authorized Changes in Work: Where the County designates the pay quantity for an item to be a lump sum and the Plans show an estimated quantity, the County will adjust compensation for that item proportionately when an authorized plan change is made which results in an increase or decrease in the quantity of that item. When the Plans do not show an estimated plan quantity or the applicable specifications do not provide adjustments for contingencies, the County will compensate for any authorized plan change resulting in an increase or decrease in the cost of acceptably completing the item by establishing a new unit price through a supplemental agreement as provided in 4-3.2.
- 9-3.4 Deviation from Plan Dimensions: If the Contractor fails to construct any item to Plan or to authorized dimensions within the specified tolerances, the Director, at his discretion will: require the Contractor to reconstruct the work to acceptable tolerances at no additional cost to the County; accept the work and provide the Contractor no pay; or accept the work and provide the Contractor a reduced final pay quantity or reduced unit price. The County will not make reductions to final pay quantities for those items designated to be paid on the basis of original plan quantity or a lump sum quantity under the provisions of this Article unless such reduction results in an aggregate monetary change per item of more than \$100, except that for earthwork items, the aggregate change must exceed \$5,000 or 5% of the original plan quantity, whichever is smaller. If, in the opinion of the Director, the Contractor has made a deliberate attempt to take advantage of the construction tolerances as defined in 120-12.1 to increase borrow excavation in fill sections or to decrease the required volume of roadway or lateral ditch excavation or embankment, the County will take appropriate measurements and will apply reductions in pay quantities. The County will not use the construction tolerance, as defined in 120-12.1, as a pay tolerance. The construction tolerance is not to be construed as defining a revised authorized template.

9-4 Deleted Work.

The County will have the right to cancel the portions of the Contract relating to the construction of any acceptable item therein, by making an adjustment in payment to the Contractor of a fair and equitable amount covering the value of all cancelled work less all items of cost incurred prior to the date that the Director cancels the work.

9-5 Partial Payments.

9-5.1 General: The Director will make partial payments on monthly estimates based on the amount of work that the Contractor completes during the month (including delivery of certain

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materials, as specified herein below). The Director will make approximate monthly payments, and the County will correct all partial estimates and payments in the subsequent estimates and in the final estimate and payment.

The County will base the amount of such payments on the total value of the work that the Contractor has performed to the date of the estimate, based on the quantities completed and the Contract prices, less payments previously made and less any retainage withheld.

Contract amount is defined as the original Contract amount adjusted by approved supplemental agreements.

9-5.1.1 Applications for Payment: On or before the 25th day of each month, the Contractor shall submit six notarized copies of its monthly application for payment to the CEI Consultant for Work performed during the previous month. Each application for payment shall be accompanied by the certifications described in 9-5.6. The County shall not be required to make payment until and unless these certifications are furnished by the Contractor.

Invoices received after the 25th day of each month shall be considered for payment as part of the next month's application. Within ten calendar days of receipt of each application for payment, the CEI Consultant will either:

- 1. indicate his approval of the requested amount;
- 2. indicate his approval of only a portion of the requested payment, stating in writing his reasons therefore; or
- 3. return the application for payment to the Contractor indicating, in writing, the reason for refusing to approve payment and the action necessary to make the payment request proper.

In the event of a total denial and return of the application for payment by the CEI Consultant, the Contractor may make the necessary corrections and resubmit the application for payment. The County shall, within thirty calendar days after County approval of an application for payment, pay the Contractor the amounts so approved. Provided, however, in no event shall the County be obligated to pay any amount greater than that portion of the application for payment approved by the CEI Consultant. Monthly payments to the Contractor shall in no way imply or constitute approval or acceptance of Contractor's Work.

9-5.1.2 Retainage: The County shall retain five percent of the gross amount of each monthly application for payment or five percent of the portion thereof approved by the CEI Consultant for payment, whichever is less. Such sums shall be accumulated and released to the Contractor with final payment.

Retainage will be determined for each job on multiple job Contracts. The County will not accept Securities, Certificates of Deposit or letters of credit as a replacement for retainage. Amounts withheld will not be released until payment of the final estimate.

9-5.2 Reserved

9-5.3 Withholding Payment:

9-5.3.1 Withholding Payment for Defective Work: If the County discovers any defective work or material prior to the final acceptance, or if the County has a reasonable doubt as to the integrity of any part of the completed work prior to final acceptance, then the County will not allow payment for such defective or questioned work until the Contractor has remedied the defect and removed any causes of doubt.

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- **9-5.3.2 Withholding Payment for Failure to Comply:** The County will withhold progress payments from the Contractor if he fails to comply with any or all of the following, as applicable, within 60 days after beginning work:
- 1. Comply with and submit required documentation relating to prevailing wage rate provisions, Equal Employment Opportunity, On-The-Job Training, and Affirmative Action;
- 2. Comply with the requirement to report all necessary information, including actual payments to DBEs, all other subcontractors and major suppliers, through the Internet based Equal Opportunity Reporting System;
- 3. Comply with or make a good faith effort to ensure employment opportunity for minorities and females in accordance with the required contract provisions for Federal Aid Construction Contracts, and
- 4. Comply with or make a good faith effort to meet On-The-Job Training goals.

The County will withhold progress payments until the Contractor has satisfied the above conditions.

- **9-5.3.3 Withholding Payment for Other Reasons:** The County may withhold any payments otherwise due Contractor under this Agreement or any other agreement between the County and the Contractor, to such extent as may be necessary in the County's opinion to protect it from loss as a result of:
 - 1. Third party claims filed or reasonable evidence indicating probable filing of such claims;
 - 2. Failure of the Contractor to make payment properly to Subcontractors or for labor, materials, or equipment;
 - 3. Reasonable doubt that the Work can be completed for the unpaid balance of the Contract amount;
 - 4. Reasonable indication that the Work will not be completed within the Contract Time;
 - 5. Unsatisfactory prosecution of the Work by the Contractor;
 - 6. Failure to provide accurate and current red line documents, as-built drawings, or certified surveys;
 - 7. Any other material breach of the Contract Documents.

If these conditions are not remedied or removed, the County may, after three calendar days' written notice, rectify the same at Contractor's expense. The County also may offset against any sums due Contractor the amount of any liquidated or unliquidated obligations of Contractor to the County.

9-5.4 Release of Retainage After Acceptance: When the Contractor has furnished the County with all submittals required by the Contract, such as invoices, DBE Participation Certification, properly executed and notarized Release and Affidavit, duly executed Surety's consent to final payment, EEO reports, materials certifications, certification of materials procured, etc., (excluding Contractor's letter of acceptance of final amount due and Form 21-A release) and the Director has determined that the measurement and computation of pay quantities is correct, the County may reduce the retainage to two percent of the Contract plus any amount that the County elects to deduct for defective work as provided in 9-5.3.

The County will not allow a semifinal estimate under the provisions of the above paragraphs unless the time elapsing between (1) acceptance of the project and receipt of all test

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reports, invoices, etc., and (2) submission of the final estimate to the Contractor for acceptance, exceeds or is expected to exceed 30 days.

The County may deduct from payment estimates any sums that the Contractor owes to the County on any account. Where more than one project or job (separate project number) is included in the Contract, the County will distribute the reduced retainage as provided in the first paragraph of this subarticle to each separate project or job in the ratio that the Contract value of the work for the particular job bears to the total Contract amount.

9-5.5 Partial Payments for Delivery of Certain Materials:

9-5.5.1 General: The County will allow partial payments for new materials that will be permanently incorporated into the project and are stockpiled in approved locations in the project vicinity. Stockpile materials so that they will not be damaged by the elements and in a manner that identifies the project on which they are to be used.

The following conditions apply to all payments for stockpiled materials:

- 1. There must be reasonable assurance that the stockpiled material will be incorporated into the specific project on which partial payment is made.
- 2. The stockpiled material must be approved as meeting applicable specifications.
- 3. The total quantity for which partial payment is made shall not exceed the estimated total quantity required to complete the project.
- 4. The Contractor shall submit to the Director certified invoices to document the value of the materials received. The amount of the partial payment will be determined from invoices for the material up to the unit price in the Contract.
- 5. Delivery charges for materials delivered to the jobsite will be included in partial payments if properly documented.
- 6. Partial payments will not be made for materials which were stockpiled prior to award of the Contract for a project.
- **9-5.5.2 Partial Payment Amounts:** The following partial payment restrictions apply:
- 1. Partial payments less than \$5,000 for any one month will not be processed.
- 2. Partial payments for structural steel, ITS and signal components and precast prestressed items will not exceed 85% of the bid price for the item. Partial payments for all other items will not exceed 75% of the bid price of the item in which the material is to be used.
- 3. Partial payment will not be made for aggregate and base course material received after paving or base construction operations begin except when a construction sequence designated by the County requires suspension of paving and base construction after the initial paving operations, partial payments will be reinstated until the paving and base construction resumes.
- **9-5.5.3 Off Site Storage:** If the conditions of 9-5.5.1 are satisfied, partial payments will be allowed for materials stockpiled in approved in-state locations. Additionally, partial payments for materials stockpiled in approved out-of-state locations will be allowed if the conditions of 9-5.5.1 and the following conditions are met:
- 1. Furnish the County a Materials Bond stating the supplier guarantees to furnish the material described in the Contract to the Contractor and County. Under this bond, the Obligor shall be the material supplier and the Obligees shall be the Contractor and the Lee County

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Board of County Commissioners. The bond shall be in the full dollar amount of the bid price for the materials described in the contract.

2. The following clauses must be added to the construction Contract between the Contractor and the supplier of the stockpiled materials:

"Notwithstanding anything to the contrary, <supplier> will be liable to the Contractor and Lee County, Florida County<supplier> default in the performance of this agreement."

"Notwithstanding anything to the contrary, this agreement, and the performance bond issued pursuant to this agreement, does not alter, modify, or otherwise change the Contractor's obligation to furnish the materials described in this agreement to Lee County, Florida County."

3. The agreement between the Contractor and the supplier of the stockpiled materials must include provisions that the supplier will store the materials and that such materials are the property of the Contractor.

9-5.6 Certification of Payment to Subcontractors: The term "subcontractor," as used herein, includes persons or firms furnishing materials or equipment incorporated into the work or stockpiled for which the County has made partial payment and firms working under equipment-rental agreements. The Contractor is required to pay all subcontractors for satisfactory performance of their Contracts before the County will make a further progress (partial) payment. The Contractor shall also return all retainage withheld to the subcontractors within 30 days after the subcontractor's work is satisfactorily complete, as determined by the County. Prior to receipt of any progress (partial) payment, the prime contractor shall certify that all subcontractors having an interest in the Contract were paid for satisfactory performance of their Contracts and that the retainage is returned to subcontractors within 30 days after satisfactory completion of the subcontractor's work. Submit this certification in the form designated by the County.

Within 30 days of the Contractor's receipt of the final progress payment or any other payments thereafter, except the final payment, the Contractor shall pay all subcontractors and suppliers having an interest in the Contract for all work completed and materials furnished. The County will honor an exception to the above when the Contractor demonstrates good cause for not making any required payment and submits written notification of any such good cause to both the County and the affected subcontractors or suppliers within said 30 day period.

The Contractor shall indemnify and provide defense for the County when called upon to do so for all claims or suits against the County, by third parties, pertaining to Contractor payment or performance issues arising out of the Contract. It is expressly understood that the monetary limitation on the extent of the indemnification shall be the approved Contract amount, which shall be the original Contract amount as may be increased by subsequent Supplemental Agreements.

9-6 Record of Construction Materials.

9-6.1 General: For all construction materials used in the construction of the project, (except materials exempted by 9-6.2), preserve for the County's inspection the invoices and records of the materials for a period of three years from the date of completion of the project. Apply this requirement when subcontractors purchase materials, and obtain the invoices and other materials records from the subcontractors. By providing the materials, the Contractor certifies that all invoices will be maintained for the required period.

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9-6.2 Non-Commercial Materials: The provisions of 9-6.1 do not apply to materials generally classed as non-commercial, such as fill materials, local sand, sand-clay, or local materials used as stabilizer.

9-7 Disputed Amounts Due the Contractor.

The County reserves the right to withhold from the final estimate any disputed amounts between the Contractor and the County. The County will release all other amounts due, as provided in 9-8.

9-8 Acceptance and Final Payment.

9-8.1 Acceptance and Final Payment Documents: Whenever the Contractor has completely performed the work provided for under the Contract and the Director has performed a final inspection and made final acceptance (as provided in 5-10 and 5-11), and subject to the terms of 8-11, the Director will prepare a final estimate showing the value of the work as soon as the Director makes the necessary measurements and computations. The Director will correct all prior estimates and payments in the final estimate and payment. The County will pay the estimate, less any sums that the County may have deducted or retained under the provisions of the Contract, as soon as practicable after final acceptance of the work, along with all executed supplemental agreements received after final acceptance.

If the Contractor fails to furnish all required Contract Documents as listed in (1) through (9) below within 90 days of the County's offer of final payment or request for refund of overpayment, the County will not issue Acceptance and remaining retainage will continue to be withheld.

- 1. The Contractor has agreed in writing to accept the balance due or refund the overpayment, as determined by the County, as full settlement of his account under the Contract and of all claims in connection therewith, or the Contractor, has through the use of the Qualified Acceptance Letter, accepted the balance due or refunded the overpayment, as determined by the County, with the stipulation that his acceptance of such payment or the making of such refund does not constitute any bar, admission, or estoppel, or have any effect as to those payments in dispute or the subject of a pending claim between the Contractor and the County. To receive payment based on a Qualified Acceptance Letter, define in writing the dispute or pending claim with full particular of all items of all issues in dispute, including itemized amounts claimed for all particulars of all items, and submit it as part of the Qualified Acceptance Letter. The Contractor further agrees, by submitting a Qualified Acceptance Letter that any pending or future claim or suit is limited to those particulars, including the itemized amounts, defined in the original Qualified Acceptance Letter, and that he will commence with any such arbitration claim or suit within 820 calendar days from and after the time of final acceptance of the work and that his failure to file a formal claim within this period constitutes his full acceptance of the Director's final estimate and payment. The overpayment refund check from the Contractor, if required, will be considered a part of any Acceptance Letter executed.
- 2. The Contractor has properly maintained the project, as specified hereinbefore.
- 3. The Contractor has furnished a sworn affidavit to the effect that the Contractor has paid all bills and no suits are pending (other than those exceptions listed, if any) in connection with work performed under the Contract and that the Contractor has not offered or made any gift or gratuity to, or made any financial transaction of any nature with, any employee

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of the County in the performance of the Contract. Include with the listed tort liability exceptions, if any, evidence of adequate insurance coverage as required in 7-13.

- 4. The surety on the Contract bond consents, by completion of their portion of the affidavit and surety release subsequent to the Contractor's completion of his portion, to final payment to the Contractor and agrees that the making of such payment does not relieve the surety of any of its obligations under the bond.
- 5. The Contractor has complied with and settled all requirements pertaining to any wage-rate provisions.
- 6. The Contractor has submitted all required mill tests and analysis reports to the Director.
- 7. The Contractor has furnished the Construction Compliance with Specifications and Plans Certification. Provide the Director with a notarized final certification of compliance with the requirements of Section 105 to accompany the final estimate. Certification must be on a form provided by the Director.
- 8. The Contractor has submitted and the County has accepted all as-built drawings and certified surveys.
- 9. The Contractor has furnished all required manufacturers' warranties to the Director.

9-8.2 Reserved

9-9 Reserved

9-10 Offsetting Payments.

- 1. After settlement or final adjudication of any claim of the County for work done pursuant to a construction contract with any party, the County may offset such amount from payments due for work done on any construction contract, excluding amounts owed to subcontractors, suppliers, and laborers, which it has with the party owing such amount if, upon demand, payment of the amount is not made within 60 days to the County.
- 2. Offsetting any amount pursuant to (1) above shall not be considered a breach of Contract by the County.

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EXHIBIT F INSURANCE REQUIREMENTS

CERTIFICATES OF INSURANCE

- (1) The Contractor shall obtain and maintain such insurance as will protect it from: (1) claims under workers' compensation laws, disability benefit laws, or other similar employee benefit laws; (2) claims for damages because of bodily injury, occupational sickness or disease or death of its employees including claims insured by usual personal injury liability coverage; (3) claims for damages because of bodily injury, sickness or disease, or death of any person other than its employees including claims insured by usual personal injury liability coverage; and (4) from claims for injury to or destruction of tangible property including loss of use resulting there from -- any or all of which claims may arise out of, or result from, the services, Work and operations carried out pursuant to and under the requirements of the Contract Documents, whether such services, Work and operations be by the Contractor, its employees, or by Subcontractor(s), or anyone employed by or under the supervision of any of them, or for whose acts any of them may be legally liable.
- (2) This insurance shall be obtained and written for not less than the limits of liability specified hereinafter, or as required by law, whichever is greater.
- (3) The Contractor shall require, and shall be responsible for ensuring throughout the time the Agreement is in effect, that any and all of its Subcontractors obtain and maintain until the completion of that Subcontractor's work, such of the insurance coverages described herein as are required by law to be provided on behalf of their employees and others.
- (4) The Contractor shall obtain, have and maintain during the entire period of the Agreement insurance policies, which contain the following information and provisions:
 - (A) The name and type of policy and coverages provided;
 - (B) The amount or limit applicable to each coverage provided;
 - (C) The date of expiration of coverage;
 - (D) The designation of the County as an additional insured and a certificate holder (This requirement may be excepted for workers' compensation and professional liability Insurance);
 - (E) The following clause must appear on the Certificate of Insurance:

Should any material change occur in any of the above described policies or should any of said policies be canceled before the expiration date thereof, the issuing company shall mail at least thirty (30) calendar days' written notice to the County.

(5) If the initial, or any subsequently issued Certificate of Insurance expires prior to the completion of the Work or termination of the Agreement, the Contractor shall furnish to the County, in triplicate, renewal or replacement Certificate(s) of Insurance not

later than thirty (30) calendar days prior to the date of their expiration. Failure of the Contractor to provide the County with such renewal certificate(s) shall be considered justification for the County to terminate the Agreement.

- (6) Contractor shall include the County, the County's agents, officers and employees in the Contractor's General Liability and Automobile Liability policies as additional insureds.
- (7) If the County has any objection to the coverage afforded by other provisions of the insurance required to be purchased and maintained by Contractor in accordance with the requirements of the Contract Documents on the basis of its not complying with the Contract Documents, the County shall notify Contractor in writing thereof within thirty (30) calendar days of the delivery of such certificates to the County. Contractor shall provide to the County such additional information with respect to its insurance as may be requested.
- (8) The Contractor shall obtain and maintain the following insurance coverages as provided hereinbefore, and in the type, amounts and in conformance with the following minimum requirements:



Lee County Insurance Requirements

Minimum Insurance Requirements: Risk Management in no way represents that the insurance required is sufficient or adequate to protect the vendors' interest or liabilities. The following are the required minimums the vendor must maintain throughout the duration of this contract. The County reserves the right to request additional documentation regarding insurance provided

a <u>Commercial General Liability</u> - Coverage shall apply to premises and/or operations, products and completed operations, independent contractors, contractual liability exposures with minimum limits of:

> \$1,000,000 per occurrence \$2,000,000 general aggregate \$1,000,000 products and completed operations \$1,000,000 personal and advertising injury

b. Business Auto Liability - The following Automobile Liability will be required and coverage shall apply to all owned, hired and non-owned vehicles use with minimum limits of:

\$1,000,000 combined single limit (CSL); or \$500,000 bodily injury per person \$1,000,000 bodily injury per accident \$500,000 property damage per accident

<u>Workers' Compensation</u> - Statutory benefits as defined by FS 440 encompassing all operations contemplated by this contract or agreement to apply to all owners, officers, and employees regardless of the number of employees. Workers Compensation exemptions may be accepted with written proof of the State of Florida's approval of such exemption. Employers' liability will have minimum limits of:

\$500,000 per accident \$500,000 disease limit \$500,000 disease – policy limit

*The required minimum limit of liability shown in a. and b. may be provided in the form of "Excess Insurance" or "Commercial Umbrella Policies." In which case, a "Following Form Endorsement" will be required on the "Excess Insurance Policy" or "Commercial Umbrella Policy."



Lee County Insurance Requirements

Verification of Coverage:

- Coverage shall be in place prior to the commencement of any work and throughout the duration of the contract. A certificate of insurance will be provided to the Risk Manager for review and approval. The certificate shall provide for the following:
 - a. Under the Description of Operations, the following must read as listed:

"Lee County, a political subdivision and Charter County of the State of Florida, its agents, employees, and public officials are automatic additional insureds and includes an automatic waiver of subrogation with regard to general liability. The certificate holder is an additional insured on a primary and noncontributory basis with regards to general liability."

b. The certificate holder must read as follows:

Lee County, a political subdivision and Charter County of the State of Florida P.O. Box 398 Fort Myers, Florida 33902

Special Requirements:

- 1. An appropriate "Indemnification" clause shall be made a provision of the contract.
- 2. It is the responsibility of the general contractor to ensure that all subcontractors comply with all insurance requirements.

EXHIBIT G RELEASE AND AFFIDAVIT

COUNTY OF
STATE OF FLORIDA
Before me, the undersigned authority, personally appeared
who after being duly sworn, deposes and says:
(1) In accordance with the Contract Documents and in consideration of paid,
claims demands, damages, costs and expenses, whether in contract or in tort, against Lee County, Florida (the "County"), its Board of County Commissioners, employees and agents relating in any way to the performance of the Agreement between Contractor and the County, dated,, for the period from to
(2) Contractor certifies for itself and its subcontractors, materialmen, successors and assigns, that all charges for labor, materials, supplies, lands, licenses and other expenses for which the County might be sued or for which a lien or a demand against any Payment Bond might be filed, have been fully satisfied and paid.
(3) Contractor agrees to indemnify, defend and save harmless the County, its Board of County Commissioners, employees and agents from all demands or suits, actions, claims of liens or other charges filed or asserted against the County arising out of the performance by Contractor of the Work covered by this Release and Affidavit.
(4) This Release and Affidavit is given in connection with Contractor's [monthly/final] application for payment No
CONTRACTOR:
By: (signature of the executive officer)
Its: (title of the executive officer)
Date:

Witnesses				
[Corporate Seal]				
STATE OF				
COUNTY OF				
The foregoing instrument was presence or □ online notarized behalf of the corporation.	zation, this	day of _		, by
behalf of the corporation. He	e/she is perso	nally known to	o me or ha as identifi	s produced cation and did (did
not) take an oath.				
My Commission Expires:(Signature of I	Notary)		
Name:(Legibly Printed)				
(AFFIX OFFICIAL SEAL)	1	Notary Public,	State of_	···
	C	Commission N	o.:	

EXHIBIT H CHANGE ORDER FORM



Lee County Construction Contract Change Order

OUT THE WAY IT			Chang	e Oraci	
Print Form			Number:		
	A Change Order requires approval by the Department Director for expenditures under \$50,000, approval by the County Manger for expenditures between \$50,000.00 and \$99,999.99, or approval by the Board of County Commissioners for expenditures over \$100,000.00.				
Contract / Project Name:					
Contractor:					
Contract #:	Pr	roject #: Bid #:			
Lee County Projec	et Manager:	Account #:			
Fiscal Staff:			Date of Request:		
Purpose of Change Order: Description: Attachments:(List documents supporting change)					
Change i	in Contract Price	Dollar Amount	Change in Contract Time	Calendar Days	
Original Contract P	rice		Original Contract Time		
Previous Change O	rder Total		Net Change from Previous Change Orders		
Contract Price Prior	to this Change Order		Contract Time Prior to this Change Order		
Net Increase (Decre	ase) of this Change Order		Net Increase (Decrease) of this Change Order		
Contract Price with A	All Approved Change Orders		Contract Time with All Approved Change Orders		
			on by the CONTRACTOR constitutes an accord and its arising out of, or incidental to, the above mention		
	Contractor Signature	(Print & Sign N	Name) Date Accepted		
	Contact Em	ail Address	Contact Phone #		

Lee County Board of County Commissioners

2115 Second Street, 1st Floor - Fort Myers, FL 33901 PO Box 398 - Fort Myers, FL 33902-0398 **Main Phone**: (239) 533-8881

EXHIBIT I SUPPLEMENTAL SPECIFICATIONS

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I hereby certify that these Supplemental Specifications have been properly prepared by me, or under my responsible charge:

Supplemental Specification Section(s): 8-3.2, 102, 200 and 430			
Signature:	Avelino Cancel Digitally signed by Avelino Cancel DN: C=US, E=acancel@leegov.com, O=Lee County DoT, CN=Avelino Cancel Date: 2024.07.09 15:19:00-04:00	annun,	
Date:	July 9, 2024	CENS: CENS	
Engineer of Record:	Avelino Cancel		
Florida License No.:	68497	No. 68497	
Firm Name:	Lee County DOT	★ ★ STATE OF	
Firm Address:	5560 Zip Dr	SOME PARTY	
City, State, Zip Code:	Fort Myers, FL 33905	MONALEMIN	
Cert. of Authorization No:			

DIVISION I-GENERAL REQUIREMENTS AND COVENANTS

PROSECUTION AND PROGRESS - PROSECUTION OF WORK - GENERAL (SUBMISSION OF WORKING SCHEDULE). (REV 5-20-21) (FA 7-7-21) (FY 2023-24)

SUBARTICLE 8-3.2 is deleted and the following substituted:

8-3.2 General: For this Contract, submit the following schedules and reports.

8-3.2.1 Contract Schedule: Submit to the Engineer for acceptance a Critical Path Method (CPM) Contract Schedule for the project within 30 calendar days after execution of the Contract or at the preconstruction conference, whichever is earlier.

The Contract Schedule shall include detailed schedule diagrams and schedule data as described below that shows how the Contractor intends to complete the work within the Contract Time. Any weather days that affect the Critical Path will be added as they occur. When the project includes a Maintenance of Traffic plan, the work breakdown structure (WBS) or project activity codes for the Contract Schedule shall be consistent with the Contract Maintenance of Traffic plan, showing activities for each discrete Contract activity to be accomplished within each Maintenance of Traffic phase. When the project does not include a Maintenance of Traffic plan, the WBS or project activity codes shall be consistent with the phasing shown in the Contract Documents. Include activities for deliverables and reviews in the schedule. Sufficient liaison shall be conducted and information provided to indicate coordination with utility owners having facilities within the project limits. The schedule must incorporate the utility work schedules included in the Contract Documents, unless changed by mutual agreement of the utility company, the Contractor and the Department. Show the interdependence (logic) of the utility work schedule activities with other schedule activities in the Contract Schedule for acceptance by the Department, unless otherwise approved by the Engineer.

Failure to include any element of work or any activity relating to utility work will not relieve the Contractor from completing all work within the Contract Time at no additional time or cost to the Department, notwithstanding the acceptance of the schedule by the Department.

The Contract Schedule may indicate a completion date in advance of the expiration of Contract Time. However, the Department will not be liable in any way for the Contractor's failure to complete the project prior to expiration of Contract Time. Any additional costs, including extended overhead incurred between the Contractor's scheduled completion date and the expiration of Contract Time, shall be the responsibility of the Contractor. The Contractor shall not be entitled to claim or recover any such costs from the Department.

Acceptance by the Engineer of the Contract Schedule or any updates shall not be construed as approval of any particular construction methods or sequence of construction or to relieve the Contractor of its responsibility to provide sufficient materials, equipment and labor to guarantee the completion of the contract in accordance with the Contract Documents.

8-3.2.2 Schedule Submissions: Develop the schedule in Precedence Diagram Method (PDM) format.

Each schedule submission and monthly update shall include a minimum of the following six items:

- 1. Submit the files electronically in the current Department version of Oracle Primavera P6 format by exporting the full schedule to an .xer file format.
- 2. A Gantt chart grouped by WBS, then phase, sorted by early start then total float. The chart shall include the following columns:
 - a. Activity ID
 - b. Activity Name
 - c. Calendar
 - d. Activity Type
 - e. Original Duration
 - f. Remaining Duration
 - g. Duration % Complete
 - h. Early Start
 - i. Early Finish
 - j. Late Start
 - k. Late Finish
 - 1. Total Float

The chart shall also include activity bars using the Oracle Primavera P6 default color coding for the bars. The chart shall be submitted as a Portable Document Format (.pdf) file and formatted on 11 inch by 17 inch landscape oriented sheets, with the activity table and bars.

- 3. A Gantt chart with the same columns and bars listed in 8-3.2.2(2), but filtered for the longest path, not grouped but sorted by early start, then early finish. The chart shall be submitted as a.pdf file and formatted on 11 inch by 17 inch landscape oriented sheets, with the activity table and bars.
- 4. The Schedule log for the calculated schedule, submitted as a.pdf file and formatted on 8-1/2 inch by 11 inch portrait oriented sheets.
 - 5. A schedule narrative report with the following information:
 - a. Current project schedule status and identify potential

delays

b. A description of the progress made since the previous

schedule submission

- c. Objectives for the upcoming 30 calendar days
- d. Indicate if the project is on schedule, ahead of schedule or

behind schedule.

1. If ahead or behind schedule, indicate the specific

number of calendar days.

2. If behind schedule, include a detailed recovery plan that will put the schedule back on track or identify the alleged delay event for which a preliminary request for an extension of Contract Time has been submitted, which if granted by the Department, will account for the amount of time the project is behind schedule, or provide a fully supported request for a Contract Time extension, which if granted by the Department, will account for the amount of time the project is behind schedule.

e. Description of the current critical path and indicate if the critical path has changed in the last 30 calendar days.

f. Discussion of current successes or problems that have affected either the critical path's length or have caused a shift in the critical path within the last 30 calendar days.

g. Identify specific activities, progress, or events that may reasonably be anticipated to impact the critical path within the next 30 calendar days, either to affect its length or to shift it to an alternate path.

h. List all changes to schedule logic, calendars, calendar assignments, activity types, activity names, changes to constraints, added activities or duration changes (original and remaining) that have been made to the schedule since the previous submission.

For each change, describe the basis for the change and specifically identify the affected activities by activity ID.

i. Identify any and all activities, either in progress or scheduled to occur within the following 30 days that require Department participation, review, approval, etc.

6. A detailed logic report that provides a list of activities in the schedule sorted by activity ID, no grouping and submitted as a .pdf file and formatted on 8-1/2 inch by 11inch portrait oriented sheets. For each activity listed, the report shall include the activity's predecessors and successors, including the relationship type and lag.

For each submission of the Contract Schedule and monthly update, the Engineer will have 21 days to accept the Contract Schedule or monthly update or to schedule a meeting, if needed, within that time, with the Contractor to resolve any problems that prevent acceptance of the schedule. Attend the meeting scheduled by the Engineer, and submit a corrected schedule to the Engineer within seven days after the meeting. The process will be continued until a Contract Schedule or monthly update is accepted or accepted as noted by the Engineer.

Upon the Engineer's acceptance of the Contract Schedule, submit monthly updates of the Contract Schedule, including all months prior to the start of construction, reflecting progress through the monthly estimate cut-off date within 8 calendar days after the monthly estimate cut-off date.

The Engineer may withhold monthly payments due for failure of the Contractor to submit an acceptable schedule or monthly updates within the time frame described herein.

8-3.2.3 Schedule Content: All schedule submissions shall comply with the following content guidelines as appropriate to the specific submission:

The schedules shall include the sequence, order, and interdependence of major construction milestones and activities. Include procurement of project specific materials and equipment that require submittals and are not readily available, long-lead time items, and key milestones identified by the Contract.

Show the sequence, order, and interdependence of activities in which the work is to be accomplished. Include allowance for Department review, acceptance and return of submittals, samples and shop drawings where Department acceptance is specifically required (in accordance with 5-1.4.6 of the standard specifications). In addition to construction activities, schedule activities shall include the submittals, procurement, and Department or Utility activities:

1. Submittal activities shall include submittal preparation, Department review, and acceptance of submittals. If the Department's action on any submittal is

"Not Accepted" or "Revise and Resubmit", a new series of submittal preparation activities shall be inserted into the schedule. Predecessor for the new submittal preparation activity will be the original acceptance activity and the successor of the new acceptance activity will be the fabrication/delivery activity for the equipment or material.

2. Procurement activities shall include all project specific materials and equipment that require submittals and are not readily available, fabrication of special material and equipment, and their installation and testing.

3. Show activities of the Department or Utilities that affect progress and contract-required dates for completion of all or parts of the work.

Detailed schedule data: shall conform to the following:

1. All activities shall be assigned to a specific project calendar within the software. Specific project calendars will be defined within the software to include planned work days and planned non-work days. These project calendars will include both Contractor and Contract defined holidays and suspension days as non-workdays. The use of global calendars is not permitted. Project calendars shall not inherit holidays from global calendars. Work shifts identified for each project calendar shall be consistent with the Contractor's planned workdays. Actual start and finish date times shall be consistent with the work shift hours on the calendar assigned to the activities.

2. A cost account drawdown schedule depicting amount earned by month through project completion. The sum total of the cost accounts shall be equal to the current contract value.

3. At a minimum, each schedule activity shall contain codes by:

a. Responsibility: for items of work that are not in control of the Contractor including, but not be limited to, Department, Utility, etc.

b. Phasing: identify the appropriate Maintenance of Traffic

The required coding can be accomplished by WBS codes or project

activity codes.

phase or subphase.

- 4. Key milestones as identified by Contract. At a minimum, the start and finish of each Maintenance of Traffic phase or subphase shall be represented by a milestone activity. Milestone activities shall be start or finish milestone type activities, as appropriate.
- 5. All non-procurement activities must be less than or equal to 20 workdays unless approved by the Engineer. Sufficient explanation for activities over 20 days shall be provided for the Engineers review and approval.
- 6. All activities must include adequate detailed activity descriptions to describe the work that is included. In each activity, provide sufficient detail so that the amount of work the activity involves is clearly communicated.
 - 7. Only two open-ended activities (the first and the last) are allowed.
- 8. Constraints shall only be used for "project start," and "project completion." Constraints shall not override logic. The project start constraint shall be the Contract execution date. The project completion date shall be the Contract completion date plus any Contract defined holidays and suspension days included on the longest path. The use of any other imposed constraints is not allowed without specific approval by the Engineer. Any other desired constraints must be submitted to the Engineer with the rationale for the use of each desired additional constraint. If allowed by the Engineer, the rationale should be recorded in the activity's notebook field. Mandatory constraints (start and finish) violate network logic and shall not be used.

9. Out of sequence progress shall be corrected on each monthly update by modifying the schedule logic so that the logic accurately depicts the actual sequence of the work. The Retained Logic setting shall be used when calculating the schedule.

10. All changes to activities shall be recorded with a note in the activity notebook field. The notebook entry shall include, as a minimum, the date and reason for the change, as well as reference to a document wherein the Engineer acknowledges and accepts the change.

11. The use of resource leveling, either manual or automatic, is

prohibited.

Contractor.

12. Activities shall not be deleted from the schedule. If an activity is not required, then upon approval from the Engineer, the Contractor shall provide actual start and finish dates equal to the date of the Engineer's approval, shall add the word "Removed" to the activity name and shall make a notebook entry explaining the reason for removing the activity from the planned work.

13. Activities shall be added to the schedule upon notifying the Engineer when it is determined that a Contract work element was omitted from the previous accepted Contract schedule or update or if work is added to the Contract, or to reflect a time extension in accordance with 8-7.3.2.

14. Activity names shall only be changed to reflect changes to the scope of the work element represented by the activity, not as a way to remove and replace activities. Changes to activity names shall be approved by the Engineer.

15. Unless otherwise approved by the Engineer, activity types shall be defined as milestones, level-of-effort, WBS summary or task dependent. Resource dependent type shall not be used. All activities shall have percent complete type set to duration and duration type set to either fixed duration and unit/time or fixed duration and units.

8-3.2.4 Weekly Meetings: Attend weekly meetings scheduled by the Engineer to discuss Contract progress, near term scheduled activities, including utility relocations, problems and their proposed solutions. Submit a Three-Week Planning Schedule at each weekly meeting, showing the Contract schedule activities completed in the previous week and planned for the next two weeks. Develop the Three-Week Planning Schedule in Gantt chart format from the updated Contract schedule, identifying completed, current and planned activities. Designate all activities that are controlling work items as determined by the currently accepted Contract Schedule

8-3.2.5 Float: Float is defined as the amount of time the finish of an activity can be delayed. Two kinds of float are possible: Total float is how much an activity can be delayed without affecting the finish date of the project or an intermediate deadline (constraint); it is the difference between the late finish date and the early finish date. Free float is how much an activity can be delayed without affecting its earliest successor.

Float is not for the exclusive use or benefit of either the Department or the

Use of float suppression techniques, such as preferential sequencing (arranging critical path through activities more susceptible to Department caused delay), special lead/lag logic restraints, zero total or free float constraints, extended activity times, positive relationship lags, or imposing constraint dates other than as required by the contract, shall be cause for rejection of the project schedule or its updates. The use of finish-to-start lags greater than zero days, start-to-start lags that exceed the duration of the predecessors, or finish-to-finish lags that exceed the duration of the successor, shall not be used without the expressed approval of the

Engineer. The use of Resource Leveling, or similar software features, for the purpose of artificially adjusting activity durations to consume float and influence the critical path is expressly prohibited.

Negative float shall not be a basis for requesting time extensions. Any extension of time shall be addressed in accordance with 8-3.2. 7. Scheduled completion dates that extend beyond the Contract completion date, evidenced by negative float, may be used in computations for assessment of payment withholdings. The use of this computation is not to be construed as a means of acceleration.

8-3.2.6 Critical Path: The critical path shall be defined as the longest path and is represented by the longest logical path through the remaining activities, resulting in the earliest calculated completion date. There may be more than one longest path in the schedule. However, the use of float suppression techniques as described in 8-3.2.5 shall not be used to force the schedule to have more than one longest path.

8-3.2.7 Time Extensions: The Contractor is responsible for submitting a request for Contract Time extension in accordance with 8-7.3.2. An extension of time shall be considered only to the extent that an event impacts the completion date of the schedule such that the impacted completion date is later than the Contract completion date as adjusted previously. The Pre-event Schedule is defined as the latest accepted update of the Contract schedule, statused (actual start dates added, actual finish dates added, remaining durations adjusted) to the end of the day before the start of the event. The Post-event Schedule is defined as the accepted update of the Contract Schedule just after the end of the event and destatused (actual start dates removed, actual finish dates removed, remaining durations adjusted) to the end of the last day of the event.

As a minimum, time extension requests shall contain:

- 1. A descriptive summary of the event
- 2. A written analysis supported by a:
 - a. Pre-event Schedule
 - b. Post-event Schedule
- 3. Schedule submittal items 1, 2, 3 and 4 required in 8-3.2.2 shall be provided for the Pre-event and Post-event schedules

Time extensions shall not be considered for proposals that do not include full documentation described above. Once a time extension has been approved by the Engineer, the Contract completion date shall be changed accordingly.

8-3.2.7 Performance of Work: By submitting a schedule, the Contractor is making a positive assertion that the project has been and will be constructed in the order indicated in the schedule. Prosecute the work in accordance with the latest accepted Contract Schedule or update. Any costs associated with meeting milestones and completing the project within the authorized Contract Time will be borne solely by the Contractor.

8-3.2.8 As-Built Schedule: Submit an as-built schedule along with the Qualified Acceptance Letter if the Contactor elects the use of the Qualified Acceptance Letter as described in 9-8.1. The as-built schedule shall describe the actual order and start and stop times for all activities by the Contractor.

DIVISION II-CONSTRUCTION DETAILS

SECTION 102 – MAINTENANCE OF TRAFFIC (LCDOT 09/15/2023)

<u>Article 102-4:</u> Delete Article 102-4 in its entirety and substitute the following:

The Contractor shall submit a complete Traffic Control Plan (TCP) to the Engineer for review and approval at the preconstruction meeting. Prepare the TCP in conformance with and in the form prescribed in the current version of the FDOT Design Manual, FDOT Standard Plans – Index 102 series and the MUTCD. Indicate in the plan a TCP for each phase of activities. Take responsibility for identifying and assessing any potential impacts to a utility that may be caused by the TCP, and notify the County in writing of any such potential impacts to utilities. The TCP shall be signed and sealed by a professional engineer duly registered in the State of Florida.

Engineer's approval of the TCP does not relieve the Contractor of sole responsibility for all utility impacts, costs, delays or damages, whether direct or indirect, resulting from Contractor initiated changes in the design or construction activities from those depicted in the original Contract Documents, and which effect a change in utility work different from that shown in the utility plans, joint project agreements, interlocal agreements or utility relocation schedules.

The County reserves the right to reject any Traffic Control Plan. Obtain the Engineer's written approval before beginning work using a TCP. The Engineer's written approval is required for all modifications to the TCP. The Engineer will only allow changes to the TCP without proper documentation on an emergency basis.

Pedestrian and/or bicycle traffic must be safely and continuously maintained through, or around, work zones on highway or streets where pedestrian and bicyclists were permitted at the start of the project. The Contractor shall submit a plan for approval signed and sealed by a professional engineer duly licensed in the State of Florida for the safe passage of pedestrian and bicycle traffic prior to closure of any existing pedestrian facility. Facilities constructed to specifically provide access for pedestrians in or around work zones must be consistent with the current United States Access Board-PROWAG. The plan shall detail the rerouting of users, duration of closure and proposed construction methods for any temporary facility.

All costs for maintenance of traffic including preparation of Traffic Control Plan shall be in included in the price bids for Pay Item 102-1 – Maintenance of Traffic, except as expressly provided for in other pay items in the contract.

Subarticle 102-9.15: Delete Subarticle 102-9.15 in its entirety and substitute the following:

Temporary Traffic Detection Technology – Maintain all existing actuated or traffic responsive mode signal operations for main and side street movements for the duration of the contract and restore any loss of detection within 12 hours. Video detection shall be

installed at the beginning of the project before any loss of detection has occurred. The contractor shall furnish, install and operate video detection using technology approved by Lee DOT Traffic Division and as listed in Lee County DOT Traffic Plan Specifications posted on the county website at https://www.leegov.com/dot/traffic/trafficstandard

SECTION 200 - PRIMING AND MAINTAINING

Article 200-8.1: The following Article shall be added in its entirety:

The Contractor shall select the particular type of base material and prime coat material that are compatible and adhere together. If the prime coat is damaged by subsequent construction equipment, including the paving machine, construction shall be stopped, and the base/prime shall be removed and replaced.

SECTION 430 – PIPE CULVERTS AND STORM SEWERS (LCDOT 10/27/2017)

Article 430-3: Articles 430-3.1 is modified as follows:

Pipe material for storm sewer or cross drain installations under pavement shall consist of steel reinforced concrete pipe in accordance with Section 449 and shall be a minimum of Class III or HE-III.

DIVISION III-MATERIALS

Reserved

EXHIBIT J SPECIAL PROVISIONS

1. CONTRACT TIME

Contractor shall perform the contracted work fully, entirely, and in accordance with the Contract Documents within the Contract Time specified herein. If the Contractor fails to complete the work within the time stipulated, liquidated damages will apply in accordance with Standard Specification Article 8-10 Liquidated Damages for Failure to Complete the Work.

Contract Time: 120 Calendar Days Commencement Date to Final Acceptance

2. PERMITS

None

3. GEOTECHNICAL INFORMATION

None

4. WARRANTY

If within three (3) year after Final Acceptance, any Work is found to be Defective due to base failure, Contractor shall correct it promptly after receipt of written notice from the County. Prior to Final Payment, Contractor shall provide and maintain through three (3) years after final acceptance a Warranty Bond for base failures. Contractor will repair damage caused by the failure and/or repair.

5. MATERIAL TESTING

For all naturally occurring excavated materials the County reserves the right to sample and test the material at the source at the County's cost and sole discretion. The intent of this testing would be to confirm the material produced at the site meets specification requirements prior to delivery and acceptance at the project site. The County shall notify the contractor and supplier as soon as discrepancies are noticed, if any. Once notified of material issues the Contractor and supplier shall submit to the County for approval a plan to immediately rectify material properties and consistency prior to delivery and acceptance at the project site.

EXHIBIT K TECHNICAL SPECIAL PROVISIONS

I hereby certify that these Technical Special Provisions have been properly prepared by me, or under my responsible charge:

Technical Special Provision Section(s): T465, T468, T508			
Signature:			
Date:			
Engineer of Record:			
Florida License No.:			
Firm Name:			
Firm Address:			
City, State, Zip Code:			
Cert. of Authorization No:			

TECHNICAL SPECIAL PROVISIONS

FOR

SECTION T465 - MOVABLE BRIDGES CONSTRUCTION COUNTY PROJECT NUMBER: CN-1414-218

MATLACHA BASCULE BRIDGE EMERGENCY REPAIRS

BRIDGE NO. 124134

This Technical Special Provision has been digitally signed and sealed by <u>Travis M. Kimmins</u>, <u>PE</u> on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Engineer of Record: Travis M. Kimmins, PE

Date: 07/31/2024

Florida License No.: 87786

Firm Name: Hardesty & Hanover, LLC

Firm Address: <u>5110 Eisenhower Blvd</u>, <u>Suite 310</u> City, State, Zip Code: Tampa, Florida 33634

Pages: 1-4, 8-15

No 87786

No 87786

STATE OF

ORIDA GINTHINGS SONAL ENGINEERING

This Technical Special Provision has been digitally signed and sealed by <u>Marco Lara, PE</u> on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Engineer of Record: Marco Lara, PE

Date: 07/31/2024

Florida License No.: 78414

Firm Name: Hardesty & Hanover, LLC

Firm Address: 5110 Eisenhower Blvd., Suite 310

City, State, Zip Code: Tampa, FL 33634

Pages: <u>5-7</u>, <u>11-15</u>



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MOVABLE BRIDGES

T465-1. GENERAL

T465-1.1. Description

The work under this Technical Special Provision includes rehabilitation of movable bridge systems and components, bridge operators, and functional checkout of the movable bridge as required by the Contract Documents.

T465-1.2. Standards

Portions or all of certain recognized industry or association standards or specifications referred to as a requirement in these specifications are to be considered as binding as though reproduced in full unless supplemented and modified by more stringent requirements of the Contract Documents. Unless otherwise stated the reference standard or specification which is current at the time of the Contract Documents are issued will apply. The following abbreviations will be used throughout the Contract Documents to designate standard specifications for material and workmanship:

American Associate of State Highway and Transportation Officials	AASHTO
American Bearing Manufacturers Association	ABMA
American Iron and Steel Institute	AISI
American National Standards Institute	ANSI
American Society of Mechanical Engineers	ASME
American Welding Society	AWS
International Organization for Standardization	ISO
National Lubricating Grease Institute	NLGI
National Fluid Power Association	NFPA
Society of Automotive Engineers	SAE

T465-1.3. Existing Information

The dimensions and elevations shown are based on the Existing Bridge Plans and may not represent as-built conditions.

T465-1.4. Field Measurements and Surveys

Conduct field surveys to verify existing dimensions shown on the plans, prior to development of submittals. Clearly indicate field verified dimensions on all submittals. Conduct field measurements and surveys as required to supplement information provided in the plans and as necessary to provide a complete and satisfactory fitting and operational installation.

T465-1.5. Products

Provide materials and equipment meeting the requirements of this TSP. Where particular products are called for, provide said products unless otherwise approved by the Engineer.

T465-1.6. Coordination

Coordinate installation and testing of the machinery and electrical systems.

Coordination of Shop Drawings: Provide Shop Drawings meeting the requirements of FDOT Specification 5.

T465-1.7. Quality Control

Perform all work under this Technical Special Provision in accordance with an approved Quality Control Plan meeting the requirements of FDOT Specification 105.

T465-1.8. Observation of Work

Meet the requirements of FDOT Specification Section 105.

T465-1.9. Documentation of Tests

Meet the requirements of FDOT Specification Section 105.

T465-1.10. Equipment Start-Up

- A. Verify that work is complete, and equipment is in operable condition.
- B. Observe start-up and adjustment. Record date and time of start-up, and results.
- C. Provide equipment demonstrations to the Engineer. Record times, valve adjustment and setting turns and additional information required for operation and maintenance manuals.
- D. Provide the services of a factory authorized start-up representative at the time of energizing and for the Functional Checkout as required in this Technical Special Provision.

T465-1.11. Inspection and Acceptance of Equipment

Prior to Functional Checkout, verify that equipment is tested, operational, clean, and ready for operation.

Assist Engineer with review. Prepare list of items to be completed and corrected.

T465-1.12. Submittals

T465-1.12.1. General

Meet the requirements of FDOT Specification Section 5. As a minimum, but not limited to, include the following in the Shop Drawings:

- A. Before preparation of shop drawings for new components that must mate with the existing structure, obtain all necessary field dimensions to provide proper fit of the new components. Where new components are to be attached to the existing structure where existing fasteners exist, take care that any fastener holes in the new components will mate with the bolts/holes in the existing material. If reaming larger holes in existing components, verify edge distances are acceptable.
- B. Mark standard drawings showing more than one model or size or selection, to indicate the model, size or type proposed.
 - C. Submit shop drawings for new equipment as required by the specifications.
- D. Submit shop drawings when installation and mounting details of components are different from Plans or not specifically detailed on the Contract Documents.

T465-1.12.2. As-Built Drawings and Operations Manual

As a condition precedent to Final Acceptance under FDOT Specification 5-11, prepare and submit to the Engineer for review and approval complete as-built drawings and operations and maintenance instructions for all new components meeting the requirements of FDOT Specification 5-1.4.4. In addition, provide an electronic copy of all supplementary documents in a format acceptable to the Engineer.

Prepare as-built drawings from the marked up working drawings. Provide the working drawings for checking purposes.

Operations and maintenance instructions shall comprise a compilation of the manufacturers' catalog data, installation, and maintenance instructions of all new mechanical and electrical components. The County will add this information to the existing operations and maintenance manual.

Ensure that as-built drawings are essentially the same as the working plans and shop drawings submitted for approval but showing all the changes made during construction.

T465-1.12.3. Product Data

Submit products meeting the requirements of FDOT Specification 5-1.4.4.

T465-1.13. Training

Provide on-site training for operations and maintenance personnel, in addition to any factory training which is provided under Technical Special Provisions Section T468.

Train maintenance personnel during the last 15 days of the Operational Testing Period in the maintenance and operation of the bridge. All training shall be completed prior to final acceptance.

T465-1.14. Maintenance and Operations Training

Provide a minimum of 8 hours of on-site training for the new specified equipment for 3 persons. Coordinate the time of the training with the County.

Include the following topics:

A. Lubrication for new machinery and hydraulic equipment.

- B. New hydraulic equipment.
- C. Preventive maintenance for all new machinery.

Perform maintenance training prior to the end of the Operational Testing period.

T465-2. TRAFFIC AND SIDEWALK GATE ASSEMBLIES

T465-2.1. Description

T465-2.1.1. General

Furnish and install traffic gate and sidewalk gate assemblies as indicated in the Plans, MUTCD, AASHTO Standard Specifications for Movable Highway Bridges, and this Technical Special Provision.

T465-2.1.2. References

Florida Department of Transportation Design Standard Index Drawing 508-T01 "Traffic Control Devices for Movable Span Bridge Signals".

T465-2.1.3. Shop Drawings

- 1. Include Manufacturer's data sheet for each new gate assembly, including arms, gongs, and lights. Include drawing for dimension and interconnect wiring for each gate.
 - 2. Installation instructions and operation and maintenance data.
 - 3. Anchor bolt sizing calculations, signed and sealed by a Florida Registered

Professional

T465-2.2. Materials

T465-2.2.1. Traffic Gates

- A. Furnish and install gate arms equipped with steel hot-dip galvanized, sectional bolt-on type counterweights with at least 10% adjustment and lights in accordance with the Design Standards Index No. 508-T01.
- B. Ensure that during the opening and closing cycles, the gate arm will begin with zero velocity and accelerate smoothly, reaching maximum velocity at mid stroke (45 degrees) then decelerate smoothly to zero velocity at full stroke (90 degrees) without whip or bounce, all within a maximum of 13 seconds for a full opening or closing cycle. Ensure the electrically operated gate will operate the arm with a wind speed of 80 mph.
- C. Furnish and install main arm shafts with a minimum of 2 inch diameter, AISI 4150 with a minimum tensile strength of 140,000 psi, mounted in heavy duty ball bearings and lubricated from inside the housing. Furnish and install a fully enclosed, all gear, direct drive unit running in oil bath and ductile iron gear case. Non-metallic gears, belts, cams, pulleys, linkages, chains or connecting rods are not acceptable in drive train.
- D. Furnish and install totally enclosed, Class F insulation motors, operating on 480 V, 3 phase, and specifically designed for gate actuator, capable of operating at full load when the voltage to the motor is plus or minus 10% of rated voltage. Ensure the motor has the capacity to perform all necessary functions to the satisfaction of the Engineer based on torque required for gate arm and accessories. Ensure the braking mechanism is equipped with a solenoid release, automatic motor brake that automatically releases when hand crank is inserted. Provide a hand crank to manually raise or lower gate arm in event of power failure. Provide a limit switch that interrupts the control power circuit whenever the hand crank is engaged.
- E. Fabricate the operator housing from 1/4 inch thick welded plate aluminum. Paint housing inside and outside with an industrial wash primer followed by a quick dry enamel. Equip housing with 4-1 inch holes and provide anchor bolts and template for installation. Provide front and rear access doors hung on bronze, slip-off type full cross hinges with stainless steel hinge pins. Provide held in place doors with pad lockable door locks and sealed with neoprene strip gaskets. Provide limit switches on both doors. Provide door limit switches that interrupt the control circuit, but can be defeated (circuit closed) by pulling the plunger out and automatically reset when the door is closed.

- F. Furnish and install limit switch unit assemblies consisting of eight individual switches with one set of normally open and one set of normally closed contacts each. Furnish and install contacts with a UL rating of not less than 10 A at 120 VAC. Use corrosion resistant non-ferrous materials for limit switch body, shafts and cams. Ensure that gear limit switches to the drive mechanism are in step with the actual gate position at all times, whether operation is by power or manual mode. Do not use cams or screws to set the limit switches or designs requiring battery backup methods to ensure position control in the event of power failure.
 - G. Equip gate with a manual disconnect switch.
- H. Install screw clamp, pressure plate type terminal blocks inside the housing on the roadway side and terminate all control wires on terminal blocks and clearly label all circuits. Number conductors to match wiring diagram. Complete all electrical connections required to provide proper operation of the traffic gates, lights, gongs, etc.
- I. Gate Arm. Furnish and install gate arms to the length specified in the Contract Documents constructed of 6061-T6 rectangular aluminum tubing and fiberglass with ultra-violet resistive treatment. Ensure that the gate arm is covered on both sides with alternating 16 inch reflective red and white 3M "High Intensity Prismatic" reflective sheeting. Provide a retained pivot shear pin base for each gate arm so that when excessive force is applied to arm, a spring loaded latch pin engages, once the arm has rotated, to prevent the arm from rotating back into traffic. Design shear pin base and lightweight arm assembly for easy, rapid reinstallation or replacement by one person.
- J. Furnish and install warning lights with the housing constructed of molded plastic, which are moisture and corrosion proof equipped with 2-way visibility, 4 inch diameter red lens with a 100,000 hour LED lamp. Ensure the light circuit is equipped with a heavy duty, solid state, fully factory wired flasher, with two alternately flashing circuits with a flash rate of 0.50 seconds OFF and one steady burn circuit. Mount the strobes on the gate arms as shown in the Plans. Provide all mounting hardware, solid state flashing circuitry, clearly labeled terminal block, heat sink, and transformer when required.
- K. Furnish and Install, on On-Coming gates, a heavy-duty, 120 VAC motor driven, industrial quality gong of cast aluminum construction; machined for proper fit with gasketed rear door hinged with stainless steel hinge pins and equipped with a swing bolt with provisions for a pad lock. Ensure the gear train is journaled in oil-impregnated, bronze bearings and driving a cam and hammer to strike gong shell approximately 100 times per minute. Ensure the gong shell is 8 inch in diameter, constructed of spun silicon bronze held in place with tamper resistant, stainless steel stud and protected by a cast aluminum weather guard.

T465-2.2.2. Sidewalk Gates

- A. Furnish and install horizontal, swing type, sidewalk gates. Provide electrically operated operating machinery with manual cranking ability at locations shown in the Plans.
- B. Size anchorages for new gate installations on gate pilasters per Manufacturer's recommendations and make by drilled anchor bolts, set with epoxy adequately sized to support all attachments.
- C. During the opening and closing cycles, the gate arm begins with zero velocity and accelerates smoothly, reaching maximum velocity at mid stroke (45 degrees) then decelerating smoothly to zero velocity at full stroke (provide range of operation adjustable from 90 to 180 degrees) without whip or bounce. Standard operating time is 13 seconds for full opening or closing cycle. Sized to handle the weight of the arm used and be able to operate against a wind speed of 50 mph.
- D. Furnish and install a fully enclosed, all gear, direct drive unit running in oil bath and ductile iron gear case. Non-metallic gears, belts, cams, pulleys, linkages, chains or connecting rods are not acceptable in drive train.
- E. Furnish and install totally enclosed, Class F insulation motors, operating on 480 V, 3 phase, and specifically designed for gate actuator, capable of operating at full load when the voltage to the

- F. motor is plus or minus 10% of rated voltage. Ensure the motor has the capacity to perform all necessary functions to the satisfaction of the Engineer based on torque required for gate arm and accessories. Ensure the braking mechanism is equipped with a solenoid release, automatic motor brake that automatically releases when hand crank is inserted. Provide a hand crank to manually open or close gate arm in event of power failure. Provide a limit switch that interrupts the control power circuit whenever the hand crank is engaged.
- G. Fabricate the operator housing from 1/4 inch thick welded plate aluminum. Paint housing inside and outside with an industrial wash primer followed by a quick dry enamel. Equip housing with 4-1 inch holes and provide anchor bolts and template for installation. Provide front and rear access doors hung on bronze, slip-off type full cross hinges with stainless steel hinge pins. Provide doors held in place with pad lockable door locks and sealed with neoprene strip gaskets. Provide limit switches on both doors. Provide door limit switches that interrupt the control circuit, but can be defeated (circuit closed) by pulling the plunger out. Provide limit switches that automatically reset when the door is closed.
 - H. Equip gate with a manual disconnect switch.
- I. Install screw clamp, pressure plate type terminal blocks inside the housing on the roadway side and terminate all control wires on terminal blocks and clearly label all circuits. Ensure that the color code or number conductors to match wiring diagram. Complete all electrical connections required to provide proper operation of the sidewalk gates, lights, etc.
- J. Furnish and install gates to lengths in the Contract Documents constructed of 6061-T6 aluminum tubing.
- K. Furnish and install one warning light on each gate with the housing constructed of molded plastic; moisture and corrosion proof with 2 way visibility, 4 inch diameter red lens with a 100,000 hour LED lamp. Equip the light circuit with a heavy duty, solid state, fully factory wired, flasher. Provide all mounting hardware, solid state flashing circuitry, a clearly labeled terminal block, a heat sink, and a transformer when required.
 - L. Furnish and install "No Pedestrians" sign on each gate as shown in the Contract
 - M. Documents.
 - N. Furnish and install limit switch unit assemblies consisting of eight individual switches
- O. with one set of normally open and one set of normally closed contacts each. Furnish and install contacts with a UL rating of not less than 10 A at 120 VAC. Use corrosion resistant nonferrous materials for limit switch body, shafts and cams. Ensure that gear limit switches to the drive mechanism are in step with the actual gate position at all times, whether operation is by power or manual mode. Do not use cams or screws to set the limit switches or designs requiring battery backup methods to ensure position control in the event of power failure.

T465-2.2.3. Barrier Gate

- A. Furnish and install replacement barrier arm shall be energy absorbing, capable of stopping a 5,000 pound vehicle traveling at up to 50 mph. Arm construction shall be a double rail aluminum tube with three 0.5 inch diameter, 6x25 stranded, series 300 stainless steel cable.
- B. Cover both sides of the arm with alternating 16 inch reflective red and white engineering grade sheeting.
- C. Barrier arm mounting tubes shall be rectangular tube steel sections, hot-dip galvanized with sectional bolt-on counterweights with at least 10 percent adjustment and lights. Attachments for the barrier to the mounting arms and truss cables shall be stainless steel.
- D. During the opening and closing cycles, the gate arm shall begin with zero velocity and accelerate smoothly, reaching maximum velocity at mid stroke (45 degrees) then decelerating smoothly to zero velocity at full stroke (90 degrees) without whip or bounce. Standard operating time is 16 seconds for full opening or closing cycle. Sized to handle the weight of the arm used and be able to operate against a wind speed of 50 mph.

E. Furnish and install main arm shafts with a minimum of 2.25 inch diameter, AISI 4150 steel with a minimum tensile strength of 140,000 psi, mounted in heavy duty ball bearings, lubricated from inside with an o-ring seal on the outside.

T465-2.2.4. Construction Requirements

T465-2.2.4.1. General

Verify system voltage matches gate requirements, install in accordance with manufacturer's instructions. Make connections to control system, manually test hand crank, and power test traffic gates to ensure proper operation of gate operator, gate arm lights and gate interlock.

Adjust gate arm lengths and mounting heights to match existing and as shown in the Plans.

Size anchorages for gate installations on gate pilasters per manufacturer's recommendations and make by drilled anchor bolts, set with epoxy.

T465-3. COUNTERWEIGHT AND BRIDGE BALANCING

T465-3.1. Description

T465-3.1.1. Terminology

The terms "balance state" and "balance condition" are used interchangeably.

T465-3.1.2. Requirements for Balance States

Properly balance the bridge for all angles of operation. Consider the properly balanced condition for the bascule leaf as follows:

A. Final Balance State: 3 kips (+0.5 kip/ -0 kip) as measured at the toe of the leaf, when in the fully seated position. The angle of the center of gravity (alpha) should be between -20 and +20 degrees when fully seated. If the alpha value is within this range prior to construction, the final balance shall fall within this range. If the alpha value is outside of this range prior to construction, the balance block adjustments shall move the alpha value closer to this range. Based on the initial bridge balance condition the Engineer may adjust the range of imbalance.

B. Interim Balance State: During the course of construction, the permitted imbalance shall be no greater than 3 kips (+1 kip/-0 kip). The Engineer may consider an imbalance state outside this range for specific operations. For proposed imbalance outside this range, submit to the Engineer for review and approval a detailed request along with calculations completed in accordance with the Specifications. Based on the initial bridge balance condition the Engineer may adjust the range of imbalance.

T465-3.1.3. General Scope of Work

General: The work specified in this Section is required for the single leaf bascule span; items are not necessarily listed in the order of occurrence.

- A. Perform an initial balance test to determine the unbalance of the bridge prior to construction.
 - B. Develop and submit Leaf Balancing Plan.
 - C. Adjust existing blocks as required for achieving balancing.
- D. Achieve and maintain acceptable interim balance states for the bascule leaves throughout the course of the work.
- E. Achieve an acceptable final balance state for the bascule leaves upon completion of the work.
- F. Hire a Specialty Engineer to perform the dynamic hydraulic cylinder pressure measurements and recording for Balance Verification Testing.
 - G. Field survey and document final dimensional configuration of adjusting blocks.

T465-3.1.4. Work Restriction and Requirements

- A. Meet the requirements of FDOT Specification 7 and 103.
- B. Maintain a Balanced Leaf Condition at all times.

T465-3.1.5. Counterweight Details

Verify existing balance block configuration and number of spare blocks on site prior to preparing balance calculations.

T465-3.1.6. Counterweight Blocks (Cast Iron)

Cast-iron Blocks:

- A. Material: ATSM A48 or equivalent.
- B. Unit Weight: Minimum 450 pcf.
- C. Quantity: Determine from balance calculations.
- D. Protective Coating: Match existing block coating. In the event the existing coating cannot be determined, provide the following coating.
- 1. Coat Tar Epoxy: Abrasive blast and apply one coat of coal tar epoxy coating minimum 8 mils dry film thickness. Optional: Hot-dipped galvanized in accordance with ASTM A153.

T465-3.1.7. Quality Assurance

Counterweight Calculations: Provide signed and sealed span balance report by a Professional Engineer registered in the State of Florida.

Provide Specialty Engineer for performing dynamic hydraulic cylinder pressure measurements and recording data for Balance Verification Testing. Specialty Engineer shall have a minimum of three years' experience in dynamic hydraulic cylinder pressure recording and data interpreting of at least three movable bridges and hydraulic systems of similar size and type. Submit the experience record of the Specialty Engineer per FDOT Specification 105 for approval by Engineer.

T465-3.1.8. Shop Drawings

At the completion of the Specialty Engineer's Balance Verification Testing, submit revised erection drawings documenting the final configuration of adjusting blocks in the counterweight pockets (main girders).

- A. Span Balancing (Interim and Final): Submit description of proposed equipment to be utilized, proposed balancing procedures, and proposed reporting forms.
 - B. Leaf Balancing Plan:
 - 1. Prepare and submit a Leaf Balancing Plan for the single leaf.
 - 2. Balance State Report:
- a. Submit final balance state after all work on the leaf is complete but prior to the Specialty Engineer conducting Balance Verification Tests.
- b. As a minimum, the balance state reports must contain the following: hydraulic cylinder pressures with associated leaf positions, magnitude of span unbalanced moment (WL), centroid angle alpha relative to the horizontal line trunnion (alpha), average trunnion friction (AVTF), imbalance plots, accompanying weather, wind, and temperature measurements, quantification of the location of the center of gravity of the leaf, summary and conclusions, and Signed and Sealed by Professional Engineer registered in the State of Florida.

T465-3.2. Construction Requirements

T465-3.2.1. Notifications

Notify the Engineer a minimum of 28 days prior to the date that is anticipated that the Specialty Engineer's Balance Verification Testing is going to be required.

Submit final Balance Report to and confirm with the Specialty Engineer the date for Balance Verification Testing a minimum of 7 days prior to the date; failure to submit the report or confirm the date may result in a delay of the Balance Verification Testing; delays caused as a result from the failure to hire Specialty Engineer or confirm testing date with Specialty Engineer is not a basis for claim.

T465-3.2.2. Span Balancing - General

- A. Obtain, as a minimum, pressure measurements as follows: At leaf angular positions of every 5 degrees from Fully Closed to Fully Open. For a minimum of three cycles of the leaf; the intent is to obtain three measurements at each angular position, the second and third measurement being made after the leaf is cycled back to the closed position.
- B. Given the numerous variables that may have an effect on the values of the pressure measurements, schedule testing generally as follows in order that measurements taken on one day may be better correlated with measurements taken on another day:
 - 1. In the morning at sunrise so as to minimize the differential in ambient temperature.
- 2. At a time with no wind; if wind exists, preferably the wind should not be in a direction along centerline of the bridge (perpendicular to the bridge deck surface).

T465-3.2.3. Shop Drawings

As a minimum, submit the following for review and approval:

- A. Leaf Balancing Plan:
- 1. Prepare and submit a Leaf Balancing Plan. The plan shall account for the specific conditions and work for each leaf.
 - B. Span Balance Verification Tests:
 - 1. Submit the results of the span balance verification test to the Engineer for approval.

T465-3.2.4. Initial Balance State

Establish the initial balance state of the single leaf utilizing the pressure transducer method. Contractor to hire a Specialty Engineer to perform the dynamic pressure transducer test to verify the initial balance state.

If appropriate, revise Leaf Balancing Plan and submit for the record.

T465-3.2.5. Balance Verification Testing

Perform dynamic hydraulic cylinder pressure testing which includes, at minimum, the following items:

- A. Formulate a detailed test procedure to ascertain the final balance of the leaf. The test procedure will be based on obtaining and analyzing pressure readings from the hydraulic system. Submit the proposed test procedure to the Engineer for approval.
- B. Furnish and install the required transducers, all cabling and transmission equipment, data acquisition equipment and strip chart recorders and produce fully documented reports detailing the results of the measurements.
 - C. Submit the following items to the Engineer for approval.
- D. Description of the procedure including type and method of installation of hydraulic pressure transducers, method of transmission of low-level signals, data acquisition equipment and/or strip chart recorders.
- E. Layout of span drive machinery showing proposed location of transducers, power supplies, cable or radio links, data acquisition equipment and all associated cabling.
- F. Provide elementary wiring diagrams of interconnection of pressure transducers, power supplies, data acquisition equipment and strip chart recorders and sample computations of:
 - G. Hydraulic pressures to forces.
 - H. Span imbalance.
 - I. Curve fitting and basis for friction correction.
- J. Connect 5000 pounds per square inch hydraulic pressure transducers to the blind and rod end test ports of both main hydraulic cylinders for a total of four transducers, per leaf. Use transducers with accuracies not less than 0.5 percent full-scale output. Use output voltage/current compatible with the data acquisition/strip chart recorder utilized. Use transducer power supply as recommended by the manufacturer.

- K. Connect output leads from each transducer to either the computer-based data logger streaming the data to disk at a minimum 1000 hertz sample rate or a five channel minimum strip chart recorder with at least 10 inch wide chart paper. Provide an inclinometer to record continuous leaf angle to either the data logging equipment or the strip chart recorder. Use an adjustable chart speed with a setting of at least 10 inches per minute. Use a recorder capable of recording data from at least four channels if it is equipped with a dedicated event marker or five channels if a channel is used to record events.
- L. Record simultaneously the blind and rod end pressures of both main hydraulic cylinders versus span opening angle to a suitable scale. Use the same scale and the chart speed for all transducers, if a strip chart recorder is used. Make at least three opening/closing runs, when the wind speed is less than five miles per hour and the bridge deck is visibly dry. Prior to taking measurements ensure that all air is bled from the system.
- M. Convert cylinder pressures to force by applying fundamental hydraulic system relationship calculations for each plot for both opening and closing. Use the constant velocity region. Process the data to give leaf imbalance (kip-feet) versus opening angle, corrected for friction, about the center of roll. Prepare plots of total span imbalance.

T465-3.2.6. Balance Verification Tests and Final Balancing

Provide safe access to the bridge for the Specialty Engineer to conduct Balance Verification Tests. Place additional adjusting blocks, remove existing blocks, or change arrangement of adjusting blocks as required by the Specialty Engineer.

Record changes for submittal of final adjusting block configuration.

T465-3.2.7. Acceptance and Final Documentation

Testing by the Specialty Engineer that verifies that a leaf is in an acceptable final balance state is the basis that the leaf is acceptable with respect to balancing.

Obtain test results from the Specialty Engineer and combine with revised drawings showing final adjusting block configurations; submit as final documentation of the final balance state.

T465-4. MOVABLE BRIDGE FUNCTIONAL CHECKOUT

T465-4.1. General Requirements

Develop written procedures for and perform functional acceptance testing of the movable bridge operation as defined herein to determine compliance with the requirements for construction, safety, maintenance, and operation of the facility as required in the Contract Documents. Include in the tests verification of all functions related to leaf operation, maintenance, and safety whether specifically defined herein or required of the Contract.

Working drawings must be available at the time of the functional checkout and that unavailability of the working drawings is cause to cancel functional checkout, start-up, and commissioning.

Collect and assemble full documentation of the test requirements and provide in booklet form meeting the requirements of FDOT Specification 5-1.4.4.2.

Detail and submit in shop drawing format for approval, test procedures for specific tests to be performed and the acceptance criteria for each test. Each procedure will be reviewed before and after testing by the Engineer.

Ensure this testing demonstrates the functionality of the bridge components as well as the complete operation of the constructed facility. Shop test individual systems prior to this procedure as required herein or under individual item specification.

Verify all mechanical, electrical and structural systems integration requirements.

T465-4.2. Material Requirements

Functional Acceptance Test Books: Integrate and assemble information required for Functional Test into a book (approximately 8 1/2 in. x 11 in.). Neatly label the book with a descriptive title, the name of the project, bridge number, the location, year of the test, the Owner, the Contractor and the Engineer. Provide black on white background, easily legible, copies of drawings, figures, and data. Bind the

information into each instruction (test procedure) section between rigid plastic or cloth binding covers. Submit four bound copies for review to the Engineer. Submit a PDF electronic version of the book with searchable text and table of content links to each section.

T465-4.3. Construction Requirements

T465-4.3.1. General

- A. The Functional Acceptance Tests consists of three stages:
 - 1. Preliminary Checkout.
 - 2. Functional Tests (Phase C).
 - 3. Operational Testing Period.
- B. Engineer Notification: Provide adequate notice (ten working days minimum) prior to all tests so that the Engineer can witness and accept the method and result of the testing.
- C. Manufacturer Representatives: Arrange to have at the site, for each test, appropriate representatives of the bridge drive and electrical control equipment. These representatives must be prepared to make adjustments to the equipment, locate faults or defects and correct them, and obtain from the manufacturer without delay new parts or replacements of apparatus which, in the opinion of the Engineer, do not perform satisfactorily.
- D. Field Tests: Arrange for and provide all necessary field tests, as indicated herein and as directed by the Engineer, to demonstrate that the entire modified or reworked area is in proper working order and is in accordance with the Contract Documents.

E. Phasing of Tests:

- 1. Functions which have been completed to the extent required of the testing may be accepted in part, provided the deficiencies have been documented, an approved plan of corrective action has been submitted, and an approved method of providing a safe substitute function has been implemented (example, gate functions may be provided by temporary flagmen).
- 2. Completion of Final Testing (also known as "Phase C") will be accepted only when the entire integrated system has been tested and accepted, all temporary functions have been removed, and all required records and documentation have been provided.

T465-4.3.2. Tests

The Functional Acceptance Tests: Present specific, step-by-step procedures to demonstrate and provide data for evaluation of each function of the movable bridge. Include for each test quantitative measurements including torque, amperage, watts, pressure, temperature, speed, RPM, and other parameters required by the Engineer to evaluate functionality. Include method of measurement, and their method of recording. Refer to the testing requirements of TSP Sections T468 and T508.

Acceptance Criteria: Present Functional Acceptance criteria that is concise and void of ambiguities. State specific performance of each component or function with regards to the requirements of the design and each unique condition of performance. Include all normal and emergency operating conditions as defined in the Contract Documents and design specifications and all maintenance modes of operation.

T465-4.4. Start-up Requirements

T465-4.4.1. General

Implement start-up procedures that protect the equipment from damage and ensure safe working conditions during bridge operations throughout construction. This section identifies specific requirements related to movable bridge start-up operations.

T465-4.4.2. Machinery Operation

- A. Movable leaf shall not be operated by the drive machinery until all of the following conditions have been met:
- 1. Hydraulic Cylinder connections have been completed including installation of shims and tensioning of fasteners. Any temporary measures shall first be approved by the Engineer. Cylinder and cylinder clevis bearings shall have been installed and lubricated.

- 2. Hydraulic System shall have completed the Hydraulic Static Field Test and the test results have been reviewed and approved by the Engineer.
 - 3. Pressure relief and all new valve settings have been tested and approved.
- B. The bascule leaf shall not be operated at greater than the specified creep speed until all of the following conditions have been met:
 - 1. All conditions listed above for operation of movable span by the drive machinery.
- 2. Hydraulic Systems shall have completed the Hydraulic Unit Dynamic Field Test and the test results have been reviewed and approved by the Engineer.

T465-4.5. Preliminary Checkout

Prior to scheduling the Functional or Acceptance Test, perform preliminary checks and make adjustments on the new work, such that the system is in general working order. Ensure that all control wiring has been completely and properly labeled. Coordinate this work with the maintenance of traffic plan such that any failure of the system being tested would not interfere with the scheduled use of the bridge. Perform shop tests prior to this phase as specified in the applicable Articles.

- A. The Preliminary Checkout shall include testing of the following systems and subsystems and check-out in the following order:
 - 1. Functionally test the control and hydraulic system. Record data as required.
- B. During the Preliminary Checkout, record the following data (each record shall have "time" as the base measurement):
- 1. Chart recorded pressure and flow readings for the hydraulic power unit for a full cycle of operation.
- 2. Chart recorded ammeter readings for each main drive motor throughout a full cycle of operation.
- 3. Chart record the Timing Sequences of electrical inputs to each Hydraulic Power Unit. Include all limit switches.
- C. Record times and additional information required for operation and maintenance manuals.

During the Preliminary Checkout perform and record Functional Tests results. The Preliminary Checkout shall be used to troubleshoot the entire facility, such that the proper function can be demonstrated during the Functional Checkout without extensive modifications. Extreme caution shall be observed when operating systems for the first operations. Refer to Section T465-4.4 for start-up requirements. Submit Preliminary Checkout records to the Engineer in duplicate a minimum of one week prior to scheduled Functional Testing.

T465-4.6. Functional Tests

Arrange for and provide all necessary field tests, as indicated herein and as directed by the Engineer. Demonstrate the correct operation of the entire modified or reworked area in accordance with the Contract Documents during this phase of functional checkout. Test both manual and automatic operations. Upon approval of the Engineer to proceed, conduct the Functional Tests. The tests shall include but are not limited to the following:

- A. Bridge Sequence: Demonstrate sequenced operation of the bridge in normal mode on utility power and emergency power.
- B. Emergency Stop: Demonstrate the emergency stops of the Bascule Leaf during each phase (i.e., accelerating and decelerating, full speed, creep speed) of opening and closing the bridge and during each direction of span lock and gate operation. Demonstrate recovery to resume sequence of operation from point of interruption.
 - C. Bridge Machinery:
 - 1. Demonstrate operation of all lubrication systems.
 - 2. Demonstrate live load shoe contact and alignment of the bascule rear and rest pier

joints.

D. Hydraulic Functions

- 1. Main Drive Power Unit: Operate the Main Drive Power Units under the following conditions and record pressure, operation time, timing sequences, and motor current draws.
 - a. Operation with pump group 1 or 2 only and both cylinders on-line.
 - 2. Drive System Hydraulic Cylinder Assemblies.
- a. Demonstrate emergency (total loss of electrical power) lowering of the leaf from the fully open position using the needle valves located on the hydraulic cylinder assemblies.
- b. Demonstrate cylinder cushion performance driving bridge into load shoe and lowering bridge via hydraulic cylinder needle valves.
- c. Demonstrate emergency lowering of bascule leaf using the manual needle valves on the hydraulic cylinder manifolds.
- E. Bumper Blocks: Demonstrate bumper block contact points relative to leaf position and contact face parallelism. Record clearances between bumper blocks with leaf open to normal full open position.
- F. Lubrication Systems: Demonstrate all lubrication systems associated with the new machinery subcomponents are fully operational. Demonstrate delivery of the lubricating agents to intended interfaces per subcomponent manufacturers recommendations.

T465-4.7. Operational Testing Period

Following successful completion of the Functional Tests, a 60 day Operational Testing Period will start and this testing period shall end on the last contract work day.

Repair or replace mechanical or electrical components of the bridge, agreed upon by the Department and the Contractor before the Pre-Construction meeting that becomes inoperative during the 60 day period at no cost to the County. Test any repaired or replaced components in accordance with the Contract Documents. The 60-calendar day testing period for repaired or replaced individual components shall begin immediately after that individual work is completed.

During this period, operate the leaf a minimum of four times per day, under the observation of the Engineer.

Replace any spare parts used during the operational testing period.

Repair or replace, at no cost to the County, any bridge equipment that becomes inoperative during the 60 day period. Maintenance other than specified in the established Maintenance Procedures will be accomplished by County forces during the 60 day period.

If correction of inoperative or defective equipment requires installation of components from a different manufacturer, or reconfiguration of components, the changes will be subject to approval by the Engineer. Additional functional testing of the corrected systems may be required and the 60-day Operational Testing Period may be increased or restarted at the sole discretion of the Engineer. Perform the tests at no additional compensation.

T465-5. METHOD OF MEASUREMENT

- A. Counterweight Adjustment (Balancing), Furnishing of CW Blocks and CW Pocket Cleaning: The work of maintaining the bascule leaf in an acceptable balanced condition and safe stable condition including adjusting the Counterweight as described in this Section will be measured as one Counterweight associated with one Bascule Leaf. All labor, materials, and equipment for counterweight adjustments including verification of existing balance block configurations, preparation of balance procedures, balance calculations, pressure gauge testing, furnishing of counterweight blocks, and cleaning of the counterweight pockets will be paid for by each Counterweight assembly.
- B. Movable Bridge Preventive Maintenance: The quantity will be paid at the Contract unit price of lump sum for the duration of days that the Movable Bridge Operator is maintaining the bridge.
- C. Operating Instructions: No separate measurement will be made toward furnishing operating instruction books, and providing bridge operations and maintenance training.

D. Movable Bridge Functional Checkout will be paid at the Contract lump sum price completed and accepted. No separate measurement will be made toward furnishing operating instruction books and providing bridge operations and maintenance training. No separate measurement will be made for work associated with pre-test, preliminary checkout, functional testing, and operational testing.

BASIS OF PAYMENT

Price and payment will be full compensation for all work specified in this Technical Special Provision, including furnishing and installing all equipment and materials.

Payment will be made under:

Pay Item No. 465-3-17	Movable Bridge - Counterweight, Adjust	EA
Pay Item No. 465-3-50	Movable Bridge - Counterweight, F&I, CW Blocks	EA
Pay Item No. 465-3-96	Movable Bridge - Counterweight, Clean, Pockets	EA
Pay Item No. 465-20	Movable Bridge - Preventive Maintenance	LS
Pay Item No. 465-21	Movable Bridge - Bridge Operator	LS
Pay Item No. 465-71-3	Movable Bridge - Functional Checkout, Phase C, Complete	LS

For traffic gates and sidewalk (pedestrian) gates: Pay Item No. 508-2-6 - Movable Bridge Gate, Furnish and Install - AS

TECHNICAL SPECIAL PROVISIONS

FOR

SECTION T468 - MECHANICAL CONSTRUCTION FOR MOVABLE BRIDGES COUNTY PROJECT NUMBER: CN-1414-218

MATLACHA BASCULE BRIDGE EMERGENCY REPAIRS

BRIDGE NO. 124134

This Technical Special Provision has been digitally signed and sealed by <u>Travis M. Kimmins, PE</u> on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Engineer of Record: Travis M. Kimmins, PE

Date: 07/30/2024

Florida License No.: 87786

Firm Name: Hardesty & Hanover, LLC

Firm Address: <u>5110 Eisenhower Blvd</u>, <u>Suite 310</u> City, State, Zip Code: <u>Tampa</u>, Florida 33634

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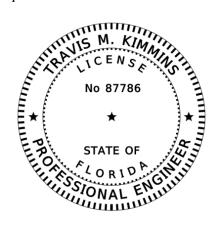


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MECHANICAL CONSTRUCTION FOR MOVABLE BRIDGES

T468-1. BASIC MECHANICAL REQUIREMENTS

T468-1.1. General

The work under this Technical Special Provision includes rehabilitation of movable bridge systems and components of the movable bridge as required by the Contract Documents.

Dimensions given in the Contract Documents are nominal and intended for guidance. Note any variations from nominal dimensions on the Shop Drawings.

T468-1.2. Definitions

- A. Bascule Span: All structural, mechanical, and electrical elements of the movable span, including the Bascule Leaf, and all associated trunnion bearings, machinery, power and control systems.
- B. Bascule Leaf: The movable portion of the roadway and sidewalk deck and its supporting elements, including the Bascule Girders, floor beams, brackets, barriers, handrails, roadway deck, sidewalk deck, counterweight, trunnions, and appurtenances which rotate about the trunnion axis during operation.
- C. Bascule Girder or Main Girder: The main longitudinal load carrying members of the Bascule Leaf (steel girders).
- D. Counterweight: The weight provided to balance the leaf including the counterweight concrete and associated reinforcing steel.
- E. AASHTO Movable Specifications: AASHTO LRFD Movable Highway Bridge Design Standard Specifications.
 - F. Blend: A smooth transition between surfaces with a slope less than or equal to 1:3.
- G. Centerline Trunnion (Trunnion Centerline): The theoretical axis of rotation of the Bascule Leaf.
- H. Tight Integration (Well Integrated): The methods, practices, techniques, standards, and procedures by which a seamless hardware, software, electrical, mechanical and structural interfacing of electrical sub-systems, hydraulic sub-systems, mechanical sub-systems and structural components is provided. Tight integration is determined (in part) by the Engineer through submittals, shop testing of complete systems and sub-systems, shop drawings, and incidental items as required by the Engineer. Provide a rehabbed movable bridge system that is reliable, repeatable and free of anomalies and intermittent operation.

T468-1.3. Integration

Coordinate hydraulic, electrical, and mechanical equipment, systems and sub-systems integration with structural components and disciplines.

T468-1.4. Supervisory and Technical Personnel

Provide the following supervisory and technical personnel at a minimum and submit qualifications according to the requirements of FDOT Specification Section 105.

- A. Certified Hydraulic Technician:
- 1. Provide a Certified Hydraulic Technicians or Certified Industrial Hydraulic Mechanics certified by the International Fluid Power Society. Use Certified Technician/Mechanics having prior experience on similar sized systems for installation, start-up, piping and flushing of hydraulic systems. Use Certified Technicians/Mechanics with at least five years of experience in the design, fabrication, and installation of hydraulic systems of the size, type and scope described within contract documents for this specific project.
- 2. Use only personnel with demonstrated skill in this type of work for installation and adjustment of hydraulic components.
 - B. Millwrights:
 - 1. General:

For field installation and alignment of machinery/hydraulic components and other designated components required under the provisions of the Contract Documents, utilize millwright(s), with a minimum of ten years of experience in the assembly and alignment of hydraulic cylinders of similar size, type and character. Millwright(s) shall be present for the full duration of all field installations.

2. Supervisory Millwright:

Provide the services of an approved supervisory millwright who is a millwright by trade. Responsibilities include but are not limited to the supervision of field alignment and installation of the machinery and other designated work.

3. Millwright:

Utilize approved millwright(s) for field alignment and installation of the machinery and other designated work to be provided under the provisions of these Technical Special Provisions and the Contract Documents. For alignment and installation procedures for machinery components, have Supervisory Millwright initial all submittals.

T468-1.5. Working Contract Documents and Shop Drawings

Provide Shop Drawings in accordance with FDOT Specification Section 105 and as follows, including but not limited to:

- A. Detail and accurately dimension all parts, indicate limits of accuracy and tolerances required for machining, surface finishes and allowances for fits. Unless otherwise called for, provide the fits and finishes in accordance with ANSI B46.1 and ANSI B4.1.
- B. Provide an outline drawing (master assembly drawing) depicting general layout of the machinery including location and orientation relative to the larger bridge structure. Provide sub-assembly and subsequent detail drawings depicting all operating machinery and parts relevant to the scope of work to be performed on this contract. Ensure the drawing contains all information necessary for computing the strength of the machinery parts. Provide sufficiently detailed drawings to permit the duplication of the machinery parts by others, including assembly and disassembly instructions.
- C. Any deviation from what's contained in the Contract Plans and in these Technical Special Provisions should be submitted to the Engineer for approval with an explanation why the change was made and how this new change affects the design.
- D. Assembly drawings must be provided in order for detailed components to be approved.
- E. Show the estimated weights of individual parts and total weights of all parts in the details for machinery and castings.
- F. Include in submittals for each manufactured item manufacturer's descriptive literature, drawings, diagrams, performance and characteristic curves, and catalog cuts, and include the manufacturer's name, trade name, catalog model or number, nameplate data, size, certified layout dimensions, capacity, specification reference, including ASTM, ANSI, and any other applicable references, and all other information necessary to establish Contract compliance.
- G. Provide complete shop bills of materials for all machinery parts. If the bills are not shown on the shop drawings, furnish prints of the bills in the same manner as specified for the drawings.
- H. State the material and material specifications for each part. Where ASTM Specifications or any of the Standard Specifications are used, give the designating numbers of such specification.
- I. Furnish complete assembly and erection drawings. Indicate identifying marks, match marks and essential dimensions for locating each part or assembled unit with respect to the bridge or equipment foundation. Cross-reference every part to the drawing sheet on which it is detailed. Clearly show and detail marks or indentations of any type on the drawings. In general, avoid die stamping or scoring unless otherwise called for on the Contract Documents.
- J. Detail all components and assemblies separately to assure correct fabrication, assembly, and erection.

- K. Submit assembly drawings of machinery prior to submission of the corresponding individual parts.
 - L. Do not use mirror image or opposite hand drawings.
 - M. Give each shop drawing a suitable title to describe the parts detailed therein.
- N. Where equipment or materials are specified to conform to requirements of the standards of an organization such as American Society of Mechanical Engineers (ASME), Underwriters Laboratories (UL), American Gas Association (AGA), and American Refrigeration Institute (ARI), which use a label or listing as method of indicating compliance, submit proof of such conformance for review. The label or listing of the specified organization will be acceptable evidence. In lieu of the label or listing, submit a certificate from an independent testing organization adequately equipped and competent to perform such services and approved by the Engineer, stating that the item was tested in accordance with the specified organization's test methods and that the item conforms to the specified organization's standard or code.
- O. Provide detailed written installation procedure for all machinery components. The procedure shall include sequence of installation, alignment methods, bolt tightening methods and torque values for all bolts.
- P. Provide manufacturer's lubrication literature for every new machinery component that requires lubrication.
 - Q. Provide machinery painting procedures and materials.
 - R. Indicate procedures for field structural welding with inspection requirements.
- S. Provide attachment methods and details where new components are connected to the existing structure, including bolt holes and edge dimensions. Dimension fastener locations to the centerlines of machinery components.
- T. Clearly indicate and accurately detail minimum and maximum tolerances for all dimensions requiring a fit. Verify the maximum and minimum clearance and interference between mating components for all fits do not exceed the specified standard limits.
- U. Clearly differentiate any dimensions that are prior to machining from final dimensions. Provide a final dimension for any dimension that is prior to machining.
- V. As used herein, certified test reports refer to reports of tests conducted on previously manufactured materials, or equipment identical to that proposed for use.
- W. As used herein, factory tests refer to tests performed on the actual materials or equipment proposed for use. Submit results of the test in accordance with provisions of the Contract Documents for laboratory test results.

T468-1.6. Construction Requirements

Construct in accordance with the Contract Documents and the applicable provisions of the AASHTO Movable Bridge Specifications.

Ensure that, unless specified in the Contract Documents or herein, dimensions between machined surfaces have a tolerance of 0.010-inch and machined surfaces have a flatness tolerance of 0.030-inch.

Design and construct temporary members in accordance with the provisions of FDOT Specification Section 5.

T468-1.6.1. Notification of Shop Work

Comply with FDOT Specification Sections 5 and 105.

T468-2. MATERIALS AND EQUIPMENT

T468-2.1. Materials

T468-2.1.1. General

Provide products that are compatible with other products of the mechanical work, and with other work that requires interface with the mechanical work, including mechanical and electrical connections and control devices.

Provide each piece of new mechanical equipment and apparatus with a permanent, corrosion-resisting metal nameplate stamped with the name of the manufacturer, the catalog or model number, and the rating or capacity of the equipment or apparatus.

Shop Inspection and Testing: Comply with the requirements of FDOT Specification Sections 5, 6, and 105.

Use materials that conform to the current ASTM specifications. An alternative material may be requested in writing; the request must provide complete data justifying suitability of the alternate materials and must be approved by the Engineer prior to initiating fabrication or construction.

Furnish materials and equipment that are the standard catalogued products of manufacturers regularly engaged in production of such materials or equipment and be the manufacturer's latest standard design that complies with the Contract Documents. Where duplicate components are required, furnish products of the same manufacturer. However, the component parts of the system need not be the products of the same manufacturer.

All components listed are to be replaced in-kind. In the event of the item being no longer available, submit reasoning to the Engineer in writing for equivalent substitution. Provide manufacturers data cutsheets for engineer approval prior to purchase.

T468-2.1.1.1. Description of Work

See Section 3.2 for detailed list of items to be replaced. Reference summarized scope of work items as follows:

- A. Furnish and install new Plain Spherical Bearings at Cardanic Ring assemblies.
- B. Furnish and install new Plain Spherical Bearings at Upper Clevis assemblies.
- C. Shim and adjust Live Load Shoe Assemblies.
- D. Shim and adjust Span Lock Assemblies.
- E. HPU and hydraulic system rehabilitation.
- F. Apply Touch-up paint to new equipment and any existing components that were impacted by the work.
 - G. Perform field testing to be witnessed by the Engineer.

T468-2.1.1.2. Qualifications

If the work is subcontracted, use a qualified subcontractor for this work. The Subcontractor shall have had at least ten years' experience in the design, fabrication, and installation of major bridge mechanical systems for civil engineering applications of this size and type.

T468-2.1.2. Pins

Provide all pins with accurate finishes and ample radii at fillets. Ensure they are round, true, smooth and straight, and have round fillets at shoulders.

Accurately machine and polish all journal-bearing areas on pins, with no trace of tool marks or scratches on the journal surface or adjoining shoulder fillets.

T468-2.1.3. Castings

Provide castings that conform to AASHTO Requirements.

Ensure all castings are free of cracks, cold shuts, shrink holes, blow holes, porosity, are free of loose scale and sand, fins, seams, gates, risers and other irregularities. Cast unfinished edges of castings neatly with rounded corners with inside angles having ample fillets.

Unless otherwise indicated, perform, in the manufacturer's shop, for each casting:

- A. Visual examination of all surfaces (100%) per ASTM A802, with Level II as the Acceptance Criteria. Linear discontinuities, cracks and tears are not permitted. Castings with test records meeting Level III may be considered for weld repair. All other discontinuities are unacceptable.
 - B. Liquid Penetrant exams in accordance with ASTM E165.

C. Magnetic Particle Testing (100 %) per ASTM E709, with acceptance criteria per ASTM E125. The Acceptance Criteria, as to the Type of Discontinuity and the Degree for acceptance, will be as follows:

Type I	Cracks/Hot tears	3/16" Maximum
Type II	Shrinkage	Degree 3
Type III	Inclusions	Degree 3
Type IV	Chaplets	Degree 2
Type V	Porosity	Degree 1

Surface discontinuities may be considered for weld repair.

D. Ultrasonic 100 percent volumetric examination per ASTM A609. All castings with solid sections of 4 inches thick or greater shall meet ASTM A609, Method A, Quality Level 3. Castings that do not pass this test will be rejected. Submit test results, whether positive or negative, to the Engineer.

Cast phosphor bronze castings into ingots and allow to cool, pour the casting from the remelted ingots. Furnish the chemical analysis of each heat, and ensure no alloy contains any more than 0.08% Sulphur. Perform physical tests in accordance with ASTM B22 Specification, and in addition, record the permanent set under a load of 350 psi for bearings. Cracks or other evidence of brittleness in compression test specimens after testing will be cause for rejection.

Suspend large castings and hammer all over.

Repair steel castings that develop cracks, flaws or other defects during hammering or from any other cause. The Engineer must approve Weld repair, after start of machining and/or assembly. Ensure all repairs conform to the required ASTM procedure.

If weld repair is approved by the Engineer following a review of the test results, submit detailed weld procedures, including a means to qualify the weld repair. Obtain approval from the Engineer before making any weld repairs. Perform weld repairs per ASTM A488 or equivalent, and radiographic examination of welds per ASTM E94.

T468-2.1.4. Forgings

Provide forgings that conform to AASHTO Specifications for Movable Bridges.

Perform, in the manufacturer's shop, for each forging:

A. Liquid Penetrant exams in accordance with ASTM E165 or Magnetic Particle exams in accordance with ASTM A275 and ASTM E709. Acceptance criteria of ASTM A788, Supplementary Requirements S18 and S19, shall apply.

B. Ultrasonic exams in accordance with ASTM A388 or ASTM E2375. Acceptance criteria of ASTM A788, Supplementary Requirement S20, Level BR and Level S, shall apply.

T468-2.1.5. Cylinder Support Bearings

Where required, provide plain spherical bearings of the self-aligning type that are sized to meet L-10 life (as defined by the AFBMA at which 90 percent of a group of bearings will survive the identical loading conditions) of 40,000 hours under the power requirements defined in the AASHTO Movable Specifications or shown in the Plans. Design sliding contact surface shall be steel on steel configuration. All pins and attachments shall be machined to the dimensions and tolerances as specified by the Bearing Manufacturer. Unless otherwise specified in the Plans, provide all plain spherical bearings with double-lip seals to retain the lubrication and guard the spherical surfaces from contamination. New plain spherical bearings shall receive grease recommended by Bearing Manufacturer.

Bearings shall be a standard product of the manufacturer. Provide certified dimensional check details for each bearing manufactured for this project.

T468-2.1.6. Fasteners

A. Provide all bolts for connecting machinery parts to each other and to supporting members as shown in the Contract Documents and conform to one of the following types, as specified in the Plans:

1. Structural bolts.

- 2. High-strength turned bolts, turned cap screws, and turned studs.
- B. Structural Bolts
- 1. Shall meet the requirements of ASTM F3125 Grade A325 Type 1. Ensure hole for the structural bolt is no larger than 1/16" over the nominal diameter of the bolt. Exclude threads from the shear plane.
 - 2. Use nuts that conform to ASTM A563 or A194, Grade DH or 2H, heavy hex series.
 - C. High-strength Turned bolts, cap screws, and studs.
 - 1. Turned fasteners shall meet the requirements of ASTM A449 Type 1.
- 2. Use only high strength bolts with heavy hexagonal heads. Wherever possible, install high-strength bolts connecting machinery components to structural elements or to other machinery components comprised of different thicknesses so that the bolt head is adjacent to the connected element with the least thickness.
- 3. Furnish high-strength turned bolts, turned cap screws, and turned studs with turned shanks and cut threads. Furnish turned bolts with semi-finished, washer-faced, hexagonal heads and nuts. Ensure all finished shanks of turned fasteners are 0.060-inch larger in diameter than the diameter of the thread, which determines the head and nut dimensions.
- 4. Ensure the shanks of all turned fasteners have a LC6 fit in the finished holes in accordance with ANSI B4.1.
- 5. Drill or ream-assemble all elements connected by bolts to assure accurate alignment of the hole and accurate clearance over the entire length of the bolt within the specified limits.
- 6. Use nuts that conform to ASTM A563 or A194, Grade DH, heavy hex series. Provide heavy series heads and nuts for turned bolts, screws, and studs.
- 7. Provide bolt heads, nuts, castle nuts, and hexagonal head cap screws dimensioned in accordance with ANSI B18.2.1, Hexagon Bolts and ANSI B18.2.2 Nuts.
- 8. Ensure the dimensions of socket-head cap screws, socket flathead cap screws, and socket-set screws conform to ANSI B18.3. Provide screws made of heat-treated alloy steel, cadmiumplated, and furnished with a self-locking nylon pellet embedded in the threaded section. Unless otherwise called for on the Contract Documents or specified herein, provide setscrews of the headless safety type with threads of coarse thread series and cup points. Do not use setscrews to transmit torsion nor as the fastening or stop for any equipment that contributes to the stability or operation of the bridge.
- 9. Unless otherwise called for, sub drill all bolt holes in machinery parts at least 0.030 inch smaller in diameter than the bolt diameter and ream assemble for the proper fit at assembly or at erection with the steel work after the parts are correctly assembled and aligned.
- D. Provide cap screws with threads that conform to the coarse thread series and have a Class 2A tolerance. For bolts and nuts, ensure the bolts conform to the coarse thread series and have a Class 2A tolerance. Furnish Class 2B nuts in accordance with ANSI/ASME B1.1.
 - E. Spot face bolt holes square with the axis of the hole.
- F. Do not use different size bolts when connecting components (i.e., gearbox to pedestal, bearing to pedestal). If a hole is over drilled requiring a bigger bolt, then furnish all bolts of the bigger size.
- G. Provide cotters that conform to SAE standard dimensions and are made of half-round stainless-steel wire, ASTM A276, Type 316.
- H. Provide anchor bolts for connecting machinery parts to masonry that comply with ASTM A307 material, hot-dipped galvanized per ASTM A153 unless otherwise approved by the Engineer. Furnish bolts as shown on the Contract Documents. Ensure the material and loading requirements is as shown on the Contract Documents. The filler material may be a non-shrink grout, Babbitt metal, or zinc.
- I. Provide each anchor bolt a heavy hex nut meeting ASTM A194 Grade 2H and a hardened plain washer under each nut meeting ASTM F436.

T468-2.1.7. Shims

Provide ASTM A666 type 304 or 316 stainless steel, full depth shim packs, drilled for all bolts that pass through, trim to the dimensions of the assembled unit. Thin brass precision thickness shims may be used for final adjustment.

Provide full tapered shims, if required to obtain the specified alignment tolerances, at no additional cost.

Do not use resins in lieu of shims.

T468-2.1.8. Span Lock Assemblies

Perform shimming and adjustment work on front guides and receivers for movable leaf alignment with approach span. Provide shims per Section 2.1.7.

T468-2.1.9. Live Load Bearing Assemblies

Provide live load shoes shim adjustment materials as shown in the Plans. See Section 2.1.7 for shim material requirements.

Coordinate work with span lock adjustment work and cylinder bearing replacement.

T468-2.1.10. Lubrication of Machinery

Provide standard grease fittings for a pressure system of lubrication for all new bearings and surfaces requiring external lubrication. Replace existing fittings supplying new bearings. Provide pressure fittings rated at a minimum 10,000 psi. Provide fittings with a steel check valve that will receive grease and close against backpressure.

Locate grease fittings in bearings or attached with 0.54-inch diameter schedule 80 minimum size extra strong, threaded steel pipe and forged threaded fittings so that grease is introduced directly into the grease grooves for distribution. Extend tubing from the bearings to convenient lubrication stations but keep lines as short as practical. In such cases, securely support and locate the tubing to protect it from damage and prohibit vibration during application of live load.

Supply one grease gun for each type fitting.

Immediately after the completion of fabrication, plug all grease fittings until components are installed and regular lubrication is started.

Furnish the bridge with an appropriate amount of proper lubricant for new and rehabilitated machinery. Store the lubricant in steel containers at room temperature. Keep the lubricant for each type of machinery component separately in clearly marked containers. Take all measures necessary to prevent lubricant contamination.

Proprietary units: Provide lubricants approved by the manufacturer.

Other units: Provide the lubricants specified in the latest edition of the AASHTO Movable Bridge Inspection, Evaluation, and Maintenance.

T468-2.1.11. Painting of Machinery

Paint with a three-coat system in accordance with FDOT Specification Section 560 and Section 561. Paint all new machinery equipment and touch up all existing machinery equipment incidental to machinery replacement work.

Provide paint for the final field coat high-gloss enamel compatible with the intermediate coats and with colors meeting the Federal Standard No. 595 Color Number Code. Paint machinery surfaces with the final field coat in the following colors:

- A. Federal safety Blue for all fixed parts of the machinery, such as weldments, housings, and motors.
- B. Federal safety Red except rubbing surfaces, for all moving parts of the machinery, such as shafting, couplings, brakes, machinery guards, hydraulic cylinders, live load shoes, and load shoe masonry plates.
- C. Federal Safety Yellow non-corrosion resistant hydraulic power unit manifolds and components.

T468-2.2. Construction Requirements

T468-2.2.1. General

Follow the AASHTO Standard Specifications for Movable Highway Bridges requirements for field erection, workmanship, machining, finishing, aligning, testing, and inspection, unless otherwise specified in the Contract documents.

Structural Steel: Unless otherwise noted, construct structural steel fabrications in accordance with the provisions of FDOT Specification Section 460.

Where installation procedures or any part thereof are required to be in accordance with the recommendations of the manufacturer of the material being installed, furnish printed copies of these recommendations to the Engineer prior to installation. Do not install material until the recommendations are received. Failure to furnish these recommendations can be cause for rejection of the material.

T468-2.2.2. Pins

Unless otherwise indicated in the Contract Documents, ensure the non-mated surfaces have a maximum roughness of 125-micro inch.

T468-2.2.3. Castings

Ensure weld repair of castings at the foundry conforms to the required ASTM procedure. Ensure weld repair, after start of machining and/or assembly, is approved by the Engineer.

Clean all castings free of loose scale and sand, fins, seams, gates, risers, and other irregularities.

Obtain prior approval from the Engineer before making any weld repairs that are not included in the original material specification.

T468-2.2.4. Forgings

Ensure weld repair of forgings conforms to the required ASTM and AWS procedures. Ensure weld repair, after start of machining and/or assembly, is approved by the Engineer.

Obtain prior approval from the Engineer before making any weld repairs that are not included in the original material specification.

T468-2.2.5. Cylinder Support Bearings

Utilize maintenance free, radial spherical plain bearings. Plain spherical bearing shall have a static loading rating and a dynamic load rating minimum as shown on the Plans. Refer to TSP T468-2.1.5 for additional requirements. Submit shop drawings and manufacturer's certified prints.

- A. Replace maintenance free, Cardanic Ring radial spherical plain bearings.
- B. Replace maintenance free upper clevis radial spherical plain bearings.

Plain Journal bearings to be refurbished by disassembly, cleaning and inspection of interior bearing housing surfaces, Glycodur bushing ID and trunnion pin shafts on the Cardanic Ring assembly. Inform engineer of any discrepancies.

- C. Refurbish maintenance required, Cardanic Ring plain bearings.
 - 1. Provide new cover plates and cover plate fasteners.
 - 2. Provide new giant button head grease fittings.

T468-2.2.6. Fasteners

A. General:

- 1. Unless otherwise specified, all fasteners used for connecting machinery parts to each other and to supporting steel shall be HS turned bolts.
- 2. Install bolts connecting machinery components to structural elements or to other machinery components comprised of different thicknesses so that the bolt head is adjacent to the connected element with the least thickness.
 - 3. Clean all contact surfaces of structural steel to be bolted together before bolting.
 - 4. Spot face bolt holes square with the axis of the hole.
 - 5. Spot face bolt holes through unfinished rough cast surfaces.
- 6. Drill or ream-assemble all elements connected by bolts to assure accurate alignment of the hole and accurate clearance over the entire length of the bolt within the specified limits.

- 7. Ream or drill holes in shims and fills for machinery parts to the same tolerances as that of the connected parts at final assembly.
- 8. Unless otherwise indicated in the Contract Documents, drill bolt holes in machinery parts for connection to supporting steelwork in the shop a minimum of 1/16 inch diameter smaller than the finished bolt diameter or drill from solid at assembly. Drill and ream for the required fit at final assembly.
- 9. Unless otherwise indicated in the Contract Documents, drill bolt holes in steelwork for turned bolts from solid at assembly or erection after proper alignment. Do not pre-drill holes full size prior to final assembly.
- 10. Do not use different size bolts when connecting components (i.e., bearing to pedestal). If a hole is over drilled requiring a bigger bolt, then furnish all bolts of the bigger size.
- 11. Fasteners that require tapped holes shall be detailed with a minimum thread engagement of $1\frac{1}{2}$ times the nominal body diameter.
 - 12. Countersunk fasteners shall be detailed with a minimum of a 1/16 inch recess.
 - B. HS Turned Bolts and HS Turned Studs:
 - 1. HS turned bolts and HS turned studs shall not be used if previously torqued.
 - C. Tensioning:
- 1. Unless otherwise required in the Contract Documents, tension HS Turned Bolts, and HS Turned Studs used for connecting steel machinery parts together or to structural steel and whose nominal threaded diameter is less than or equal to $1\frac{1}{2}$ inch in accordance with the Bolted Connection requirements of the FDOT Specifications for HS Turned Bolts based on thread diameter.
- 2. Tension HS Turned Bolts, and HS Turned Studs larger than 1½ inch (nominal thread diameter) by turning the nut ¼ turn past snug tight and adding a backing nut (double nuts) turned snug tight unless otherwise noted in the Contract Documents. If the Contract Documents require a HS Turned Bolts, or HS Turned Studs larger than 1½ inch to be tensioned, hydraulically tension the bolt as indicated herein.
- 3. Preload for High Strength SAE Bolts and Studs: Tension all bolts, cap screws, and other threaded fasteners as follows:

For permanent connections: $F_t = 0.75 \text{ x } A_t \text{ x } S_p$ Where: $F_t = \text{fastener preload}$

 A_t = tensile area of the fastener S_p = fastener proof strength

4. Utilize 50 percent of the proof strength for all HS Turned Bolts, or HS Turned

Studs.

5. Preload may be applied by direct hydraulic tensioning or torque. Where using torque, calculate it as follows: $T = K \ x \ F_t \ x \ d$

Where: T = required wrench torque applied to fastener

K = constant dependent upon bolt size, material and lubrication.

d = nominal fastener diameter

6. For mild-steel fasteners use an average value of K=0.2 for dry assembly. For lubricated assembly use K=0.18 .

T468-2.2.7. Shims

Unless otherwise indicated in the Contract Documents, provide shim pack containing shims of decreasing thickness from full depth down to 0.010-inch, plus 2-0.005-inch shims. For example, a 0.5-inch shim pack would consist of the following shim thickness 0.500, 0.250, 0.125, 0.060, 0.040, 0.020, 0.010, 2-0.005-inch for a total of 9 shims.

Show and fully dimension shims as details on the shop drawings.

Do not use shims with open sided or U-shaped holes for bolts unless otherwise noted. Ensure no shims have less than two holes for bolts.

Neatly assemble shims not installed after final alignment, tag with the part number from the approved shop drawings and turn over to the Department for future use.

Oversize bolts holes in shims by 1/8" for turned bolts.

T468-2.2.8. Span Lock Assemblies

Adjust Span Locks to the following conditions and tolerances:

- A. Do not make the final adjustment of the lock bars until the live load shoes are properly adjusted, the elevations at the tip ends of the bascule girders are within 1/16-inch of one another, and the bridge is balanced within the final requirements detailed in the Technical Special Provisions.
- B. Prior to installing the lock bar, place a straight edge vertically on the horizontal surface of the bronze bearings of the rear guide, front guide and the receiver to verify alignment. Ensure the straight edge contacts each of the shoes and the maximum allowable gap between the straight edge and the bronze bearings at any point is 0.003-inch.
- C. Prior to installing the lock bar, place a straight edge horizontally on the vertical surface of the front guide and rear guide to verify alignment. Ensure the straight edge contacts each of the shoes and the maximum allowable gap between the straight edge and the bronze bearing at any point is 0.005-inch.
- D. Ensure the position of the actuator relative to the lock bar is such that no more than 1/32-inch of offset misalignment and no more than 1/4-degree angular misalignment exists at the connection to the lock bar with the actuator in either the fully driven or fully retracted positions.
- E. Ensure the position of the actuator is such that there is an equal amount of reserve stroke remaining following operation in the driving and in the retracting directions.
- F. Adjust span locks such that driving and/or pulling the locks causes no change in the contact of the live load shoes.

Shim lock bars to obtain a total vertical clearance of RC9 fit between bar and socket. Clearance may vary between top and bottom faces of bar, but neither clearance can be less than 0.005-inch.

T468-2.2.9. Live Load Bearing Assemblies

Provide Shop Drawings in accordance with FDOT Standard Specifications Section 105, including but not limited to:

- A. Fully detailed drawings of live load shoe shims.
- B. Load Equalizing: When all four of the live load supports have been installed with the nominal shims indicated, lower each leaf until there is approximately 1/2-inch of space below each live load shoe. Use the following procedure to obtain equal loading on the two live load shoes for each leaf:
- C. Release all brakes on the span drives for the leaf in question to allow the span to settle down bringing at least one live load shoe into contact with its strike plate. Note that the span locks should not be installed at this time.
- D. If both live load shoes contact their strike plates, raise the leaf and insert a temporary shim 1/2-inch thick under the adjacent shoe (Sa). Lower the leaf by releasing the brakes. Measure the clearance (Co) under the opposite shoe (So). Raise the leaf and remove the 1/2-inch temporary shim from under the adjacent shoe and insert it under the opposite shoe. Lower the leaf by releasing the brakes. Measure the clearance (Ca) under the adjacent shoe. If the clearances Ca and Co measured under the two live load shoes with the temporary shim in place are equal, no additional shim adjustment is required at this time. If Ca is greater than Co, additional shims must be installed under Sa with a thickness of T= (Ca-Co)/2. If Co is greater than Ca, additional shims must be installed under So with a thickness of T= (Co-Ca)/2.
- E. If one of the live load shoes does not contact its strike plate, measure the clearance (C1) under that shoe (S1). Raise the leaf and install a temporary shim of thickness (C1+1/2-inch) at S1. Lower the leaf and measure the resulting clearance C2 at the other shoe (S2). Install permanent shims at S1. The thickness (T) of the permanent shims will be T = [C1 + (1/2-inch-C2)/2)].

- F. Span Vertical Alignment: After the shimming described above to equalize the loads on the live load supports has been completed for both leaves, additional shim adjustments may be required to bring the tips of the two leaves to the proper elevation and to align the roadways at the tips of the two leaves. Use the following procedures to complete the shimming of the live load supports:
- G. Lower both leaves to the fully closed position with all four live load shoes in firm contact with their strike plates.
- H. Measure the elevation of the tips of the two leaves at the center of the waterway with respect to the elevations of the roadways on the ends of the approach spans adjacent to the bascule spans.
- I. Measure the differences in elevation between the roadways at the tips of the two leaves, at the center of the roadway, and at the point on the roadway 2-feet inboard of each curb.
- J. Determine what adjustment in shim thickness is required at the live load supports to properly align the roadways at the tips of the two leaves and to position them at the proper elevation with respect to the approach span roadways. Ensure the difference in elevation from the span centerline to the rear joint between the fixed and bascule spans is as shown in the Contract documents $\pm 1/8$ -inch.
- K. Install additional shims (or remove shims) above the live load shoes as required to position the roadways at the tips of the leaves at the proper elevation with respect to the roadways on the approach spans and to properly align the roadways on the two leaves vertically with one another. An equal amount of shims must be added or removed from the two live load shoes on a given leaf.
- L. After adjusting the thickness of the shims under each live load shoes, lower the leaves by releasing the brakes and check the tips of the bascule leaves to see if they are at the proper elevation and are properly aligned with one another. Readjust shims under the strike plate if necessary.
- M. Alignment: The live load supports are properly aligned when the live load shoe is in full contact with the live load strike plate. Contact is full if a 0.002-inch feeler gage cannot be inserted between the shoe and the strike plate along the entire length of live load shoe.

T468-2.2.10. Welding and Weldments

Ensure that welding required conforms to the AASHTO/AWS D1.5 Bridge Welding Code for the material being welded.

Inspect all weldments utilizing Ultrasonic Testing or Radiographical Testing as per ASTM E164 and AWS D1.5. Unless otherwise noted, perform 100% magnetic-particle inspection of fillet welds and partial penetration welds of machinery weldments.

Perform coupon testing and provide a certified copy of test reports prior to any welding procedure involving attachment to existing steelwork. Provide report showing the chemical composition of the specific steel piece(s) to be welded. Design a weld procedure specific to this chemical composition.

Unless otherwise noted, treat all welded machinery and weldments that support machinery as main members, all welds as subject to tension or stress reversal, and all welds as joining primary components. Do not perform field welding on these elements unless specifically required in the Contract Documents.

Stress relieve all shop welds. Do not machine components until after welding and stress relieving. Unless otherwise shown in the Contract Documents, finish machined surfaces of weldments to flatness as required herein and finish machinery bearing surfaces parallel to each other and to the bottom of the base plate. Machine finish the height of the weldments supporting machinery, on shims, as measured from the bottom of the base plate to the top of the bearing surface, to Plan height plus or minus 1/8 inch. Grind all exposed edges of weldments to a chamfer or radius to eliminate sharp edges and burrs. Ensure that weldment base plates, placed against concrete or grout, have 3/4-inch minimum radii on the corners.

Submit shop drawings that include procedures for field structural welding with inspection requirements stipulated in the Contract Documents for approval prior to start of welding.

Include a certified copy of a test report showing the chemical composition of the specific steel piece(s) to be welded in any welding procedure involving attachment to existing steelwork. Consider this chemical composition in the welding procedure.

Unless otherwise shown in the Contract Documents, connect elements of weldments by complete joint penetration welds. Groove welds shall be complete joint penetration groove welds (CJP). Do not use fillet welds where they would require machining to provide clearance for machinery, fasteners, or other attachments. Clip stiffeners to avoid overlapping stiffener welds with welds at the intersection of main plates.

Ensure the fitting up and welding procedure is such that distortion of the work will be a minimum. If necessary to obtain this result, use suitable welding fixtures. Unless otherwise specifically stated, stress relieving is required for welded machinery parts prior to final machining.

Perform welding for steel HPU elements in accordance with the AWS D1.1 Structural Welding Code - Steel. Perform welding for stainless steel HPU and reservoir elements in accordance with the AWS D1.6 Structural Welding Code - Stainless Steel. Perform welding for hydraulic piping in accordance with the ASME B31.1 Code for Pressure Piping. Perform visual inspection and inspection documentation of all the above welds in accordance with the applicable welding code requirements.

Do not paint welded components until welds are inspected and approved.

Thoroughly coat finished mounting surfaces with an approved temporary protective coating that prevents oxidation and are skidded or crated for protection during handling, shipment and storage. Unless the weldment is galvanized and after weldment is accepted by the Engineer, prime base surfaces which will have concrete or grout cast against them, but do not finish coat them.

T468-2.2.11. Shop Assembly Operations

Shop assemble machinery components to verify their correct fit prior to shipment as far as the removed assembly components to be repair/reconditioned allows. Disassemble components not mounted in a common base for shipment. Match mark any components requiring selective assembly for future assembly.

T468-2.2.12. Erection and Testing

Erect and assemble machinery in accordance with part numbers and match marks. Adjust all parts for precise alignment by means of shims and pull parts tightly against supporting members by use of clamps, temporary bolts, or other approved means before drilling and reaming holes for connecting bolts. Install all machinery within the specified tolerances and such that satisfactory operation is achieved.

Do not install machinery unless mounting surfaces are clean of dirt, paint and other foreign materials.

Securely tighten connecting screws, bolts and nuts to specified torque values after approval of field alignment by the Engineer.

T468-2.2.13. Lubrication of Machinery

Connect grease fittings with tubing or fittings so that grease is introduced directly into the grease grooves for distribution. Tubing is to extend from the bearings to convenient lubrication stations. Install vibration absorbent braided stainless steel hose, 8-inch minimum length, between the pipe and the component lubricated on span lock components or other components subject to vibration or impact. Provide tubing supports at increments not to exceed 3-feet between supports.

T468-2.2.14. Painting of Machinery

Clean and paint all unfinished surfaces of new, re-used, or existing of machinery, equipment, hydraulic assemblies, supports, and structural members mating with machinery in accordance with FDOT Specification Section 560 and Section 561.

Paint with a three-coat system (Prime, Intermediate, and Finish coatings) in accordance with FDOT Specification Section 560 and Section 561.

Clean all machinery surfaces of all chips, dirt, rust, scale, sand, grease, and other foreign matter by solvent cleaning, wire brushing, or other approved means prior to painting.

Clean existing steel surfaces mating to new components per SSPC SP 3.

After proper surface preparation, apply one shop coat of primer to all machinery surfaces, except for rubbing surfaces.

After completing the operating tests and acceptance of the machinery, wash with approved solvent all accumulated oil, grease, dirt, and other foreign matter from exposed machinery surfaces, except rubbing surfaces. Give the exposed surfaces a final field coat.

Paint other supporting steel with the final field coat to match the structural steel in accordance with FDOT Specification Section 561. Do not paint stainless steel elements of hydraulic power unit assemblies, including support structure, reservoir, and drip pan unless approved by the Engineer.

Apply the finish coat to weldments, bearing housings, and other machinery as specified in this Technical Special Provision in the shop. Apply field touch-up paint to shop applied coatings damaged during construction.

Ensure nameplates on all proprietary elements are readable, clean, and free of all paint before acceptance of the machinery.

Protection For Shipment:

- A. Coat all finished metal surfaces, not to be painted, as soon as practical after machining with a temporary protective coating that prevents oxidation. Coat non-stainless shims with a temporary protective coating that prevents oxidation prior to shipment and wipe clean before installation. Completely protect machinery parts from weather, dirt and foreign materials during manufacture and store indoors while awaiting erection. Exposed shaft journals shall be greased or coated with the oxidation preventative coating, wrapped in oil-soaked burlap and securely timber lagged for shipment. Any solvent used to clean a journal prior to assembly must be completely removed from the shaft and bearing prior to assembly. Assembled units including lock bar operators and other devices having finished mounting surfaces shall have those surfaces thoroughly coated with a temporary protective coating that prevents oxidation and shall be skidded or crated for protection during handling, shipment and storage.
- B. Bag and crate mounting hardware and other small parts for shipment. Label bags with all contents. Provide tags, recording the part number, secured to each part with wire or plastic ties prior to shipment.
- C. Any coating removed for the purpose of installation or erection of equipment shall be reapplied as soon as practical until it is removed for the application of paint or installation into a lubricated assembly.

T468-3. HYDRAULIC OPERATING MACHINERY

T468-3.1. General

This Article defines the work requirements for the hydraulic machinery, components, and associated elements and electro-hydraulically operated equipment for use in movable bridge operation and control and movable bridge auxiliary devices.

T468-3.1.1. Description of Work

See Section 3.2 for detailed list of items to be replaced. Reference summarized scope of work items as follows:

- A. Recondition existing Hydraulic Power Unit with replacement of subcomponents listed below.
- B. Refurbish plain bearings inside Cardanic Rings. Disassemble the Cardanic Rings assemblies which include respective plain bearings. Clean and inspect trunnion pins and bearing interior cavities. Provide new Glycodur bushings, lubricate entire bearing assembly with grease at reassembly and installation.
- C. Provide new Hydraulic fluid and perform filtering to the required cleanliness level shown in the Plans.

D. Remove and dispose of all subcomponents listed to be replaced according to local, state and federal regulatory standards. Perform removal of all listed (See Section 3.2) hydraulic fluid system subcomponents with systems depressurized and fluid drained from the section of system at which work is to be performed. Alternatively, drain entire system if no other means of fluid line isolation exists. Protect any exposed surfaces which normally would be enclosed or covered from contamination which may later result in damage of the local or global hydraulic system components.

T468-3.1.2. Qualifications

If the work is subcontracted, use a qualified subcontractor for this work. The Subcontractor shall have had at least ten years' experience in the design, fabrication, and installation of major hydraulic systems for civil engineering applications of this size and type.

Use Hydraulic Technicians or Industrial Hydraulic Mechanics who are Certified Fluid Power Engineers and/or Certified Fluid Power Specialists from the International Fluid Power Society. Use Certified Technician/Mechanics having prior experience on similar sized systems for installation, start-up, piping and flushing of hydraulic systems. Use Certified Technician/Mechanics with at least five years experience in the design, fabrication, and installation of hydraulic systems of this size and type.

Use only personnel with demonstrated skill in this type of work for installation and adjustment of hydraulic components.

T468-3.1.3. Field Hydraulic System Testing

Perform static and dynamic field tests of the hydraulic system as follows:

- A. Hydraulic Static Field Testing:
- 1. Complete charging and flushing of hydraulic system prior to testing. After all components (tubing valves etc.) of the fluid system have been physically tightened and inspected, bleed all air from cylinders. Do not exceed creep speed velocity during these tests. Demonstrate that the current leaf condition is tip heavy within acceptable tolerances prior to initiating any tests or operations that require the cylinders to hold the load of the leaf. Submit balance calculations for review by the Engineer prior to testing.
- 2. Verify system directional control and cylinder manifold pilot operated check valve function (Suggested procedure: With the cylinders disconnected from the leaf, extend and retract the cylinders at creep speed or less).
- 3. Verify that rods do not drift unless actuated (Suggested procedure: extend cylinders and hold position).
- 4. Pressure test system to seating pressure level. Set the system pressure relief valves to the specified seating pressure. Set the flow control for creep speed. Perform this test with the leaf in the full open or full closed position.
- a. If the Bascule Leaf is in the fully open position, block the leaf against the bumper blocks. Provide leaf restraints to prevent accidental lowering. Manually controlling the HPU, shift the directional control to the raise position. Verify system and cylinder pressures, leak free piping and control functions. Shut down power unit and bleed pressure from cylinders.
- b. If the leaf is in the full closed position, verify that all live load shoes are in full contact with the masonry plates or temporary blocking. Provide leaf restraints to prevent accidental raising. Manually controlling the HPU, shift the directional control to the lower position. Verify system and cylinder pressures, leak free piping and control functions. Shut down power unit and bleed pressure from cylinders.
 - 5. Test load holding and manual bleed down valve functions.
 - 6. If initial Bascule Leaf operation is from the open position, perform the following

test:

- a. Manually lock the cylinders by closing all cylinder bleed down needle valves.
- b. Partially release the Bascule Leaf restraints to produce slack of the equivalent of at least ½ inch and no more than 1 inch of cylinder stroke. Verify that the load is held by cylinders.

- c. Open the cylinder blind end bleed down needle valve on one cylinder, verify that the other cylinder holds the load and that the leaf is tip heavy. If the leaf rotates further open discontinue the test until the span is rebalanced to a tip heavy condition.
- d. Using manual control of the power unit and the auxiliary pump, raise the leaf back to its original position.
 - e. Repeat the above steps to test the holding capacity of the other cylinder.
 - 7. If initial Bascule Leaf operation is from the closed position, perform the following

test:

- a. Using manual control of the power unit and the auxiliary pump, raise the Bascule Leaf approximately 2 to 3 inches of cylinder stroke. Stop the bridge.
 - b. Shut down the power unit and verify that the cylinders hold the load.
- c. Open the cylinder blind end bleed down needle valve on one cylinder, verify that the other cylinder holds the load and that the leaf is tip heavy. If the leaf rotates further open discontinue the test until the span is rebalanced to a tip heavy condition.
- d. Using manual control of the power unit and the auxiliary pump, raise the leaf back to its original position.
 - e. Repeat the above steps to test the holding capacity of the other cylinder.
 - B. Hydraulic Unit Dynamic Field Testing and Adjustment
- 1. Hydraulic Unit Dynamic Field Testing: Do not initialize dynamic testing until Hydraulic Static Field Testing and Initial Bridge Operation is completed and accepted by the Engineer.
- 2. Raise and lower the leaf in creep speed. Verify motion control signals and indicators, including limit switches, normal stop, and Emergency Stop.
- 3. After several operations check all areas for leaks, fluid temperature and motor current drain. Connect all control wiring for console system test.
- 4. If console is not available, use local manual control of movable span to demonstrate the operation of the hydraulic Bascule Leaf drive.
 - 5. Install all limit switches and position indication devices to initial settings.

T468-3.1.4. Submittals

Submit all new hydraulic equipment component data to the Engineer for approval prior to fabrication. Label each submittal package as noted below and include all the required items for that section. Provide these labels in addition to sequential submittal numbers. Include the complete HPU schematic within the submission.

Use a Certified Fluid Power Engineer or Certified Fluid Power Specialist to prepare or check all calculations required to be performed for detailing the hydraulic systems. Provide calculations signed by the responsible Certified Fluid Power Engineer or Certified Fluid Power Specialist.

Indicate welded connections using standard AWS welding symbols.

Field verify all dimensions shall conform with existing conditions. Clearly indicate on all shop drawings all field verified dimensions.

Prepare and provide the following submittal packages as a minimum. Submit additional submittal packages as specified or as requested by the Engineer.

T468-3.1.4.1. Cylinders and Attachment Components

- A. Bill of Materials for all new cylinders components including manufacturer's part numbers for ordering replacement seals.
- B. Certified dimensional prints and assembly drawings of components with reference numbers matching the cylinder Bill of Materials. Include an assembly drawing of cylinders and attachments indicating clearances between the cylinders and adjacent structures, equipment, and walkways. Machining tolerances shall be clearly shown. Clearly state the rated pressure for cylinders and manifolds on the shop drawings.
 - C. Weld procedures for all clevis welds.
 - D. Cylinder clevis details.

- E. Cylinder clevis bearings, including snap rings and hardware, and clevis pins.
- F. Assembly drawing of cylinder manifolds.
- G. Detailed alignment and installation procedures.
- H. Paint material and painting procedures, including color identifications, surface preparation procedures and product specifications.
- I. List of spare parts provided with manufacturer, model/part numbers and quantity to be supplied.
- J. State design safety factor on shop drawing. Safety factor to meet AASHTO design requirements.

T468-3.1.4.2. Cylinder Cardanic Ring Assemblies

- A. Bill of Materials for all components including manufacturer's part numbers for ordering replacement parts.
- B. Field verified dimensions required to finalize envelope size of bearing and mounting bolt hole locations. This includes verifying location and size of existing bolt holes in existing structural support.
- C. Provide manufacture's recommended loading requirement. State safety factor on shop drawing. Safety factor is based off the 3000 psi load rating of the cylinder. A minimum safety factor of three is required.

T468-3.1.4.3. Startup and Functional Testing

- A. Detailed procedure for inspection, flushing, and fluid sampling for all hydraulic work.
- B. Detailed procedure for Hydraulic Static Field Testing.
- C. Detailed procedure for functional testing of the Main Hydraulic Drive System.

T468-3.1.4.4. Qualifications

- A. Qualification demonstrating certification of Certified Fluid Power Engineer and/or Certified Fluid Power Specialist from the International Fluid Power Society.
- B. Qualifications demonstrating certification of Certified Hydraulic Technician or Certified Industrial Hydraulic Mechanics from the International Fluid Power Society.

T468-3.2. Materials

Assemble hydraulic equipment in accordance with standard NFPA hydraulic practices. All components listed are to be replaced in-kind. In the event of the item being no longer available, submit reasoning to the Engineer in writing for equivalent substitution. Provide manufacturers data cutsheets for engineer approval prior to purchase. Work the material section with the Hydraulic schematics and tabulated item list in plans.

T468-3.2.1. Pumps

Provide hydraulic pumps of the variable displacement, axial piston type with swash plate design suitable for open-loop operation. Provide variable displacement pumps to requirements shown in the Plans. Provide pumps with the following:

- A. Rated for continuous duty at 5000 psi or higher.
- B. Clockwise and/or counterclockwise rotation.
- C. Displacement tolerance of +/- 10% for 4.3 cubic inches (71 cc).
- D. Max flow setting of 27.5 gpm.
- E. Pressure compensator settings:
- F. Low Pumps 1500 psi.
- G. High Pumps 2650 psi.
- H. Pump efficiency at 1800 psi pressure and full flow of 85 percent or better.

Provide direct coupling of each pump to an electric motor by use of a C faced adaptor bracket. Use electric motors that are in accordance with the requirements noted in this Section and Section T508.

Connect pumps and electric motors using a suitable flexible coupling with less than 0.005-inch parallel or angular misalignment. Coupling and shaft fit to be per manufacturer's recommendation. Secure coupling set screws with an approved thread locker. Mount the entire pump/motor assembly on standard vibration isolation shock mounts.

T468-3.2.2. Manifolds

Provide main system valving rated for its intended flow and pressure and suitable for the intended use in the hydraulic system with regard to function and performance throughout the anticipated range of operating conditions. Use ANSI/ISO standard subplate mounted or cartridge valves wherever possible for ease of servicing. Provide externally drained valves where required.

Provide valves with corrosion resistant bodies or paint valves in accordance with the requirements for painting machinery.

Use manifolds to house valving and other components as specified in the Plans. Unless otherwise specified in the Plans, fabricate manifolds from stainless steel as required for the specified working pressures.

T468-3.2.3. Temperature Switch

Provide fluid temperature switches for the following functions:

- A. High operating fluid temperature pump shutdown and HPU immersion heater shutdown.
 - B. Low operating fluid temperature for HPU immersion heater activation.

T468-3.2.4. Hydraulic Plumbing and Fittings

Provide plumbing and fittings that conforms to current ASME and NFPA hydraulic system standards. Provide plumbing and fittings that conform to the following unless otherwise noted.

- A. Rigid Hydraulic Tubing and Piping:
 - 1. For rigid tubing use seamless, annealed ASTM A269 Type 304 stainless steel tube.
 - 2. For piping use seamless, ASTM A312 Type 316 stainless steel.
- 3. For fittings for stainless tubing use SAE J518 four bolt welded O-ring flange, flat O-ring face seal fittings.
- 4. Long runs shall incorporate SAE four bolt split flange unions to facilitate easy installation and disassembly.
- 5. For threaded connections use SAE straight thread with O-ring. Provide all fittings of stainless steel.
- 6. For fittings for steel piping use SAE four bolt welded O-ring flange or flat O-ring faced seal.
- 7. For long runs incorporate SAE four bolt split flange unions to facilitate easy installation and disassembly.
- 8. Weld and pressure test all tubing and piping in the manufacturer's shop before installation. No field welding of plumbing or fittings will be permitted.
- 9. Use mechanical connections that incorporate O-rings as the primary pressure sealing component.
- 10. Size tubing, fittings and pipe to provide a minimum Factor of Safety of 4.0 against bursting (based on tensile strength). Calculate the bursting strength per the requirements of AASHTO LRFD Movable Specifications
 - B. Hydraulic Flexible Hoses:
- 1. Provide flexible hose of the proper SAE rating, consistent with working pressures noted on the Plans. As a minimum, use flexible hose for suction, drain, bypass and pressure lines connecting all pumps to the system.
 - 2. Connect all hydraulic cylinders to fixed plumbing with flexible hose.
 - 3. Assemble all hose assemblies with a suitable sealant.
 - 4. Provide Type 316 stainless steel hose ends and hardware for all hoses.
 - 5. Use JIC Code 61 or 62 four bolt flange, O-ring sealed fittings for hose connections.

T468-3.2.5. Hardware and Fasteners

Use ASTM A193, Grade B8M, Type 316 or ASTM A276 Type 316 Stainless Steel for all fastener bolts, nuts, washers and all other mounting hardware used on all the hydraulic equipment and power units, and plumbing unless otherwise specified. Provide valves with manufacturer recommended stainless steel hardware. Provide non-stainless-steel fasteners only under the following conditions:

- A. Component fasteners subject to calculated forces due to hydraulic pressure and are not supplied in stainless steel by the component manufacturer, or;
 - B. Strength requires bolts to be heat treated alloy steel, SAE Grade 8.

Paint non-stainless-steel hardware in accordance with the requirements for the connected components.

T468-3.2.6. Hydraulic Clamps

Use of hydraulic pipe clamps is mandatory. Clamp hydraulic tubing and piping using 1 5/8 inch Slotted Steel Channels and heavy-duty clamps. Provide sufficient clamps such that maximum pipe clamp spacing does not exceed 36 inches. Submit a fully detailed hydraulic piping layout drawing for review and approval by the Engineer prior to installation. Follow clamp manufacturer's specifications for installation. Use Type 316 stainless steel for all metallic clamp components, hardware, and channels.

T468-3.2.7. Hydraulic Fluid Filtering

Provide filters as shown on the plans.

T468-3.2.8. Return Line Components

Provide return line components as shown on the plans.

T468-3.2.9. Cylinder Assembly Valves and Components

Provide main-system valving rated for its intended flow and pressure, and suitable for the intended use in the hydraulic system with regard to function and performance throughout the anticipated range of operating conditions. Use ANSI/ISO standard subplate mounted or cartridge valves wherever possible for ease of servicing. Provide externally drained valves where required. Refer to Plans for valve performance requirements.

Provide valves with stainless steel, corrosion-resistant bodies. Utilize high temperature Viton seals for all valves.

- A. Provide check valves that are leak free in the checked direction. Provide pilot operated check valves equipped with external drain and decompression poppet where specified.
- B. In-Line Valving: Provide in line ball and needle valves with stainless steel housings. Provide in-line valves with ports at least as large as the adjoining plumbing and components.
- C. Equip all pressure test and gauge ports in manifolds with a stainless-steel quick disconnect checked test coupling with protective cap. Connect test ports to gauges with a 0.08" nominal diameter test hose equipped with a swivel nut compatible with the test couplings. Provide sufficient hose length to allow hoses to be connected to a variety of test couplings. Tie excess hose lengths in neat loops and bind with plastic snap ties such that all test hoses are well organized and can be traced and serviced.

Refer to table in Plans for information and details of individual valves of the hydraulic system.

T468-3.2.10. Ball Valves

Replace ball valves as shown on the plans.

Replace ball valve limit switches, operator rotary levers, and limit switch support brackets as shown on the plans.

T468-3.2.11. Hydraulic Fluid

Provide all hydraulic fluid required to install and test the hydraulic systems. Flush entire existing hydraulic span drive fluid system and replace with new oil. Hydraulic oil shall be the same fluid currently used at the bridge. Confirm all new components are designed for the hydraulic fluid.

Provide components, seals, etc. that are compatible with the approved fluid.

T468-3.2.12. Flow Meter

Replace flow meter as shown on the plans. Ensure new flow meter meets 10-150 gpm range of flow with 5000 psi pressure rating. Provide flow meter with stainless steel body and code 62 mounting flange.

T468-3.2.13. Accumulator

Replace accumulator as shown on the plans.

T468-3.2.14. HPU Support Frame

Replace HPU Support frame and base as shown on the plans.

T468-3.2.15. HPU Miscellaneous Subcomponents

Replace HPU Subcomponents as shown on the plans.

T468-3.2.16. Filter Cart

Replace filter cart as shown on the plans.

T468-3.2.17. Piping Runs

Exclusive of hoses, terminal connectors and adaptors, make tubing runs integral and continuous from one device or component to another. Make tube or pipe branches only at terminal connectors or adaptors that are rigidly secured. Install pipe runs with a minimum number of fittings and bends.

Install piping runs across access ways for normal maintenance and inspection that do not interfere with passage. Rigidly support these runs and protect them from contact. For protection of piping mounted to a walkway floor, provide conduit protection fabricated from corrosion resistant materials with a non-skid surface, designed to support pedestrian loading. Provide a means for removal of conduit protection in the event service is required.

T468-3.2.18. Hoses

Manufacture hose assemblies to the proper length and install such that they only have sufficient length to avoid flexing and straining the hose during operation. Torsional deflection of hoses shall be minimized. Hoses that flex with the movement of components, such as hoses connected to the main hydraulic cylinders, shall be installed such that the flexure due to cylinder movement is in a single plane. Provide fittings, hardware, and hard piping to position and orient hose ends in a manner to limit flexure to a single plane. Hoses shall be located and installed such that they do not rub against or contact rigid objects or other hoses.

T468-3.2.19. Lubrication

Refer to Section T468-2.1.10 for lubrication type and procedures.

T468-3.2.20. Painting

Refer to Section 2.2.14 for paint material and procedures.

T468-3.3. Construction Requirements

T468-3.3.1. General

Disassemble and remove all valves before cleaning and painting manifold.

Perform charging and flushing only when atmospheric particles are at a minimum (no sandblasting or painting in progress). Check reservoir condition through cleanout covers prior to charging. All surfaces should be clean of dirt, rust or moisture. Once the reservoir has been cleaned, charge the reservoir with the fluid approved for final use in the system.

After system flushing of the main drive hydraulic system operate each system for a minimum of 10 complete cycles to allow cylinder and reservoir oil to become sufficiently mixed. Using proper NFPA techniques, draw a fluid sample from each system and analyze per the ISO Solid Contaminant Code. Flush, filter, and test fluid as required to obtain the required cleanliness level. Prior to final acceptance of the bridge hydraulic system, provide certified test evidence of fluid cleanliness for all units following the ISO standard.

Provide fluid at functional acceptance and final acceptance that is clean and in acceptable condition. Ensure fluid cleanliness level for all units is as shown on the plans, or cleaner. Replace any fluid that has been heated beyond 160°F at any time during construction or testing. Replace any fluid contaminated with water or other foreign materials detrimental to the fluid or hydraulic system components.

T468-3.3.2. Pumps

Set up and test pumps at the factory or shop. Set the pump controls and verify the performance curves for the pump such that the maximum flow is set at the value required for full speed operation, the pressure compensator is set to fully compensate the pump at the specified working setting shown in the Plans. Using a test stand, verify all pump settings and measure pump efficiencies at the seating pressure, maximum working pressure, and mid-point in between. Submit a report summarizing the test measurements to the Engineer.

- A. Replace in-kind the primary (main) pumps, primary pump motor couplings, primary pump C-Face adaptors and primary pump supports. (Hydraulic schematic items 1.0.1 thru 1.0.4, 1.3.1 and 1.3.2).
- B. Replace in-kind charge pump, charge pump motor coupling, charge pump C-Face adaptor and charge pump supports. (Hydraulic schematic items 4.1, 4.23, and 3.1.1, 3.1.2, 3.1.3, 3.1.4)

T468-3.3.3. Manifolds

Disassemble, clean and inspect the manifold housing and valve ports/threads marked for refurbishment. Report to the Engineer any unforeseen or unanticipated impediments to the intended function of the manifolds as discovered upon disassembly.

- A. Refurbish Main Manifold (Hydraulic schematic item 2.0).
 - 1. Replace Directional Control Valve (Hydraulic schematic item 2.3).
 - 2. Replace Directional Control Valve (Hydraulic schematic item 2.6).
 - 3. Replace Solenoid Valve (Hydraulic schematic item 2.10).
 - 4. Replace Directional Control Valve (Hydraulic schematic item 5.1).
 - 5. Replace Mounting Plate
 - 6. Replace test point connection (Hydraulic schematic item 2.14.1).
- B. Refurbish Manual Control (Auxiliary) Manifold (Hydraulic schematic item 4.0).
 - 1. Replace Proportional Control Valve (Hydraulic schematic item 4.11).
 - 2. Replace Directional Control Valve (Hydraulic schematic item 4.12).
 - 3. Replace Mounting Plate
- C. Counterbalance (Central Pit) Manifold.
 - 1. Replace Directional Control Valve (Hydraulic schematic item 5.1).
- 2. Replace test point connections (Hydraulic schematic items 5.11.1, 5.11.2, 5.11.3 and 5.6.1 and 5.6.2).
 - 3. Replace support bracket and bracket fasteners and concrete anchors.
 - D. Cylinder Manifolds (Central pit).
 - 1. Replace needle valves ((Hydraulic schematic items 6.4.1 thru 6.4.4).
 - 2. Replace relief valves (Hydraulic schematic items 6.5.1 thru 6.5.4).
 - 3. Check valves (bottom only) (Hydraulic schematic items 6.3.3 and 6.3.4).

T468-3.3.4. Temperature Switch

A. Replace in-kind temperature switches (Hydraulic schematic items 3.4. and 3.4.1).

T468-3.3.5. Hydraulic Plumbing and Fittings

Clean and paint the rigid piping listed in this section as directed in the plans. In the event the piping or fitting requires replacement, provide engineer approved substitute meeting the associated requirements listed herein and in the plans.

A. Hydraulic Rigid Piping:

- 1. Clean and paint, if replacement is needed, replace with in-kind Accumulator line, 2" Schedule 160 pipe, approximately 32" long (Hydraulic schematic item E*). Note that the *Asterisk denotes line segment inside HPU room only.
- 2. Clean and paint, if replacement is needed, replace with in-kind Rod line, 1.25" Schedule 80 pipe, approximately 61" long (Hydraulic schematic item F*). Note that the *Asterisk denotes line segment inside HPU room only.
- 3. Clean and paint, if replacement is needed, replace with in-kind Blind line, 2" Schedule 160 pipe, approximately 61" long (Hydraulic schematic item G*). Note that the *Asterisk denotes line segment inside HPU room only.
- 4. Clean and paint, if replacement is needed, replace with in-kind Drain line, 1.25" Schedule 40 pipe, approximately 86" long (Hydraulic schematic item H*). Note that the *Asterisk denotes line segment inside HPU room only.
- 5. Clean and paint, if replacement is needed, replace with in-kind Rod line, 1.25" Schedule 80 pipe, approximately 582" long (Hydraulic schematic item F).
- 6. Clean and paint, if replacement is needed, replace with in-kind Blind line, 2" Schedule 160 pipe, approximately 582" long (Hydraulic schematic item G).
- 7. Clean and paint, if replacement is needed, replace with in-kind Drain line, 1.25" Schedule 40 pipe, approximately 582" long (Hydraulic schematic item H).
- 8. Clean and paint, if replacement is needed, replace with in-kind Rod line, 1" Schedule 80 pipe, approximately 132" long (Hydraulic schematic item K).
- 9. Clean and paint, if replacement is needed, replace with in-kind Blind line, 1.25" Schedule 80 pipe, approximately 132" long (Hydraulic schematic item N).
- 10. Clean and paint, if replacement is needed, replace with in-kind Drain line, 1" Schedule 40 pipe, approximately 132" long (Hydraulic schematic item Q).
- 11. Clean and paint, if replacement is needed, replace with in-kind Blind line, 1.25" Schedule 80 pipe, approximately 80" long (Hydraulic schematic item T).

Replace Hydraulic Flexible Hosing. In the event the item or associated fitting is not available for in-kind replacement, provide engineer approved substitute meeting the associated requirements listed herein and in the plans.

- B. Hydraulic Flexible Hoses:
- 1. Replace in-kind (2) Rod line, 1" SAE 100R13 Hose with minimum 3000 Psi working pressure rating, approximately 72" long each (Hydraulic schematic item M).
- 2. Replace in-kind (2) Blind line, 1.25" SAE 100R13 Hose with minimum 1000 Psi working pressure rating, approximately 72" long each (Hydraulic schematic item P).
- 3. Replace in-kind (2) Drain line, 1" SAE 100R9 Hose with minimum 3600 Psi working pressure rating, approximately 72" long each (Hydraulic schematic item R).

T468-3.3.6. Hydraulic Fluid Filtering

- A. Replace in-kind pressure filter (Hydraulic schematic item 2.1.1 and 2.1.2).
- B. Replace in-kind return filter (Hydraulic schematic item 3.3).
- C. Replace in-kind fill line filter (Hydraulic schematic item 3.10).

T468-3.3.7. Return Line Components

- A. Replace in-kind return line filter (Hydraulic schematic item 3.10).
- B. Replace in-kind return line quick disconnects (Hydraulic schematic items 3.10.1 and 3.10.2).

T468-3.3.8. Cylinder Assembly Valves and Components

- A. Replace Test point connections on cylinder blind end of each cylinder.
- B. Replace blind end cushion adjustment needle valves.
- C. Replace seal leak reservoir and support brackets (Hydraulic schematic item 6.10.1 and 6.10.2)

T468-3.3.9. Ball Valves

- A. Replace in-kind ball valves as indicated in the plans.
 - 1. Suction Line Ball Valves (Hydraulic schematic items 3.1.1 thru 3.1.4).
 - 2. Accumulator Ball Valve (Hydraulic schematic item 2.12).
 - 3. Manual Control Manifold Ball Valves (Hydraulic schematic items 4.17 and 4.18).
 - 4. Main Manifold Ball Valves (Hydraulic schematic items 2.16 and 2.18).
 - 5. Return Line Ball Valve (Hydraulic schematic item 3.12).
 - 6. Cylinder Ball Valves (Hydraulic schematic items 5.7.1 and 5.7.2, 5.8.1 and 5.8.2,

5.9.1 and 5.9.2)

2.11).

B. Replace in-kind ball valve limit switches, operator rotary levers, and limit switch support brackets (Hydraulic schematic items 3.11 and 3.11.1).

T468-3.3.10. Hydraulic Fluid

Provide all hydraulic fluid required to install and test the hydraulic systems. Flush entire existing hydraulic span drive fluid system and replace with new oil. Hydraulic oil shall be the same fluid currently used at the bridge. Ensure all new components are designed for the hydraulic fluid.

Provide components, seals, etc. that are compatible with the approved fluid.

T468-3.3.11. Flow Meter

A. Replace in-kind flow meter (Hydraulic schematic item 3.2).

T468-3.3.12. Accumulator

A. Replace in-kind accumulator and accumulator bracket (Hydraulic schematic item

T468-3.3.13. HPU Support Frame

- A. Replace in-kind HPU struts and bases that form the support frame as shown on the plans.
- B. Provide new fasteners to secure new supports. Inspect the entire frame and replace any corroded fasteners with in-kind replacements.
- C. All frame support hardware to be Bosch manufacturer standard or engineer approved equal.

T468-3.3.14. HPU Miscellaneous Subcomponents

- A. Replace in-kind HPU reservoir mounting nuts and bolts.
- B. Replace in-kind HPU gauge station bracket.
- C. Replace in-kind HPU hand hole cover seals.

T468-3.3.15. Filter Cart

A. Replace in-kind filter cart.

T468-3.3.16. Piping Runs

Clean and Paint piping runs if replacement required, replace per pressure and flow criteria listed in plans. Fully adhere to Section 2.2.10 requirements for welding hydraulic components.

T468-3.3.17. Hoses

Replace in-kind hoses per pressure and flow criteria listed in the plans.

T468-3.3.18. Hydraulic Cylinder Clevis Supports

Field verify all cylinder support component alignment prior to final mounting of cylinder support components.

Touch-up paint in the field as required following installation. Use paint color specified in these technical special provisions.

T468-3.3.19. Hydraulic Cylinder Clevis Pin Installation

Submit detailed procedure for installation of the Hydraulic Cylinder Clevis Pins.

T468-3.3.20. Hydraulic System Training

No training is required.

T468-4. METHOD OF MEASUREMENT

- A. Spherical Bearings: The work of furnishing and installing the plain radial spherical bearings as detailed in this Technical Special Provision and on the Plans will be paid for at the Contract unit price per each item. Applicable to (4) spherical bearings.
- B. Plain Journal Bearings: The work of reconditioning the plain journal bearings as detailed in this Technical Special Provision and on the Plans will be paid for at the Contract unit price per each item. Applicable to (4) Plain Journal Bearings.
- C. Hydraulic Cylinders: The work of reconditioning the Hydraulic Cylinders and associated components as detailed in this Technical Special Provision and on the Plans will be paid for at the Contract unit price per each item. Applicable to (2) cylinder assemblies at machinery pit.
- D. Hydraulic Power Pack (HPU) Assembly: The work of reconditioning the HPU as detailed in this Technical Special Provision and on the Plans will be paid for at the Contract unit price per each item. Applicable to (1) HPU and associated hardware assembly.
- E. Span Lock System: The work of rehabilitating the Span Lock system as detailed in this Technical Special Provision and on the Plans will be paid for at the Contract unit price per assembly. Applicable to (2) Span Lock assemblies.
- F. Live Load Shoes: The work of shimming and adjusting of live load shoes as detailed in this Technical Special Provision and on the Plans will be paid for at the Contract unit price of lump sum. Applicable to (2) Live Load Bearing assemblies.
- G. Other Machinery Components: The work of removing and disposing of specified span drive machinery components as detailed in this Technical Special Provision and on the Plans will be paid for at the Contract unit price of lump sum.

T468-5. BASIS OF PAYMENT

Price and payment will be full compensation for all work specified in this Section, including furnishing and installing all equipment and materials. When an item of Mechanical Equipment is included in the proposal, price and payment will be full compensation for all work and costs specified under this Section except as may be specifically covered for payment under other items.

Payment will be made under:

Pay Item No. 465-2-122	Movable Bridge Machinery & Castings- Rehab, Furnish & Install, Spherical Bearings	EA
Pay Item No. 465-2-421	Movable Bridge Machinery & Castings- Rehab, Recondition, Plain Journal Bearings	EA
Pay Item No. 465-2-452	Movable Bridge Machinery & Castings- Rehab, Recondition, Hydraulic Cylinders	EA
Pay Item No. 465-2-454	Movable Bridge Machinery & Castings- Rehab, Recondition, Hydraulic Power Pack	EA
Pay Item No. 465-2-505	Movable Bridge Machinery & Castings- Rehab, Adjust/Modify, Span Locks	AS
Pay Item No. 465-2-508	Movable Bridge Machinery & Castings- Rehab, Adjust/Modify, Live Load Shoes	LS
Pay Item No. 465-2-660	Movable Bridge Machinery & Castings- Rehab, Remove & Dispose, Other Machinery Components	LS

TECHNICAL SPECIAL PROVISIONS

FOR

SECTION T508 - MOVABLE BRIDGES CONSTRUCTION

COUNTY PROJECT NUMBER: CN-1414-218

MATLACHA BASCULE BRIDGE EMERGENCY REPAIRS

BRIDGE NO. 124134

This Technical Special Provision has been digitally signed and sealed by <u>Marco Lara</u>, <u>PE</u> on the date adjacent to the seal. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Engineer of Record: Marco Lara, PE

Date: 31 July 2024

Florida License No.: 78414

Firm Name: Hardesty & Hanover, LLC

Firm Address: 5110 Eisenhower Blvd., Suite 310

City, State, Zip Code: Tampa, FL 33634

Pages: 1 through 38



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Section T508

Electrical Construction for Movable Bridges

T508-1 BASIC REQUIREMENTS

T508-1.1 Description of Work

Furnishing all labor and materials required to complete, make ready for operation, and make operational the installation of all items of work to provide a complete power, lighting, and control system for the bridge and control tower in accordance with this Technical Special Provision and the accompanying Contract Documents. Items of work include but are not limited to the following:

- 1. Perform testing and verify that the completed electrical system's installation and performance is satisfactory with respect to the requirements of this TSP.
- 2. Furnish and install all wire, cables, conduits, wiring devices, connections, terminations, motors, controllers, relays, control equipment traffic gates, safety switches, and all other apparatus and accessories required by the Contract Documents.
- 3. Furnish and install the connections to motors and to other equipment furnished and installed under other sections of the Contract Documents.
- 4. Furnish and install new electrical service conductors from the utility electrical service connection point to main disconnect switch located in the generator room via utility meter and main disconnect switches. Furnish and install service rated fused and non-fused disconnect switches.
 - 5. Recondition and refurbish existing 3-phase, 4-wire motor control center and shown on the plans.
- 6. Recondition and refurbish existing hydraulic power unit control panel and replace all components including adjustable speed drives, starters, circuit breakers, relays, power blocks, terminal blocks, and all other apparatus and accessories required by the Contract Documents.
 - 7. Furnish and install new traffic gates.
 - 8. Furnish and install new pedestrian gates.
 - 9. Repair existing barrier gate.
 - 10. Furnish and install new surge suppression devices.
 - 11. Furnish and install select PA communication devices.
 - 12. Furnish and install select general lighting and receptacle devices.
 - 13. Furnish and install select CCTV camera and mounting hardware.
 - 14. Furnish and install select roadway light poles.
- 15. Locate operating and control equipment to provide easy access and arrange entire electrical work with adequate access for operation and maintenance.
- 16. Provide shop drawings for electrical and control system conduit and conductors in accordance with Chapter 8 of the FDOT Structures Design Guidelines (SDG), latest edition. Wiring and conduit work includes: runs to traffic gates, pedestrian gates, traffic signals, local disconnect switches, navigation lights, intercom and PA system; CCTV camera system, system grounding scheme, Tender House amenities and equipment (including, but not limited to general lighting and receptacles), and any other component necessary for a complete electrical operating system.
- 17. Provide shop drawings for electrical and control system conduit and conductors in accordance with Chapter 8 of the FDOT Structures Design Guidelines, latest edition. Wiring and conduit work includes: runs to traffic gates, traffic signals, local disconnect switches, navigation lights, system grounding scheme, Tender House amenities and equipment and any other component necessary for a complete electrical operating system.

T508-1.1.1 Regulatory Requirements

Perform all work, and furnish and install all materials and equipment in accordance with the applicable sections of the latest edition, at time of Contract Plan signing, of the following:

- 1. National Electrical Code NFPA 70 (NEC).
- 2. Electrical Safety in the Workplace NFPA 70E.
- 3. National Electrical Safety Code IEEE-C2 (NESC).

- 4. Life Safety Code (NFPA-101).
- 5. Underwriters Laboratories (UL) all applicable UL standards where established for electrical materials, devices, and equipment
- 6. National Electrical Contractors Association (NECA-1).
- 7. Electrical Standard for Industrial Machinery NFPA 79 (ESIM).
- 8. Standard for the Installation off Lightning Protection Systems NFPA-780.
- 9. AASHTO LRFD Movable Highway Bridge Design Specifications (second edition 2007 and all interim revisions), published by the American Association of State Highway and Transportation Officials, Inc.
- 10. American National Standards Institute (ANSI).
- 11. National Electrical Manufacturers Association (NEMA) NEMA- MG1, plus all NEMA standards where established for electrical devices, and equipment.
- 12. Institute of Electrical and Electronics Engineer (IEEE) Ground Testing Standard 81.
- 13. Insulated Cable Engineers Association (ICEA).
- 14. International Electrical Testing Association (NETA) ATS.

T508-1.1.2 Protection of Electrical Equipment

Protect electrical equipment from water damage, rain, condensation, and water dripping or splashing on equipment and wiring, at all times during shipment, storage and construction (prior to final acceptance). Provide temporary electrical connections to equipment heaters, or provide temporary heaters, as required to prevent damage from moisture.

Provide climate-controlled environment for the storage of control equipment/assemblies during construction.

Thoroughly dry out and put through special dielectric tests any equipment subjected to possible injury by water or dampness (including the interiors of motor control equipment or any other electrical devices).

Protect equipment from damage from mishandling, dropping, or impact. Do not install damaged equipment.

Provide spare parts in sealed, uniform-sized cartons, with typed and clearly varnished labels to indicate their contents and stored in a portioned lockable box. Also, provide a directory of permanent type describing the parts including the name of each part, the manufacturers' number, and the rating of the device for which the part is a spare. Mark the spare parts to correspond with their respective item numbers as indicated on the elementary wiring diagram.

Ensure spare parts are available at time of Functional Checkout. Replace spare parts used during Functional Checkout.

T508-1.1.3 Coordination of Electrical Work

The contract documents are diagrammatic in showing certain physical relationships within the electrical work, and must interface with other work including utilities and mechanical work.

T508-1.1.4 Materials and Equipment to Install

Use only new materials that conform to the standards of the UL in every case where such a standard has been established for the particular type of materials and its intended application.

Furnish and install all new conduit, wiring, disconnect switches, smoke detectors, panelboards, controls and relays, wiring devices, transformers, boxes, terminal blocks, electrical identification, motor controls, and supporting devices for a complete electrical installation on the bridge. Ensure that the materials are UL listed for the application.

Ensure all electrical equipment used outside of the conditioned spaces of the Tender House is suitable for use in a marine (salt atmosphere) environment.

T508-1.1.5 Electrical Journeymen

Ensure the individual filling this position meets the minimum requirements for 105-8.8.5.1. Electrical Journeyman of the FDOT Specifications.

Perform all electrical work either by, or under the immediate supervision of an electrical journeyman. For this project, "under the immediate supervision" means that the journeyman is in the immediate vicinity and physically involved in performing the electrical work.

T508-1.1.6 Control Systems Engineer

Ensure the individual filling this position meets the minimum requirements for 105-8.8.5.2. Control Systems Engineer of the FDOT Specifications.

The Project's Control Systems Engineer serves as sole representative for the detail design, development, coordination, and testing of the leaf drives, interface to the existing electrical control system, including the Motor Control Center (MCC), the control console, and interfacing with the existing leaf drive system.

The Control System Engineer's responsibilities include directing all field-testing the new and existing equipment including the motor control center (MCC), the main distribution panel, motor controllers, the control panel, the control desk, motor drive program, and witnessing the shop testing of the mechanical operating equipment including the traffic gates.

The Control System Engineer is responsible for the review of shop drawings, prior to submission, to ensure that all components of the bridge operating system submitted for use are compatible in every respect and that all components meet or exceed the specific requirements and intent of the project.

Ensure the Control Systems Engineer is on site, directing all testing and commissioning of the existing and new bridge operating equipment and systems including the span locks, traffic barriers, sidewalk gates, and traffic gates in conjunction with the manufacturers' on-site field engineer representatives for the mechanical equipment.

The Control Systems Engineer must be a registered Professional Engineer licensed in Florida, through examination taken in the electrical engineering discipline.

T508-1.2 Quality Control

Ensure the Quality Control Plan includes all work under this Technical Special Provision. See FDOT Specification 105 for additional information.

T508-1.2.1 Test Procedures

Procedures for shop testing and functional acceptance testing as required under T465-5 Movable Bridge Functional Checkout.

T508-1.2.2 Tools and Procedures

Manufacturer Requirements: Install, apply, or adjust all electrical equipment and materials in accordance with the manufacturers' recommendations including the usage of the manufacturer specified tooling. When such materials are UL, or other third party, listed or recognized, the tooling used for field installation must be the same as, or the manufacturers' approved equivalent to, the tooling utilized in the approval testing.

- 1. When applicable, the approved tooling will provide a suitable identification to the work to allow verification of the use of the appropriate tool to perform the work. For example, use of crimping dies that contain identification marks that emboss the crimps made with them with an identification embossment.
- 2. Where possible, the requirement to provide a level of workmanship quality is transferred to the tooling rather than the skills of the worker. For example:
- 3. Conductor Stripping: Depend upon the use of approved non-nicking strippers rather than the operator's skill with knife edged stripping tools to prevent wire nicking.
- 4. Crimp Tightness: Proper crimping will depend upon the exclusive use of controlled cycle crimping tools that require the proper degree of compression before releasing the work rather than

upon the operator's judgment in squeezing the tool handle.

- 5. Tie Tightness: Determine proper tensioning of cable and wrap ties by the use of the manufacturers' specified calibrated tensioning tool rather than the operator's judgment of what is "tight enough."
- 6. Fastener Torque: Tighten fasteners with a recommended torque, where the proper tightness is important to the performance of the function (which includes all electrical terminals), with a calibrated torque (limiting) screwdriver or other torque-indicating tool.

T508-1.2.3 Tool Verification

Whenever any other Article of this Section requires material submittals, when tooling is associated therewith, submit the manufacturers' tooling requirements and procedures, including catalog and calibration information, on the tooling that is proposed.

Document all tooling used as to the method of use and the calibration requirements and procedures. Provide calibrations that are traceable to the National Institute of Standards and Technology (NIST) or other recognized standards laboratory. Equipment that requires repetitive calibration (e.g., terminal crimpers often require daily verification by pull testing sample crimps) must be supported, on site, by the required calibration verification instruments. Ensure that operating manuals for all specialized tooling are available on the site for reference at any time.

T508-1.2.4 Tool Application

The journeyman electrician intending to operate a specialized tool must demonstrate his knowledge of, and skill in using, the tool including the knowledge and ability to judge the results produced by the tool and to recognize failure of the tool to perform satisfactorily.

T508-1.2.5 Test Equipment

Provide test and measurement instruments suitable to perform the required tests including ratings and measurement accuracy as specified by the manufacturer. Clearly indicate the exact make and model of instrument used and include manufacturers' specification data indicating the suitability of the instrument's specifications.

Use only test instruments calibrated and certified by an independent certification laboratory, to the required accuracy, in accordance with the instrument manufacturers' requirements within a maximum interval of the preceding 12 months. Certify all calibrations as traceable to the National Institute of Standards and Technology (NIST) or other recognized standardization authority.

Test instrument operating manuals and certification certificates must be available on the project site for reference whenever the instrument is being used or evaluated.

T508-1.2.6 Test Result Reporting

Include the forms to be used for recording and submitting the data, where test or inspection data submittal is required by this TSP, in the Quality Control Plan.

For all electrical testing, record the weather conditions including temperature, rain/fair, and relative humidity, on the form twice daily or more frequently at appropriate intervals as determined by the changing meteorological conditions. Record wind velocity and direction for leaf related tests where the wind loading is a factor in the performance or results.

Record test instrument identification, including traceable serial number, for each measurement group. Include a copy of the Certificate of Calibration for the particular instrument in the submittal.

Have the Control Systems Engineer review and approve all test data submittals prior to

T508-1.2.7 Test Performance

Perform all tests in accordance to the latest edition of the International Electrical Testing Association (NETA) Acceptance Testing Specifications.

T508-2 WORKING PLANS AND SHOP DRAWINGS

T508-2.1 Description

Provide Shop Drawings in accordance with FDOT Specification 5. Including but not limited to the following:

T508-2.1.1 Data Sheets

Label data sheets for individual components such as motors, limit switches, etc. with the identification numbers shown in the Contract Documents.

T508-2.1.2 Spare Parts

List of all manufacturers' recommended spare parts.

T508-2.1.3 Conduit Layout Drawings

Conduit layout drawings for conduit and wiring, including details of all conduit penetrations through structural elements, and each type of conduit and fitting. Include details of reinforcement in the penetration area on conduit penetration shop drawings. Show all conduit runs between all pieces of equipment in the drawings.

Outline and support point dimensions, voltage, main bus ampacity, integrated short-circuit ampere rating, circuit breaker arrangement and sizes. Provide manufacturers installation instructions, which indicate application conditions and limitations of use, stipulated by the product-testing agency. Include instructions for storage, handling, protection, examination, preparation, installation and starting of all products. Record actual locations of all products and indicate actual branch circuit arrangement.

T508-2.1.4 Existing Power Service

Power service detailing routing with dimensions, pull box locations, expansion joint fitting type and locations, and conduit support assembly details. Show electric meter detail and location.

T508-2.1.5 Electrical Shop Drawings

Prepare detailed electrical and hydraulic control system designs as required to fabricate and furnish the drive control equipment, define the installation and interconnection of the electrical equipment including all required interconnections with equipment furnished under other sections of the TSPs for Movable Bridge Construction.

T508-2.1.6 Fused Disconnect Switches

For fused disconnect switches include outline drawings with dimensions, equipment ratings for voltage, capacity, horsepower, and short-circuit. Provide manufacturers fuse and circuit breaker curves (time/current on log/log graph) for each rating of fuse and circuit breaker supplied.

T508-2.1.7 Disconnect Switches

Voltage and ampere ratings, construction material, NEMA classification, and dimensioned outline drawing for each type switch.

T508-2.1.8 Electrical Equipment

Catalog data sheets for conduit and fittings, wire, wiring devices, outlet boxes, fasteners, terminal blocks, mounting hardware, junction and pull boxes, grounding, and safety switches.

T508-2.1.9 Terminal Blocks

For each type and rating of terminal blocks, include voltage and ampere ratings, materials, and dimensioned outline drawings.

T508-2.1.10 Conductors

For each type of conductor to be used.

T508-2.1.11 Grounding

For each type of ground rod, clamp, well, and associated hardware.

T508-2.1.12 Boxes

For all Junction and pull boxes.

T508-2.1.14 Identification

For each type of identification device to be used for each electrical component. Provide an engraving schedule for all laminated nameplates.

T508-2.1.15 Supporting Devices

For each type of strut, clamp, insert, and associated hardware; dimensional data for struts; and pullout data for anchors.

T508-2.1.16 Motors

Plan and elevation drawings with dimensional data, nameplate data, performance data including torque-speed and current graphs, and schematic diagrams for each type of motor. Provide certified motor drawings to the machinery fabricator for coordination. Include a motor data sheet indicating horsepower, voltage, FLA and LRA current, motor speed, NEMA frame size, insulation class, temperature rise, service factor, and any optional equipment or attachments such as tach-generator, encoder, thermal switch, or space heater in the motor submittals. Provide a motor torque-speed performance graph. Provide dimensioned outline, plan/elevation and wiring interconnect drawings. Include installation instructions, operation, and maintenance data with instructions for storage, handling, protection and starting of motors. Include assembly drawings, bearing data with replacement sizes, and lubrication instructions.

T508-2.1.17 Motor Control Center

Coordination evaluation report for over current protective devices, conductors, and transformers to be replaced. Ensure the report shows coordinated device trip settings for all the devices.

One-line and three line diagrams.

Schematic diagrams for each cubicle (including field wiring with wire numbers).

Wiring and Interconnection Diagrams for both starter cubicles and terminal only cubicles to be replaced.

Include field wiring in the schematic diagrams. Wire numbers for field wiring to match existing. Ensure that field terminals on wiring diagrams also indicate these numbers. It is preferred that the existing wire numbers be used for internal wiring as well. However, if different numbers are used, mark terminals for field wiring as "panel wire number/field wire number."

Elevation and dimensioned outline drawings detailing arrangement of sections, cubicles, wireway and conduit entry.

Equipment schedule (Bill of Materials) detailing all components (with manufacturer's part no.) for each controller (cubicle).

- 1. Surge suppressor details.
- 2. Phase-loss indicating instrumentation.
- 3. Engraving schedule for nameplates.

Descriptive data for all components circuit breakers (CBs), starters, overload (OL) relays, hand-off-automatic (HOA) switches, lights, indicators.

Furnish instruction manuals describing theory of operation, maintenance information and schematics of motor starter units.

Rubber Mats.

T508-2.1.18 Integrated Bridge Control System

All components (terminal blocks, relays, timers, fuses, circuit breakers, sensors, etc.). Provide instructions for adjusting and resetting time delay relays and timers.

Dimensioned fabrication details for Hydraulic Power Unit Control Panel back panel including, to scale, equipment layouts, punch-outs, nameplate schedules, and bill of materials. Label all components, for which identification numbers are provided in the Contract Documents, with that number.

Bill of materials. Provide some means of cross-referencing the item identification numbers to the materials list; either by schedule or labeling the applicable catalog data sheets.

Engraving schedule for nameplates.

Schematic diagrams including field wiring. Use existing wire numbers for each wire and include in the schematic and wiring diagrams.

Procedures for shop test and functional acceptance testing.

Perform the detailed design of the control system using information in the Contract

Documents.

T508-2.1.20 Traffic Gate Assemblies

Refer to TSP 465-4 Traffic Gate Assemblies.

Maintain these construction shop drawings as working drawings for the duration of construction. Required working drawings include conduit routing plans, schematic diagrams, interconnection wiring diagrams, and conduit and cable schedules. Make working drawings available to the Engineer, on request, for review of construction issues.

Maintain a full set of working drawings on the jobsite at all times.

The working drawings must be available at the time of the Functional Checkout, and Start-up and Commissioning as defined in TSP T465. Unavailability of the working drawings is sufficient reason to cancel the Functional Checkout, and Start-up and Commissioning.

T508-2.1.21 As – Built Drawings and Operation Manual

Provide As-Built Drawings and Operations and Maintenance Manuals in accordance with Technical Special Provision T465-5.1.

T508-3 MATERIALS AND EQUIPMENT

Furnish only new materials that conform to the standards of the UL, in every case where such a standard is established for the particular type of material and its intended application. Prior to purchase of any materials or equipment required to be furnished and installed, submit a complete list of all such materials and equipment including manufacturers' catalog numbers, catalog data sheets, illustrations, and shop drawings to the Engineer for approval.

T508-3.1 Wire and Cable

T508-3.1.1 Description

Work under this Article includes but is not limited to the following: wire and cable, wiring connectors, and connections. Wire and cable routing shown is approximate unless dimensioned. Route wire and cable to meet project conditions. Determine exact routing and lengths required unless shown on the Plans.

T508-3.1.1.1 Quality Control

The Quality Control Plan includes, but is not be limited to, the following:

Test Reports: including procedures used and values obtained.

Manufacturer's installation instructions: Indicate application conditions and

limitations of use stipulated by product testing agency specified under Regulatory Requirements.

T508-3.1.1.2 Regulatory Requirements

Conform to requirements of NFPA 70.

Furnish products listed and classified by Underwriters Laboratories, Inc. as suitable for purpose specified and shown.

Determine required separation between cable and other work.

Determine cable routing to avoid interference with other work.

T508-3.1.1.3 Definitions

The following definitions only apply to this Technical Special Provisions.

<u>Power Conductor</u>: Any wire that feeds power to a field device (i.e. gate motors, span lock motors, traffic signals, etc.).

Control Wire: Any wire that goes to a pilot device (i.e. limit switches, pressure

<u>Field Wire</u>: Any wire that leaves the tender house. Consider the machinery platform to be outside the tender house.

T508-3.1.2 Materials

switches, etc.).

Stranded copper wire and cable. Note: Do not use aluminum conductors.

Single conductor insulated wire. Provide XHHW-2 rated $600~V_{AC}$ unless otherwise noted. Provide SE, or RHW-2 insulated wire for incoming services unless otherwise noted.

Use seven or nineteen strand copper, minimum 98% conductivity conductors for field wiring. Furnish connector accessories for copper in sufficient quantities for a complete installation. Do not use aluminum or solid copper conductors. In cases of low level audio or digital signals, use twisted shielded pairs when required.

Use no wire smaller than No. 12 AWG for power and lighting circuits and no smaller than No. 14 AWG for control wiring between cabinets, except that control wiring within a manufactured cabinet may be smaller. Use of wires smaller than No. 18 AWG requires approval. If approved, use multiconductor ribbon cables between components within a cabinet. Install per the requirements of UL 508.

Minimum field wire size is No. 12 AWG for control conductors between cabinets and field devices and No. 10 AWG for motor loads. Use pigtails, no longer than 12 inch, for connection of field devices that cannot accommodate a No. 12 AWG wire. Use No. 10 AWG for 20 A, 120 V_{AC} , branch circuit home runs longer than 75 feet, and for 20 A, 277 V_{AC} , branch circuit home runs longer than 200 feet. Maximum wire size allowed is 500 kcmil, use parallel runs as needed for larger loads.

T508-3.1.3 Construction Requirements

Installation includes placement, splicing, terminating, identifying, testing, and verifying each circuit and conductor. Do not splice wires (except for "pigtail" leads and lighting circuits), use insulated terminal blocks rated for $600\,V_{AC}$ in enclosures.

Do not mix power and control conductors in the same conduit.

If more than three current carrying conductors are in a conduit, derate the conductors per Table 310.15(B)(2)(a) of the NEC. For derating purposes, consider all power conductors, other than the ground conductors, as current carrying, this requirement does not apply to control wires.

Cover any uninsulated conductors and connectors with heat shrink insulation rated for $600~V_{AC}$. Neatly train and lace wiring inside boxes, equipment, and panelboards. Place an equal number of conductors for each phase (three-phase system) of a circuit in same raceway or cable. Make conductor lengths for parallel circuits equal. Pull all conductors into a raceway at the same time.

Install two spare conductors, minimum, for long field runs to critical devices such as traffic gates, traffic signals, and all movable span mounted devices, etc.

Use only water based, wax free, UL listed wire pulling lubricant for pulling wire and cables. Do not exceed the pulling tensions recommended by the manufacturer; pulling may be witnessed by the Engineer. Cap all conduit ends with threaded PVC or nylon bushings. Take precautions to avoid "sawing" through PVC conduit or the end cap bushings. Use only braided pull ropes. Do not pull bare conductors through PVC conduits. Swab conduit with a lubricant approved by the Engineer prior to pulling the conductors.

Test each circuit for continuity and short-circuits for its complete length before connecting to load. Verify identification numbers for the entire length of the circuit. Inspect wire and cable for physical damage and proper connection.

Perform the insulation resistance testing for motor windings and conductor insulation as required by the NETA ATS (International Electrical Testing Association-Acceptance Testing Specifications for Electric Power Distribution Equipment and Systems - latest edition), including dielectric absorption testing. Any measured resistance values less than 100 M ohms are not acceptable. The Engineer will witness the test. Record the test results and submit to the Engineer for review prior to energizing the circuit. Include a Table of the test results with the "as-built" drawings with additional columns left blank for recording future readings.

T508-3.2 Grounding

T508-3.2.1 Description

Ground the electrical power and control system in accordance with NEC Article 250

requirements. Furnish and install replacement service point ground rods, and grounding conductors as shown in the Plans.

T508-3.2.2 Materials

Use only insulated soft drawn annealed copper grounding conductors unless otherwise noted in the plans.

Use 1-inch diameter, 10 foot, copper clad steel ground rods.

Provide ground well 10 inches in diameter, 24 inches long, PVC, with a belled hub and a galvanized steel cover.

Use tin plated, high-pressure compression, one-hole lug connections for grounding equipment. Use only exothermically welded connections to ground rods.

T508-3.2.3 Construction Requirements

Install a dedicated ground conductor, with green insulation in each conduit in which voltage of the current carrying conductors exceeds 50 V.

Size grounding conductors in any conduit in accordance with NEC Table 250.122, or the same AWG as the largest current carrying conductor in the conduit, whichever is larger.

Provide two ground rods and wells at the service entrance main disconnect switch in accordance with the NEC. Locate ground wells within 10 feet of the main disconnect switch mounting support. If the resistance between the two ground rods exceeds 25 ohms, add extensions and drive rods deeper if required.

Provide, as a minimum, a No. 2/0 AWG service entrance grounding conductor from the case ground to the well. Install the ground well so that the top of the well is 1/2 inch above the finished grade and drive the rod to just below the top. Fill well with gravel.

Bond the electrical system to the lightning protection system ground at the lightning grounding electrode (rod) closest to the motor control center in the bridge pier and the ground buss in the motor control center.

T508-3.3 Supporting Devices

T508-3.3.1 Description

Provide hangers and supporting devices as required by AASHTO, the NEC, and this TSP.

T508-3.3.2 Materials

Provide brass or stainless steel mounting bolts, nuts, washers, and other hardware used for fastening boxes, disconnect switches, devices, lighting outlet boxes, conduit clamps, and similar devices. Use hexagonal bolt heads and nuts. Do not use bolts smaller than 3/8 inch in diameter except as may be necessary to fit the mounting holes in small devices, outlet boxes, and similar standard equipment.

Provide PVC coated steel support struts and clamps to support PVC coated conduits.

Furnish products listed and classified by UL as suitable for purpose specified and shown. Provide adequate corrosion resistance and ensure that the material selected for the hardware is compatible with the material of the device supported.

Provide materials, sizes, and types of anchors, fasteners and supports to carry the loads of equipment and conduit. Consider weight of wire in conduit when selecting products. Minimum safety factor is 2.0. Provide stainless steel framework for supporting boxes, switches, and other externally mounted electrical devices fabricated from stainless steel not less than 3/8 inch thick. If material of thickness less than 3/8 inch is used, obtain approval of the Engineer.

For U-Channel strut systems utilizing bolted construction, provide stainless steel, 12 gage and 1-1/2 inch width minimum components from the same manufacturer.

T508-3.3.3 Construction Requirements

Do not use powder-actuated anchors, drill or weld structural steel members; or fasten supports to piping, ductwork, mechanical equipment, or conduit. In addition, do not allow piping, or other trades to fasten to electrical conduits and supports.

- A. Use hexagonal bolt heads and nuts with spring lock washers under all nuts.
- B. Provide conduit supports at no more than 5 foot spacing between supports and no more than 12 inches from box or fixture.
- C. Fasten hanger rods, conduit clamps, and outlet and junction boxes to structure using proper fasteners. Use toggle bolts or hollow wall fasteners in hollow masonry, plaster, or gypsum board partitions and walls; expansion anchors or preset inserts in solid masonry walls; self-drilling anchors or expansion anchor on concrete surfaces; sheet metal screws in sheet metal studs; and wood screws in wood construction.
- D. Use stainless steel straps or hangers held at not less than two points for attachment to steel or concrete. Provide insulation protection between conduit and straps to protect against dissimilar metal corrosion.
- E. Provide type 316 stainless steel concrete inserts with concrete work.
- F. Install surface-mounted cabinets and panelboards with minimum of four anchors. Fasten device boxes to the mounting surface with not less than two anchors sized per manufacturer's recommendations.
- G. Fasten hanger rods, conduit clamps, and outlet and junction boxes to structure using proper fasteners.
- H. Ensure that cut offs are cut square, ground smooth and de-burred. Where PVC coated steel has damage to the coating, coat the exposed steel with the manufacturers' touch up coating, to the same thickness as the original, prior to installation.
- I. Use stainless steel cast in place inserts for overhead supports.

T508-3.4 Conduit and Raceways

T508-3.4.1 Description

Furnish and install conduit and raceways in the quantities and sizes required to complete the work as shown in the Plans. If the Plans do not show conduit size, determine the size as required by the NEC, minimum conduit size allowed is 3/4 inch. Furnish products listed and classified by UL for purpose specified and shown. Do not use non-metallic flexible conduit, aluminum conduit, intermediate metal conduit (IMC), or electrical metallic tubing (EMT). Recombine conduit and circuits indicated in the Plans, diagrams, and schedules where appropriate and as approved.

T508-3.4.2 Materials

T508-3.4.2.1 PVC Coated and Metal Conduit

Hot dipped galvanized, inside and out, rigid steel conduit (ANSI C80.1) with hot galvanized threads and external PVC coating 40 mils thick; meeting the requirements of NEMA RN 1 and fittings and conduit bodies meeting the requirements of ANSI/NEMA FB 1 with steel fittings with internal and external PVC coatings to match conduit. Provide 40 mils thick PVC coating on the outside of conduit couplings and a series of raised longitudinal ribs to protect the coating from tool damage during installation.

Ensure the bond between the PVC coating and the conduit surface is greater than the tensile strength of the coating. Verify this bond by testing as described in NEMA Standard RN-1, section 3.8.

Uniformly, and consistently, apply a nominal 2-mil thick urethane coating to the interior of all conduit and fittings. Conduit or fittings having pinholes or areas with thin or no coating are unacceptable. Protect all factory cut threads on conduit, elbows, nipples, and fittings by application of a urethane coating. The PVC exterior and urethane interior coatings applied to the conduit must afford sufficient flexibility to permit field bending without cracking or flaking at temperatures above 30°F.

Furnish right angle beam clamps and U-bolts specially formed and sized to fit the outside diameter of the PVC coated conduit. Supply all U-bolts with plastic encapsulated nuts that cover

the exposed portions of the threads.

Ensure that only tools designed and approved by the conduit manufacturer for use on PVC coated materials are used and the workmen performing the installation are trained and certified in the installation and use of PVC coated conduit and fittings by the manufacturer.

Ensure that the same manufacturer supplies all PVC coated conduit, fittings, and accessories.

T508-3.4.2.2 Liquid-Tight Flexible Metal Conduit

UL 360 listed, interlocked galvanized steel construction, with integral ground continuity and PVC jacket. Use only PVC coated fittings, meeting the requirements of ANSI/NEMA FB 1.

Use liquidtight flexible galvanized steel metal conduit only for the connection of motors, limit switches, and other devices that must be periodically adjusted in position. Make connections between the rigid galvanized steel conduit system and all motors, and movable limit switches with flexible conduit with couplings and threaded terminal fittings. Use only fully interlocked flexible conduit. Do not use flexible metal conduit extensions longer than 3 feet in length and provide with bonding jumpers.

Install conduit in accordance with NECA "Standard of Installation." Provide separate conduits for control (up to 120 V_{AC}) conductors and power

conductors.

T508-3.4.2.3 Non-Metallic Conduit

UL listed Schedule 80 PVC conduit meeting the requirements of NEMA TC 2 and Fittings and Conduit Bodies meeting the requirements of NEMA TC 3.

T508-3.4.2.4 HDPE Conduit

UL listed for electrical use Schedule 80 conduit meeting the requirements of NEMA TC 7. Use only UL listed fittings.

T508-3.4.3 Construction Requirements

- A. Use 1 inch minimum size Schedule 80 PVC or Reinforced Thermosetting Resin conduit for underground installations when installation is more than 5 feet from bascule pier wall. Use 1- inch minimum size Schedule 80 PVC conduit for underground installations when installation is within 5 feet from bascule pier wall.
- B. Use 1 inch minimum size Schedule 80 PVC in slab above grade (embedded).
- C. Use 1 inch minimum rigid galvanized steel (PVC coated) for outdoor locations, above grade, exposed (leaf) and exposed in dry locations (in pier, control house).
- D. Use 3/4 inch minimum size Schedule 80 PVC for wet and damp locations (fender).
- E. Use 3/4 inch minimum size rigid galvanized steel (PVC coated) for lighting and receptacle circuits in bascule piers.
 - F. Use HDPE conduit for submarine cable installation only.

- G. Install conduit in accordance with NECA Standard Practice and in accordance with manufacturers' instructions.
- H. Do not use plastic straps or plastic hangers. Do not support conduit with wire or perforated pipe straps. Remove wire used for temporary support.
- I. Run exposed raceway straight and parallel or at right angles to the general structure lines.
- Change conduit elevation when changing direction to avoid blocking the path of other conduits.
- K. Support all conduits on strut fabricated from type 316 stainless steel.
- L. Use only 316 stainless steel conduit mounting hardware. To prevent dissimilar metal corrosion, provide isolation bushings or washers where stainless steel touches other metals.
- M. Group related conduits; support using conduit rack. Construct rack using stainless steel channel; provide space on each for 25% additional conduits.
- N. Use pull boxes wherever necessary to facilitate the installation of the conductors. Use conduit hubs to fasten conduit to sheet metal boxes. Avoid moisture traps; provide junction box with drain fitting at low points in conduit system. Install all conduits so that they drain properly and provide drainage tees at low points where required.
- O. At any point where a conduit crosses an expansion joint, or where movement between adjacent sections of conduit is expected, install bronze or alloy expansion fittings. Arrange conduit to maintain headroom and present neat appearance. Route exposed conduit parallel and perpendicular to walls. Maintain adequate clearance between conduit and piping. Maintain minimum 6- inch crossing and 12-inch paralleling clearance between conduit and from surfaces with temperatures exceeding 40°C.
- P. Install flexible metal conduits as to drain away from the device they serve.
- Q. Provide both ends of each conduit run with a brass tag having a number stamped thereon in accordance with the conduit diagrams. Use bare copper wire to fasten these tags securely and permanently to the conduit ends.
- R. Wherever possible, run conduits in the control room and bascule piers exposed and not concealed in the walls, ceiling, or floor. Where conduits pass through the floors or walls of the control room, provide Schedule 80 PVC conduit sleeves allowing free passage of the conduits. After installing couplings, caulk openings with an approved UL listed fire stop material for airtight fits. Provide escutcheon plates on the interior walls, ceilings, and floors.
- S. Connect conduit sections to each other with approved couplings; do not use aluminum couplings. Install conduits to be continuous and watertight between boxes or equipment. Protect conduits at all times from the entrance of water and other foreign matter by being capped or well plugged overnight and when the work is temporarily suspended. Set conduits mounted exteriorly on parts of the steel work not less than 1-1/2 inch clear from the supporting structure to prevent accumulation of dirt. Space parallel horizontal conduit 1 inch apart and securely clamp to the steel work to prevent rattling and wear.
- T. Cut conduit square using saw or pipe cutter; de-burr cut ends. Clean and swab conduit after threading. Bring conduit to shoulder of fittings; fasten securely. Do not use long running threads. Tighten conduits until the cuff of the PVC coated fitting or coupling conceals all threads.
- U. Join nonmetallic conduit using cement as recommended by manufacturer. Wipe nonmetallic conduit dry and clean before joining. Apply full even coat of cement to entire area inserted in fitting. Allow joint to cure for 20 minutes, minimum. Provide embedded conduit stub-outs with threaded 316 stainless steel couplings.
- V. Install no more than the equivalent of three 90-degree bends between boxes. Use conduit bodies to make sharp changes in direction, as around beams. Use factory elbows for bends in

metal conduit larger than 2 inches. All field bends will be long sweep, with a radius 12 times the diameter, and free of kinks to facilitate the drawing in of conductors without injury to the conductors. Make conduit runs with as few couplings as standard conduit lengths will permit.

W. Use suitable caps to protect installed conduit against entrance of dirt and moisture. Upon completion of the conduit installation, clear each conduit with a tube cleaner equipped with a mandrel of a diameter not less than 80% of the nominal inside diameter of the conduit, and draw in the conductors. Provide suitable pull string in each empty conduit.

T508-3.5 Boxes

T508-3.5.1 Description

Provide pull boxes and junction boxes as shown in the Contract Plans, at locations where more than eight conductors are gathered, and as required by the NEC.

T508-3.5.2 Materials

Provide NEMA 4X type 316 stainless steel boxes in all exposed areas and machinery room. NEMA 12 in the enclosed areas of the Tender House.

Ensure pull boxes, junction boxes, and all other miscellaneous housings used for pulling wires, terminating wires, or otherwise used to install electrical equipment, are NEMA 4X stainless steel. Provide drip proof enclosure opening with a rolled edge and cover held closed with clamps.

Provide drain holes in the boxes with protective drain fittings. Provide drain fittings with neoprene tube. Ensure drain seals provide continuous draining and thereby prevent water accumulation. Drain seals range in size from 1/2 inch to 4 inches inclusive. Provide drain seals with one opening for draining and one for filling, a rubber tube to form drain passage.

Provide enclosures larger than 12 inches in any dimension with a continuous stainless steel hinged cover with a glued in neoprene gasket.

Provide sheet metal enclosures with "O"-ring sealing hub connectors, drain fittings, and not less than four mounting lugs.

Provide all enclosures with grounding terminals, and bond to ground.

Connect conduit to boxes using threaded hubs with grounding lugs, and where required, furnish isolation washers to protect against dissimilar metal corrosion. Bond hubs to ground.

T508-3.5.3 Construction Requirements

Install insulated bushings on conduit ends projecting into all boxes and enclosures. Do not drill box or enclosure for more conduits than actually enter it.

In locations exposed to weather use side or bottom conduit entries boxes only.

Use of wireways (metallic or non-metallic) and/or sheet metal troughs with hinged or removable covers is not acceptable.

Size boxes per NEC requirements for the size and number of conduits. Additionally, size boxes to include provisions for terminal block wiring clearance. Do not use boxes smaller than 8 by 8 by 4 inches.

Provide all boxes with mounting lugs and securely fasten to the structure with not less than four stainless steel fasteners. Bond all enclosure covers and doors to ground.

T508-3.6 Terminal Blocks

T508-3.6.1 Description

Provide terminal blocks for internal circuits; circuits crossing shipping splits; where it will facilitate equipment parts replacement and maintenance; and to connect the temporary systems to the permanent systems during phased construction. Provide disconnect type terminal blocks for conductors requiring connection to circuits external to the control house.

T508-3.6.2 Materials

Furnish and install terminal blocks rated at 600 V. Furnish channel mounted, screw cage, box clamp type, terminal blocks for No. 8 AWG and smaller conductors, with vibration proof nonferrous screw. Provide terminal blocks in groups of 12 with interlocking "finger safe" type barriers with white

marking strips.

Furnish power distribution terminal blocks for No. 6 AWG and larger conductors, three-pole, suitable for copper conductors, UL rated for amperage equal to the largest conductor it accommodates and made out of copper.

Provide all current carrying components with corrosion resistant plating on nonferrous hardware. Do not use aluminum components if installed outside of the conditioned spaces of the Tender House.

Provide terminal blocks with wire protectors that physically isolate the conductor from the terminal screw.

Do not use terminal blocks that require special tools.

T508-3.6.3 Construction Requirements

Group terminal blocks for easy accessibility unrestricted by interference from structural members and instruments.

Provide 2 inches minimum on each side of each terminal block and between terminals and wire duct to allow an orderly arrangement of all leads terminated on the block and to allow for wire labels.

Do not terminate more than two wires on any one terminal position.

Permanently label each terminal block, device, fuse block, and both ends of each conductor to coincide with the identification indicated on the schematic and wiring diagrams. Ensure that terminal blocks and devices already numbered on the plans have the same numbers on the equipment supplied.

T508-3.7 Electrical Identification

T508-3.7.1 Description

Provide identification for each electrical component including, but not limited to, conduit, wire, panels, boxes, motors, motor controllers, disconnect switches, and control devices.

T508-3.7.2 Materials

T508-3.7.2.1 Nameplates

Provide legend nameplates for all major pieces of equipment named on the plans, and for all control devices.

Provide legend nameplates for devices that show the device designation and name used on the schematic wiring diagram. Provide fuse legend nameplates that show the type, ampere, and voltage rating of the fuses.

Provide typewritten directories, with covers and directory pockets, for all panelboards. Provide identification for each branch circuit in a panelboard.

Provide nameplates of minimum letter height as scheduled below:

Panelboards, Switchboards, and Motor Control Centers: 1/4 inch, identify equipment designation. 1/8 inch, identify voltage rating and source.

Individual Circuit Breakers, Switches, and Motor Starters in Panelboards,

Switchboards, and Motor Control Centers: 1/8 inch, identify circuit and load served, including location.

Individual Circuit Breakers, Enclosed Switches, and Motor Starters: 1/8 inch, identify load served. Transformers: 1/4 inch, identify equipment designation. 1/8 inch, identify primary and secondary voltages, primary source, and secondary load and location.

Switches, control relays, timers and other control devices: 1/8 inch, identify load and source and tag identification number.

Control Panel switches, pushbuttons, indicating lights, meters: 1/8 inch, identify function (Raise, Lower, Pull, Drive, etc.). Provide these nameplates in addition to the lettering provided on the switch, button or lightface.

T508-3.7.2.2 Conduit Markers

Provide adequate marking of primary conduits that are exposed or concealed in accessible spaces, to distinguish each run as either a power or a signal/communication conduit. Use orange banding with black lettering unless otherwise indicated.

Provide snap-on type plastic markers. Indicate voltage ratings of conductors where above 240 V. Locate markers at both ends of conduit runs, near switches and other control devices, near items of equipment served by the conductors, at points where conduits pass through walls, floors or into non-accessible construction, and at spacing of not more than 50 feet along each run of exposed conduit. Do not mark switch-leg conduit and short branches (less than 24 inches) for power connections, except where conduit is larger than 1 inch.

Provide both ends of each marked conduit run with a brass tag having a number stamped thereon in accordance with the conduit diagrams. Fasten these tags to the conduit ends securely and permanently with bare copper or stainless steel wire.

T508-3.7.2.3 Conductor Identification

Furnish UL listed, typed heat shrink tubing type wire and cable markers installed per the manufacturer's recommendations.

Use numbers as indicated in the Contract Plans, or the approved shop drawings if numbers are not shown in the Contract Plans.

Provide wire labels on each conductor in panelboard gutters, pull boxes, outlet and junction boxes, and at load connection. Provide wire markers on each conductor at terminal blocks.

T508-3.7.2.4 Underground Warning Tape

Provide 4 inches wide plastic tape, colored yellow with suitable warning legend describing buried electrical lines in every conduit trench. Install the tape 12 inches above the conduit in the trench.

T508-3.7.3 Construction Requirements

Degrease and clean surfaces to receive nameplates and tape labels. Install nameplates and tape labels parallel to equipment lines. Secure nameplates to equipment fronts using stainless steel screws and epoxy.

Secure nameplates to inside of recessed panelboard doors in finished locations. Use embossed tape only for identification of individual wall switches and receptacles

Provide wire markers on each conductor in panelboard gutters, pull boxes, outlet and junction boxes, and at load connection. Identify with branch circuit or feeder number for power and lighting circuits, and with control wire number as indicated on schematic and interconnection diagrams or equipment manufacturers' shop drawings for control wiring for equipment to be replaced. Place existing wire number label adjacent to the manufacturers' number where equipment already has manufacturers' wire number.

T508-3.8 Dry-Type Transformers

T508-3.8.1 Description

Furnish and install dry type ventilated transformers in existing motor control center and as indicated in the Contract Plans.

T508-3.8.1.1 Delivery, Storage, and Handling

Store in a warm, dry location with uniform temperature. Cover ventilating openings to keep out dust. Handle transformers using only lifting eyes and brackets provided for that purpose. Protect units against entrance of rain, sleet, or snow.

T508-3.8.2 Materials

Ventilated dry type transformers designed according to the latest revision of ANSI/NEMA ST-20 and for continuous operation at rated kVA, 24 hours a day, 365 days a year, with normal life expectancy. Ensure required performance is obtained without exceeding 150°C average temperature rise by resistance or 180°C hot spot temperature rise in a 40°C maximum ambient and 30°C average ambient. Maximum coil hot spot temperature not to exceed 220°C Provide transformers with proven 220°C UL tested insulation system. Use copper wound coils. Ensure that materials in the transformer are flame retardant and do not support combustion as defined in ASTM D635. Final insulation treatment will be total immersion in a 220°C insulating varnish that maintains superior bond strength, high dielectric strength, and power factors at temperatures normally associated with 220°C

system. After immersion, cure the varnish thoroughly at normal operating temperatures to assure the scourging of all volatiles in the varnish solvent.

Provide transformers constructed with core materials of high quality and low loss characteristics to minimize exciting currents, no-load loss, and interlaminar vibrations. Incorporate built-in vibration dampening systems in the design to minimize and isolate sound transmission. Mechanically brace the core-coil assembly to withstand short circuit tests as defined in NEMA TR-27. Coil construction and mechanical bracing members must prevent mechanical degradation of the insulation structure during the short circuit. Provide self-bracing transformer enclosure with drip-proof and rodent-proof protection. Include convenient knockouts for conduit entrance. Locate terminal compartment in bottom of transformer, below the core-coil assembly, for side or bottom conduit entrance. Temperature rise in terminal compartment must not exceed 5°C above ambient.

Provide transformers with 2 2-1/2% full capacity taps above rated voltage and 2 2-1/2% full capacity taps below rated voltage. Minimum basic impulse level (BIL) allowed is 10 kV. Ground core and coil assembly to enclosure by means of a visible flexible copper grounding strap. Provide transformers 75 kVA and less suitable for wall, floor, or trapeze mounting; transformers larger than 75 kVA suitable for floor or trapeze mounting. Ensure coils are continuous windings with terminations brazed or welded. Include factory nameplate with transformer connection data and overload capacity based on rated allowable temperature rise.

Conduct the following tests at the factory: Applied voltage test (one minute) 4 kV; induced voltage test - two times normal for 7,200 cycles; and ratio and phase relation. Test reports on electrically duplicated units certify that the first rating of any design passed the following tests: no load losses, induced voltage, total losses, sound level, applied voltage, impulse test, and temperature rise. Submit copies of test results to the Engineer for approval.

T508-3.8.3 Construction Requirements

Transformer to be installed in existing Motor Control Center.

T508-3.9 Wiring Devices

T508-3.9.1 Description

Provide wiring devices as required.

T508-3.9.2 Materials

Toggle Switches: Provide heavy-duty use, totally enclosed type with bodies and handles of thermosetting plastic, supported on a metal mounting strap. Provide switches with screw type wiring terminals, side-wired. Do not use back-wired, clamp-type terminals. Provide snap type switches with toggle handle, rated quiet type, AC only, 20 A, 120/277 V, single pole.

Receptacles: Provide heavy-duty use, duplex grounding type rated 20 A and 125 V. Provide thermosetting plastic composition bodies, supported on a metal mounting strap. Provide side wired receptacles with binding-type terminals. Back-wired, clamp-type terminals are not allowable. Ensure that the grounded pole connects to the mounting strap.

Ground Fault Circuit Interrupter (GFCI) Receptacles: Provide duplex, feed-through type, convenience receptacle with integral ground fault current interrupter. Provide devices rated for 20 A and capable of detecting a current leak of 5 mA. Connect receptacles to protect the local load without disruption of the rest of the circuits.

T508-3.9.3 Construction Requirements

Install switches and receptacles as shown in the plans. Install switches 42 inches above the finished floor and receptacles 14 inches above floor unless otherwise noted. Install switches with OFF position down.

Furnish and install three-way switches as indicated in the Contract Documents.

Install surface mounted devices in weatherproof boxes. Inside the control house and other environmentally controlled rooms, provide 1/16 inch thick satin finished Type 302 stainless steel cover

plates.

Use GFCI type receptacles in all outside locations, rest room, and sink area.

For exterior locations, provide weather proof, corrosion resistant, plates with spring loaded snap covers. Consider the machinery floor area as an outside location.

T508-4 MOTORS

T508-4.1 Description

Furnish and install motors as indicated in the Contract Documents.

T508-4.2 Materials

Furnish motors designed for continuous operation in 40°C environment, and for temperature rise in accordance with ANSI/NEMA MG 1 limits for insulation class, service factor, and motor enclosure type.

Provide stamped, stainless steel nameplate indicating motor horsepower, voltage, phase, cycles, RPM, full load amps, locked rotor amps, frame size, manufacturers' name and model and serial number, design class and service factor.

Provide conduit connection boxes, threaded for conduit. For fractional horsepower motors, where connecting directly, provide conduit connection in end frame.

Provide bolted compression lugs connections.

Provide double-ended shafts on all motors requiring motor brakes.

Provide motor heaters and install in accordance with the manufacturer's recommendations.

Furnish and install gearmotors with integral speed reducers as required. Refer to the Technical Special Provisions Section T468 for speed reducer requirements.

T508-4.2.1 Three Phase Motors

- A. Start-Ups: 12 per hour. Two per ten-minute period.
- B. Power Output, Locked Rotor Torque, Breakdown or Pullout Torque:
 - 1. NEMA Design B Characteristics for pumps and span drive motors.
 - 2. NEMA Design D for mechanical locks, auxiliary drive, and gate operators.
- C. Insulation System: NEMA Class F or better.
- D. Design, Construction, Testing, and Performance: Conform to NEMA MG 1 for Design B and D Motors.
- E. Test in accordance with ANSI/IEEE 112, Test Method B. Load test motors to determine freedom from electrical or mechanical defects and compliance with performance data. Perform additional testing to determine speed/torque curve relationship.
- F. Motor Frames: NEMA Standard T-frames of steel or cast iron (no aluminum frames allowed) with end brackets of cast iron with steel inserts. Furnish totally enclosed fan cooled construction for motors 10 hp and larger.
- G. Thermistor System (Motor Sizes 25 hp and Larger): Three PTC thermistors imbedded in motor windings and epoxy encapsulated solid-state control relay for wiring into motor starter.
- H. Bearings: Grease lubricated anti-friction ball bearings with housings equipped with plugged provision for lubrication, rated for minimum AFBMA 9, L-10 life of 20,000 hours. Calculate bearing load with NEMA minimum V-belt pulley with belt centerline at end of NEMA standard shaft extension. Stamp bearing sizes on nameplate.
 - I. Sound Power Levels: To NEMA MG 1.
- J. Nominal Efficiency: Meet or exceed values in Schedules at full load and rated voltage when tested in accordance with ANSI/IEEE 112.
- K. Nominal Power Factor: Meet or exceed values in Schedules at full load and rated voltage when tested in accordance with ANSI/IEEE 112.
- L. Service Factor: 1.0 for mechanical drives and 1.15 for hydraulic pump motors. Reference horsepower ratings from a 1.0 service factor.

T508-4.2.2 Storage

Provide temporary power connection to internal motor heaters, or provide external heater, to maintain constantly elevated internal temperature to assure prevention of condensation or moisture

accumulation. Manually rotate the rotor every thirty days to prevent flattening of bearings. If the storage arrangement permits, rotate the entire housing 90 degrees every sixty days. The storage period continues after installation of the motors until they start actual repetitive service that will produce heat from operation.

T508-4.3 Construction Requirements

Install motors per manufacturers' instructions. Utilize millwright for field installations, base modifications, and shaft alignment with the machinery and the brakes.

Provide motor mounting bases as required for accommodating motors. Properly align motor shaft with speed reducer shaft before connecting motor coupling. Properly align brake drums with brakes. Align if required.

Coordinate motor shaft diameter and length with requirements for machine, service brakes, and tachometer. Verify alignment of motor shafts with machinery and brakes prior to installation of shaft couplings; correct as required to provide proper alignment within coupling misalignment tolerances.

T508-4.3.1 Quality Control

Perform a no-load spin test and megger tests on main drive motors to verify compliance with the manufacturers' specifications prior to make-up of machinery couplings.

T508-5 MOTOR CONTROL CENTER

T508-5.1 Description

Furnish and install select components within the existing Motor Control Center (MCC) as shown in the Contract Documents and including adequate capacities for bus ampacity, three phase circuit breakers and contactors. Refurbish and recondition existing MCC. Clean and remove debris and surface from exterior/interior sections.

Where indicated or required, furnish and install motor controls having the electrical characteristics, ratings, and modifications to match the existing equipment or as shown on the Plans.

T508-5.1.1 Manufacturer

Furnish Motor Control Center components from in-kind manufacturing company. Do not use a value added reseller as a source.

T508-5.2 Materials

T508-5.2.1 MCC Sections

Provide a storage pocket on the inside of the cabinet door for the schematics. Furnish instruction manuals, including the theory of operation, maintenance information, and plastic laminated schematics on all units within the MCC.

Replace engraved nameplates for each cubicle (including blank nameplates for unused spaces, and blank nameplates for spare cubicles). Submit nameplate-engraving schedule for approval. Fasten nameplates using stainless steel screws.

T508-5.2.2 Circuit Breakers

Provide 3-pole, heavy duty, $600~V_{AC}$, quick-make, quick-break molded case circuit breakers and MCPs. Provide a molded case type main breaker with an adjustable electronic trip unit. Furnish a 3-pole lighting panel circuit breaker as shown in the Plans. Provide an operating handle that always remains connected to the MCP or circuit breaker. Do not mount the operating handle on the door of the enclosure, but to the side of the door for safe "stand-aside" operation. Position of the operating handle will indicate ON, OFF, or TRIPPED condition. Provide interlock to prevent unauthorized opening or closing of the cubicle door with the circuit breaker in the ON position as well as turning the circuit breaker ON with the door open.

T508-5.2.3 Magnetic Across the Line Starters

Furnish 120 V_{AC} magnetic starter coils. Equip all magnetic starter coils with a combination R/C-MOV surge suppressor across the coil circuit to prevent inductive switching transients from damaging any connected circuitry.

Furnish motor starters of the Combination Motor Starters type (across-the-line non-reversing or reversing combination starters for motors up to 100 hp, 600 V_{AC}). Combine motor starters with disconnecting means, as indicated in the Contract Documents, in common enclosure. Provide a Motor Circuit Protector (MCP), or MCP with Current Limiter, as disconnecting means. Build and test motor starters in accordance with the latest NEMA standards. Equip combination motor starters with three NEMA Class 20 overload relays. Provide neatly typed label inside each motor starter enclosure door identifying motor served, nameplate horsepower, full load amperes, code letter, service factor, and voltage/phase rating. Provide quick-make, quick-break, and load interrupter enclosed knife switch with externally operable handle.

Furnish AC magnetic controllers designed for full voltage or across the line starting of induction motors rated in horsepower. Furnish starters with provision for field installation of up to 3 N.O. and 4 N.C., 10 A., auxiliary contacts in addition to the hold-in interlock. Supply a minimum of two Normally Open and two Normally Closed contacts with each magnetic motor starter. Provide additional contacts if required. Provide starters with encapsulated coils and enclosure as required to meet conditions of installation. Overload relays should be block-type with a push-to-test feature. Provide an isolated, field-mountable alarm contact.

Provide 3-pole, 480 V_{AC} , full voltage, NEMA type, magnetic combination type starters. Provide motor starters that are a combination circuit breaker and NEMA controller with overload relay protection. Connect to the bus with stab-type contacts, including ground, and a screw-type locking mechanism to hold the chassis firmly in place. Provide quantities as shown in the Plans. Where specified, provide control voltage transformers with fused secondary. Provide OL TRIPPED status and through-the-door overload RESET button.

Furnish Non-Reversing Starters (Across-the-line magnetic starters for motors up to 100 hp, 600 V_{AC}) built and tested in accordance with the latest NEMA standards. Equip non-reversing starters with three NEMA Class 20 overload relays. Provide a HAND-OFF-AUTO switch and pilot lights for OFF, RUN, and OL TRIPPED status. For FVR units provide a HAND-OFF-AUTO switch, a FORWARD-OFF-REVERSE switch and pilot lights for FORWARD, OFF, REVERSE, and OL TRIPPED status.

Provide reversing Starters (Reversing magnetic starters for motors up to 100 hp) built and tested in accordance with the latest NEMA standards. Equip reversing starters with three NEMA Class 20 overload relays.

T508-5.3 Construction Requirements

Install MCC components, where indicated, in accordance with applicable NEC standards, Manufacturers' written instructions and recognized industry practices, to comply with requirements and serve intended purposes. Install fuses, if any, in MCC units. Tighten bus connections and mechanical fasteners. Adjust operating mechanisms for free mechanical movement. Touch-up scratched or marred surfaces to match original finish.

Clean and recondition existing MCC. Prior to energizing the MCC, Megger check phase-to-phase and phase-to-ground insulation for proper resistance levels. Prior to energizing the circuitry, check MCC electrical circuits for continuity and for short-circuits. Subsequent to wire and cable hook-ups, energize MCC and demonstrate functioning in accordance with requirements.

T508-6 SPAN MOTOR AND VECTOR CONTROLLED ADJUSTABLE SPEED DRIVE T508-6.1 Description

Furnish and install in kind replacement of existing motor and drive system as described in this article. Furnish and install a in kind replacement of span drive system consisting of span drive motors, electronic drive units, panels, relays, and other components integral to the drive system. Existing hydraulic power unit control panel cabinet to remain. Furnish systems engineered, assembled, and furnished by a single manufacturer. Procure the engineered drive system from the manufacturer of the electronic drive unit or a recognized manufacturer of factory engineered drive systems. Ensure the engineered drive system supplier is not a value added reseller nor the control system contractor or supplier.

T508-6.2 Materials

T508-6.2.1 Span Drive Motor

- A. Provide TEFC, NEMA Design B motors, stainless steel shaft, with auxiliary blower (if required).
- B. Provide a closed keyway on the machinery end of the shaft. Coordinate motor coupling and installation details with the machinery manufacturer. Provide approved shop drawings to the machinery manufacturer for their use in the machinery assembly drawings.
- C. Provide motors rated for inverter duty and suitable for use in a sensor-less vector controlled variable speed drive application.
 - D. Start-Ups: 12 per hour, 2 per ten-minute period.
- E. Power Output, Locked Rotor Torque, Breakdown or Pullout Torque: NEMA Design B Characteristics.
 - F. Insulation System: NEMA Class F or better.
- G. Testing Procedure: In accordance with IEEE 112, Test Method B. Load test motors to determine freedom from electrical or mechanical defects and compliance with performance data. Perform additional testing to determine speed/torque curve relationship.
- H. Motor Frames: NEMA Standard T-frames of steel or cast iron (no aluminum frames allowed) with end brackets of cast iron with steel inserts.
- I. Thermistor System (Motor Sizes 25 hp and larger): Three PTC thermistors imbedded in motor windings and epoxy encapsulated solid-state control relay for wiring into motor starter.
- J. Bearings: Grease lubricated anti-friction ball bearings with housings equipped with plugged provision for re-lubrication, rated for minimum AFBMA 9, L-10 life of 20,000 hours.

Calculate bearing load with NEMA minimum V-belt pulley with belt centerline at end of NEMA standard shaft extension. Stamp bearing sizes on nameplate.

- K. Sound Power Levels: To NEMA MG 1.
- L. Nominal Efficiency: Meet or exceed values in Schedules at full load and rated voltage when tested in accordance with IEEE 112.
 - M. Ship motors to a facility for dynamometer testing with the variable speed drives.

T508-6.2.2 Adjustable Speed Drivers (ASD)

- A. This is a functional specification, ensure that the manufacturer sizes the motors and drives to provide the torque and speed requirements to match the existing.
- B. Design the ASD system to provide reversing, continuous speed adjustment with acceleration and deceleration control, of three-phase motors without exceeding the specified maximum motor and machinery torque. Provide an ASD system capable of supplying power to the motor(s) for the required motor torques. Provide a control capable of providing selectable current limit settings. Provide a drive that is able to withstand output terminal line-to-line short circuits without component failure, be insensitive to input line rotation, and be capable of power ride-thru of 15 mS at full load.

- C. Furnish the drive with internal over temperature protection.
- D. 115 VAC input control logic board option. Provide inputs that include, enable, run, reverse, and full speed. Provide a drive that responds to inputs with preset direction and speed to accelerate and decelerate the bridge leaf to follow a trapezoidal speed curve as shown in the Plans.
- E. Contact outputs: Four form "c" min. (functionally programmable). Provide outputs that include overload alarm, drive fault, and brake release.
- F. Provide dynamic braking function (with power resistors) capable of 100% braking of full load motor torque for 3 minutes.
- G. Provide drives capable of converting incoming three-phase, 460 VAC (-10% of min. +10% of max.) and 60 Hz (plus or minus 2 Hz) power to a variable potential DC bus level. Invert the DC voltage to pulse width modulated waveform with an adjusted 0 to 420 Hz frequency output.
- H. Ensure displacement power factor ranges between 1.0 and 0.95, lagging over the entire speed range.
- I. Provide an ASD capable of operating, without derating, in an ambient temperature of 0 to 40°C, an altitude of up to 3,300 feet above sea level, and humidity of 5% to 95%, noncondensing.
- J. Provide ASDs in NEMA 12 enclosures with complete front accessibility with easily removable assemblies.

K. Include the following items in the ASD's enclosures:

- Feeder disconnect. Input AC circuit breaker or fused switch with an interlocked, pad lockable handle mechanism accessible without opening the drive door and capable of breaking under load.
- o Isolated process follow input and output.
- o Motor mechanical brake contactor.
- o Brake chopper module for control of Dynamic Braking Resistors. Mount resistors externally.
- Electronic over current trip for instantaneous and inverse time overload protection.
- o Human interface module with START-STOP pushbuttons, power ON indicating light, and speed control potentiometer, door mounted.
 - Human interface module with alphanumeric display of run, stop, forward, reverse, fault, over frequency, instantaneous over current, DC over voltage, AC under voltage/loss of phase, emergency stop, overload, Over temperature, inverter pole trip, and stand-by modes, door mounted.
 - o Run, fault, and control power indicators, door mounted. Local/Remote operation indicating lights, door mounted.
 - O Electrical isolation between the power and logic circuits, as well as between the $120\ V_{AC}$ control power.
 - o Line transient voltage protection.
 - L. Provide the following independent adjustments on the ASD:
 - o Output frequency range: 0 to 400 Hz.
 - Programmable current limits from 20%-160% of rated current.
 Acceleration time: 0-3600 sec. with two independently programmable timers.

- o Deceleration time: 0-3600 sec. with two independently programmable timers.
- o Start boost control.
- O Volts per Hertz programmable for start boost, run boost, slope, and custom operation.
- o Slip compensation speed regulation to 0.5%.
- Provide ASD run, fault, and control power indications visible with the controller door closed. Provide an ASD reset button as part of the human interface module. Provide remotely resettable faults from a "clear fault" input line of the ASD.
- Enclosure Construction: Furnish two ground lugs, one for incoming line power and one for outgoing motor ground connections. Provide enclosures no less than 16-gage steel and finished in standard manufacturers' finish.

T508-6.3 Construction Requirements

The Leaf drive electrical and hydraulic elements shall function as a single, integrated machine and function and perform the same as the existing drive system. The drive controls shall sequence the operation of the Variable Speed drive, the flow control valves, and pressure control valves in response to input signals from the integrated bridge control panel and the leaf position transmitter and limit switches. Acceleration, deceleration, and correction of the pump motor speed shall utilize an S curve function in the Variable Speed drive programming. The manufacturer must certify that all other units are reasonably similar.

Test the ASD and supply test results to substantiate designs according to applicable ANSI and NEMA Standards. The tests must verify not only the performance of the unit and integrated assembly, but also the suitability of the enclosure venting and rigidity.

T508-6.3.1 Shop Testing of Adjustable Speed Drives

Perform shop testing on the adjustable speed drives to insure compliance with the performance requirements of this Article before acceptance of Adjustable Speed Drive-Motor combinations. The Engineer may witness the testing based on approved shop drawings and test procedures. Testing procedures will be as follows:

Apply load equal to the torque specified for TCV (Maximum Constant Velocity Torque per AASHTO 5.4.2, formerly Condition A) to motor shaft. Run motor at 100% speed for 3 minutes (driving). Motor-drive combination should be capable of driving the load without excessive heating.

Apply overhauling load equal to TCV (formerly Condition A) torque to motor shaft. Run motor at 100% speed for 3 minutes (dynamic braking). Motor-drive combination should be capable of dynamically braking the load without excessive heating. Demonstrate that motor drive can produce TS (Maximum Starting Torque per AASHTO 5.4.2, formerly Condition C) torque at no less than or equal to 50% speed for one minute. Demonstrate that motor drive can dynamic brake TS (formerly Condition C) torque at no less than or equal to 50% speed for one minute without excessive heating. Demonstrate that motor drive cannot produce or exceed the Never-Exceed torque value at zero, defined as 0-20 RPM maximum, or any other speed.

T508-6.3.2 Installation

Install motors per manufacturers' instructions.

Install motor mounting bases as required to accommodate motors. Properly align motor shaft with driven shaft before connecting motor coupling. Align if required. Megger motors before final connection. Record these readings and submit with "As-Built" drawings.

Adjusting: Make final adjustments to installed drive to assure proper operation of fan system if so equipped. Obtain performance requirements from installer of driven loads.

Cleaning: Touch up scratched or marred surfaces to match original finish.

Demonstration: Demonstrate operation of controllers in automatic and manual modes.

T508-7 INTEGRATED BRIDGE CONTROL SYSTEM

T508-7.1 Description

Furnish and install replacement components for the existing Hydraulic Power Unit Control Panel (HPUCP). Perform the detailed design of the hydraulic control system using information in the Contract Documents and FDOT Design Aids with adjustments as required for the equipment provided. Refer to as-built plans for additional information.

T508-7.2 Materials

T508-7.2.1 Cabinet

The hydraulic power unit control panel cabinet to remain. Clean and recondition existing HPUCP enclosure to like new condition. Clean and remove dirt, debris and surface corrosion from interior and exterior. Furnish and install replacement HPUCP backpanel with components including drives, circuit breakers, terminal blocks, fuses, distribution blocks, relays, starters, thermostat, wireways, enclosure lights, din rails, surge suppressors and all components to match existing and as shown on the Plans.

Provide vents (louvers with filters) and interior fans to keep temperatures to reasonable operating limits within the cabinets. Provide a temperature switch to alarm when temperatures inside exceed 40°C. Fasten a fluorescent fixture with 20-watt (min.) lamp to the inside of panel HPUCP. Install an appropriate switch as indicated in the Plans. Install a duplex receptacle on the same circuit and mount inside the cabinet. Connect both light and receptacle to a common one-pole circuit breaker. Install ground lug in all panels for bonding of enclosures.

T508-7.2.2 Wiring

Provide interconnection wiring between all electrical devices mounted in the panels and enclosures. If the devices are to be connected to external equipment use terminal blocks. Install all interior wiring neatly and carefully, and terminate on UL approved terminal blocks as per manufacturers' instructions.

Individually bundle wiring to each control switch and install with a "drop loop" of sufficient length to allow its removal for maintenance without disconnecting the wiring. Use plastic wireways (open slot type) for routing all internal wiring in the control desk. Install internal wiring in factory prewired electronic system cabinets in compliance with the requirements of T508-3.1., except that SIS insulation is allowed for wiring within a cabinet. Segregate all low voltage signal wiring, such as data, audio, and video lines, from AC lines. Do not splice low voltage signal and data lines.

T508-7.2.3 Terminal Blocks

For internal circuits crossing shipping splits, and to facilitate equipment parts replacement and maintenance, provide terminal blocks for conductors requiring connection to circuits external to the specified equipment. Furnish rail mounted, tubular screw clamp type terminal blocks. Group terminal blocks for easy accessibility unrestricted by interference from structural members and instruments. Provide sufficient space (2-inch minimum) on each side of each terminal block to allow an orderly arrangement of all leads terminating on the block. Do not terminate more than two wires on any one terminal position.

Permanently label each terminal block, device, fuse block, terminal, and both ends of each conductor to coincide with the identification indicated on the manufacturers' wiring diagrams. Number terminal blocks and devices on the equipment supplied using the same numbers shown in the Contract Documents. Identify mounted electronic components by marking with contrasting colored ink beside the component. Permanently identify individual conductors using a sleeve not less than 1/2 inch long. Mark each sleeve so that the identifications are permanent and waterproof. Adhesive type labels are not acceptable.

T508-7.2.6 Pushbuttons and Operator Interface

Indicating Lights: 120 V, bright LED type, 30.5 mm, corrosion resistant, heavy duty, oil-tight, NEMA 13. Lens color as indicated in the Plans and approved shop drawings.

Pushbuttons: Single button operator, contacts as required, 30.5 mm, corrosion resistant, heavy duty, oil-tight.

Selector Switch: Number of positions as required, maintained, lever operator knob, one N.O. and one N.C. contact in each position, 30.5 mm, corrosion resistant, heavy duty, oil-tight. Contacts as indicated in the Contract Plans and approved shop drawings.

Emergency Stop Button: Single button mushroom operator, 30.5 mm, corrosion resistant, heavy duty, oil tight. Maintained contacts, 3 contacts (min), closed when button pulled out, open when button pushed in, 1 contact (min), open when button pulled out, closed when button pushed in. Red, 67 mm, jumbo mushroom button.

T508-7.2.10 Contact Blocks

Provide contact blocks rated at 10 A, NEMA Class A600. Use clear, oil-tight, blocks to allow visual inspection.

T508-7.2.11 Legend Plates

Square or rectangular, manufactured out of laminated plastic or any similar non-metal corrosion resistant material. Provide white plates with black lettering.

T508-7.2.12 Relays

Control Relays and Plug-In Relays.

- 1. Contacts: NEMA ICS 1, Form C. 2 or 4 pole.
- 2. Contact Ratings: NEMA ICS 1; Class C300, 7 amps.
- 3. Coil Voltage: 120 V_{AC}, 60 Hz.
- 4. Provide indicating lamp or LED across coil.
- 5. Provide push-to-test button.
- 6. Clear dust cover and spade terminals.
- 7. Socket mounted, provide track-mounted socket.
- 8. Furnish and install plug-in surge suppressor on each coil.

Industrial Control Relays: Contacts rated at 10 A, NEMA Class A600, with replaceable contact cartridges. Coil voltage as indicated in the Plans. Furnish and install surge suppressor on each coil.

Contactors: Lighting type contactors, open type, and electronically held. 20 A contacts min., (field convertible) other rating as show in Contract Plans. Coil voltage as shown in Contract Plans.

T508-7.2.13 Time Delay Relays

NEMA Class B600 solid-state time-delay relay with adjustable time delays as indicated in the Contract Plans with contacts rated 5 A minimum, $600~V_{AC}$. Coil voltage as indicated on the Contract Plans. Furnish and install surge suppressor on each coil.

T508-7.2.14 Control Power Transformers

NEMA ST 1 rated machine tool transformer with isolated secondary winding with power rating as required for application. Voltage Rating: Line volts primary; $480/120~V_{AC}$ secondary, or secondary voltages as shown in the Plans or required by specific device.

T508-7.2.15 Control Circuit Breakers

Provide control circuit breakers with current rating as shown in the Contract Plans to isolate the individual control circuits and to provide selective overcurrent and short-circuit protection. Provide thermal-magnetic type circuit breakers for control circuits, rated 300 VAC, 10 kA interrupting, UL listed for control circuit application.

T508-7.2.16 Control Fuses

Provide control fuses with current rating as shown in the Contract Plans to isolate the individual control circuits and to provide selective overcurrent and short-circuit protection. Provide indicating type fuses for control circuits, ceramic or fiberglass body, midget type, rated 250 V_{AC} , 10 kA interrupting, UL listed for control circuit application. Automotive type, glass body fuses are not acceptable. Provide terminal block style, with isolating feature, fuse blocks to house the control fuses. Provide rail mounted fuse block, rated 600 V_{AC} , 30 A maximum for midget type fuses. Provide a hinge type cover for isolating and automatic fuse extraction from circuit when lifting the cover.

T508-7.3 Construction Requirements

T508-7.3.1 Field Inspection and Testing

Ensure that the equipment to be replaced (including existing HPUCP, MCC, ASD, and navigation light interfaces) are functionally tested together with existing electrical equipment and systems to be replaced to assure completeness and correct operation of the entire bridge control system. It is the responsibility of the Control Systems Engineer to coordinate the field inspection and testing of existing and new equipment. The Engineer may witness the testing as a complete control system.

Prepare and submit a complete set of test procedures and schedules for approval. Give the County sufficient notice of 30 days prior to testing in order to make arrangements. The procedure includes a systematic description of all semi-automatic actions and the expected control response, output, or sequence of outputs.

Include exercising the entire control system, simulating failures including loss of utility power, equipment failures, and Emergency Stops in the procedures. Ensure the actual testing demonstrates conformance to the requirements and intent of the Contract Documents.

T508-8 COMMUNICATIONS EQUIPMENT

T508-8.1 Description

Furnish and install replacement communications equipment in locations as shown on the Plans. Interface PA and Common audio party signal lines to the existing copper conductor submarine conduit wiring system.

T508-8.2 Materials

Equipment will be NEMA Class 4 wall mounted unit incorporating an intercom and public address systems served by a common handset, as specified below. Supply equipment to match existing equipment. Lay out the communications system with the capability of providing several different communications functions. Depressing a pushbutton switch will allow the operator to select the desired communication system function. Functions include one-way page (PA system) and Intercom communications. Provide a common interface for switching the handset (and speaker) between communications zones, matching impedance to selected zone.

Furnish one distributed P.A. amplifier per speaker and mount in close proximity to the speaker.

Furnish an amplifier that delivers 10 watts RMS minimum to each speaker. Two speakers for roadway and two speakers for marine channel (separately controlled) are required. Ensure maximum distortion does not exceed 5% for 1st and 3rd harmonics. Use industrial type equipment. Provide speakers immune to salt spray and capable of 120 degrees dispersion at 12 watts. Frequency response at 3 dB to be 450 to 8000 Hz, plus or minus 5 dB. Minimum of four speakers are required.

Furnish replacement intercom system devices that consists of page/party stations located at the locations shown on the Plans. Furnish interior or exterior type units as required and provide with 25 feet coiled cords. Equip units with page speakers. Page and private voice communication (party line communication) between Intercom Station locations indicated in the Plans. Provide transmit/receive page line communication with duplex party line communication between two or more intercom stations. One master station; speaker/microphone stations (each station on a separate zone) duplex party line as required, with two-way page line.

T508-8.3 Construction Requirements

Provide manufacturer recommended cables and wiring, consult with the PA/IC manufacturer, and provide a system that is void of feedback, hum, distortion, and noise. Adjust the PA/IC system for maximum performance as determined.

T508-12 SURGE SUPPRESSION SYSTEM

T508-12.1 Description Materials

Provide surge suppression equipment for all equipment to be replaced and as described in this article and shown in the Plans. Transient voltage surge suppression as outlined herein applies to all of the electrical power, control, signaling, utility, and communications systems and circuits that are part of this contract.

Transient surge suppression is required on electronic apparatus and other transient sensitive apparatus residing outside the confines of the protected tender house. Inter-communications amplifiers, solid-state or reed-relay position sensors, and solid-state rectifiers and flashers are examples of these types of devices. Conventional electro-mechanical devices such as motors, mechanical limit switches, or lighting devices do not require additional surge protection if all circuits connecting to such devices are protected where they enter the tender house.

Reference UL Standard for Safety for Surge Protective Devices, UL 1449, Third Edition.

T508-12.1.1 General

Provide Surge Protective Devices (SPD) UL listed and labeled for the location in which they are installed.

T508-12.1.2 Suppressors for Electrical Services

Install Transient Voltage Surge Suppressors i.e. Lightning Arrester, on each normal and emergency service entering and leaving the tender house. Bridge house service-entrance points are typically remote from the power source; consider these as delta configuration for transient protection purposes. Furnish suppressors that provide clamping phase to phase and from each phase conductor to ground. Provide a multi-stage hybrid shunt-series-shunt design, rated for Type 1, service suppressor. Provide visible indication of suppressor failure. Arrange shunt TVSS elements to fail open.

Provide suppressors that meet the following criteria: Single impulse withstand rating of 25,000 A (8 by 20 μ S waveform) per phase; Pulse lifetime rating (10,000 A - 8 by 20 μ S plus powerfollow) of 1000 occurrences; Maximum clamping voltage (voltage with input current of 10,000 A - 8 by 20 μ S) of approx. 400% normal voltage and energy rating of 10,000 joules.

T508-12.1.3 Suppressors for Feeders and General Purpose Branch Power Circuits

Install transient Voltage Surge Suppressors rated for Type 2, on each power feeder, general purpose branch circuit, and non-motor load circuit (including lighting and signaling circuits) entering or leaving the tender house. Provide multi-stage hybrid shunt-series-shunt design power circuit suppressors inserted in series with all conductors of a circuit (including neutral) and clamping between all conductors and from each conductor to ground.

Rate suppressors for dedicated loads for a minimum of 125% of their continuous load. Rate

suppressors for utility circuits based on the circuit overload protection. Provide visible indication of suppressor failure. Arrange shunt TVSS elements to fail open.

Provide power circuit suppressors that meet or exceed the following minimum criteria: Single impulse withstand rating of 10,000 A (8 by 20 μ S waveform) plus power-follow per wire; Pulse lifetime rating (3,000 A - 8 by 20 μ S plus power-follow) of 1,000 occurrences. Worst-case response time of 5 η S; Maximum clamping voltage (voltage with input current of 3,000 A - 8 by 20 μ S plus power-follow) of approx. 400% normal voltage and minimum energy handling capability of 1,500 joules.

T508-12.1.4 Suppressors for Motor Branch Circuits

Install Transient Voltage Surge Suppressors on each motor branch circuit entering or leaving the tender house's protected perimeter. Install motor circuit suppressors in the motor starter cubicle that are parallel shunt design clamping each conductor to ground, rated Type 2. Install motor circuit suppressors meeting these specifications on the power input of any field-mounted motor determined, to require supplemental protection. Provide visible indication of suppressor failure. Arrange shunt TVSS elements to fail open.

Provide motor circuit suppressors that meet or exceed the following minimum criteria: Single impulse withstand rating of 25,000 A (8 by 20 μ S waveform) plus power-follow per wire; Pulse lifetime rating (3,000 A - 8 by 20 μ S plus power-follow) of 1,000 occurrences. Worst-case response time of 5 η S; Maximum clamping voltage (voltage with input current of 3,000 A - 8 by 20 μ S plus power-follow) of approx. 400% normal voltage and Minimum energy handling capability of 1,500 joules.

T508-12.1.5 Suppressors for Control and Signal Circuit Protection

Install Transient Voltage Surge Suppressors for control and signal circuits on each control or signal circuit entering or leaving the tender house. Install control circuit suppressors in a cabinet. Provide multi-stage hybrid shunt-series-shunt design, rated Type 3, clamping each conductor to ground. Provide suppressors for balanced (two-conductor) circuits that clamp conductor to conductor when required by the nature of the circuit. Provide suppression devices for control circuit protection in single or multi-circuit plug-in modules with DIN rail mounted bases. Provide suppression modules with visual "health" indication.

Minimum performance criteria (each circuit) is as follows: Maximum single impulse conductor-to-ground current withstand of 10,000 A (8 by 20 μ S waveform) plus power-follow; Pulse lifetime rating (8 by 20 μ S @ 3,000 A plus power-follow) of 1,000 occurrences. Worst-case response time: 5 μ S; Maximum clamping voltage (3,000 A @ 8 by 20 μ S) of 200% of normal operating voltage amplitude and polarized or bipolar as appropriate for each circuit type and Minimum energy handling capability - 500 joules per conductor. Initial clamping voltage of 150% of normal operating voltage peak amplitude 5%.

T508 12.2 Construction Requirements T508-12.2.1 Segregation of Wiring

Classify all system wiring into protected and non-protected categories. Wiring on the exposed side of suppression devices is unprotected. Surge suppressor grounding and bonding conductors also fall into this category. All wiring between surge suppressors and protected equipment is protected. Provide a minimum of 3-inch of separation between parallel runs of protected and unprotected wiring in control panels, terminal cabinets, terminal boards, and other locations. Never bundle together, or rout through the same wireway, protected and unprotected wiring.

Where bundles of protected and unprotected wiring cross, make such crossing at right angles with a minimum of 1-inch of separation or a ferrous shield between the conductors. Do not install any unprotected wiring within the protected perimeter of the tender house or any other system protected as a cluster.

Install individual suppressors as close as possible to the equipment to be protected, consistent with available space. Where space permits and no code restrictions apply, install suppressors within the same cabinet as the protected equipment. Suppressors installed in this manner may utilize the

equipment chassis as a medium for bonding of their ground terminals. Install bonding jumpers not exceeding 2-inches between the chassis and suppressor ground terminals. Use bolted connections with star washers to insure electrical and mechanical integrity of connections to the equipment chassis. Install suppressors in a neat, competent manner. Ensure lead dress is consistent with recommended industry practices. Keep bonding between ground terminals for power and control or signal line suppressors serving a particular item or cluster of equipment as short as possible. Where practical, install suppressors in a common location for the cluster with the ground terminals bonded closely together

T508-13 START UP, COMMISSIONING, AND FUNCTIONAL CHECKOUT T508-13.1 Description

Start-up and Commissioning Work includes:

Additional specific testing is included in this TSP for the Integrated Bridge Control System, TSP T465, and TSP T468 for the Mechanical Systems. The work in this article includes testing of all new and existing bridge electrical equipment, bridge mechanical systems, and integrated bridge operations in addition to specific testing requirements listed in other sections.

T508-13.1.1 Electrical Testing and Installation Check Out

Provide circuit continuity test and megger test for conductor and motor insulation.

Ensure that all electrical equipment is operational and within industry and manufacturer's tolerances and is installed in accordance with the Contract Documents. Ensure the testing is complete and includes all materials, instruments, labor and supervision to perform such tests and inspections for the following:

- 1. Transformer/panelboard.
- 2. Grounding system.
- 3. Motor and motor starters.
- 4. Conductors.

T508-13.2 Quality Control

- A. Functional Checkout: Submit a systematic procedure to demonstrate the bridge systems. Number the procedure and include Pass and Fail check blanks.
- B. Testing at Electrical Installation: Provide test reports, bound and signed. Include the following:
 - o Summary of test.
 - o Description of equipment tested.
 - o Description of test procedure.
 - o List of test equipment and calibration date.
 - o Test results.
 - o Recommendations.
 - Appendix including all field test reports.
- C. Comply with Manufacturer's instructions and maintenance manuals for each particular apparatus.
- D. Furnish and use safety devices such as rubber gloves and blankets, protective screens, barriers and danger signs to adequately protect and warn all personnel in the vicinity of the tests.
- E. Use calibrated test equipment and certified traceable to the National Bureau of Standards. Ensure the data is no older than 12 months.
- F. Perform the testing of the various components and completion of any corrective work prior to placing equipment into service. Perform all testing after the equipment has been set in its final location.
- G. Utilize qualified personnel for the testing having a minimum of 2 years experience performing the type of tests required.
- H. Conduct tests in the presence of the Engineer, except when advised in writing by the

- Engineer that his presence will not be necessary.
- I. Include all tests and inspections recommended by NETA Acceptance Testing Specifications.
- J. Maintain a written record of all tests showing the date, personnel making the tests, equipment or material tested, tests performed, manufacturer, serial number of testing equipment, and results.
- K. To prevent accidents, perform testing only during periods when traffic is off the bridge unless approved in advance in writing by the Engineer.

T508-13.3 Technical Requirements

Insulation Resistance Tests (Megger)

- 1. Test all conductors with a 1000 megohm DC megger, correctly calibrated, with 500V, 1000V, and 2500V settings.
- 2. Notify the Engineer immediately of any cable insulation defects as detected by the megger tests.
- 3. The minimum acceptable values of test results will be as indicated in these TSPs. In the event that these minimum values are not achieved, advise the Engineer, who will direct what subsequent action will be required.

Perform the testing in compliance with the latest edition of NETA ATS 1 International Electrical Testing Association - Acceptance Testing Specifications for Electric Power Distribution Equipment and Systems, and as specified in the TSPs. The values of the insulation resistance measurements required by the NETA ATS 1 International Electrical Testing Association - Acceptance Testing Specifications for Electric Power Distribution Equipment and Systems will be the minimum acceptable values for this project.

T508-13.3.1 Panelboards (including incoming section of Motor Control Center)

Megger test $240V_{AC}$, and $120V_{AC}$ panelboards.

Check the internal components for the following:

- 1. Bus and cable connections to assure proper torque and tightness.
- 2. Mechanical and electrical check of disconnecting devices.
- 3. Electrical operation of all meters and relays.
- 4. Polarity of current and potential transformers.
- 5. Ratio of current and potential transformers.
- 6. Wiring and operation of all control switches.

Perform testing in compliance with the latest edition of NETA ATS 1 International Electrical Testing Association - Acceptance Testing Specifications for Electric Power Distribution Equipment and Systems, and as specified in this TSP.

T508-13.3.2 Grounding Systems

Include measurement of ground resistance at the following equipment and structures.

- 1. All neutral grounds.
- 2. Other miscellaneous grounds selected at random in a manner to be representative of the entire installation.

Perform ground tests on system ground rods using the "3 PROBE - FALL OF POTENTIAL" method. All other ground tests may be measured to system ground by use of ground reference method.

Prior to testing, verify that the equipment installation is correct.

Resistance values of more than 25 ohms to ground are not acceptable unless approved by the Engineer.

Perform the testing in compliance with the latest edition of NETAATS 1 International Electrical Testing Association - Acceptance Testing Specifications for Electric Power Distribution Equipment and Systems, IEEE Standard No. 81, and as specified in this TSP.

T508-13.3.3 Cable

600V Insulation Cable:

- 1. Feeders for motors: Check insulation resistance of all 600V_{AC} rated motor feeders with a 1000V megger. Take readings with all motor wiring connected, with all disconnect switches of combination starters in the open position, and with all starter contactors mechanically held open. Take readings between phases and between each phase and ground. Mark for replacement, and replace, conductors reading less than the insulation resistance measurements required by the NETA ATS 1 International Electrical Testing Association Acceptance Testing Specifications for Electric Power Distribution Equipment and Systems.
- 2. Feeders: Check insulation resistance of all 600V_{AC} feeders with a 1000V megger. Take readings after pulling the wires but before connections are made to equipment. Take readings between phases and between each phase and ground. Mark for replacement, and replace, conductors reading less than the insulation resistance measurements required by the NETA ATS 1 International Electrical Testing Association Acceptance Testing Specifications for Electric Power Distribution Equipment and Systems.

T508-13.3.4 Control Cables

Test all control cables for continuity.

T508-13.3.5 Motor Starter and Motor

- A. Inspect all motor control centers and starters for missing parts and any damage.
- B. Check all bus and cable connections for tightness. Check all contacts for proper alignment and pressure. Verify that all movable parts are free to operate and that all bolts are tight.
- C. Megger test all motor control centers and starters in accordance with the manufacturer's recommendations.
- D. Mechanically and electrically, check all disconnecting devices.
- E. Install fuses and overload devices. Prepare motor list showing the following:
- F. Motor nameplate data, including horsepower, full load and locked rotor amperes.
- G. RPM, voltage, service factor, and temperature rise.
- H. Manufacturer's overload heater code number used for motor protection.
- I. Fuse size and type.
- J. Make a complete operational test of each motor control from each point to assure correctness of sequencing, interlocking, and other control functions of the equipment under test.
- K. Check motors for proper lubrication.
- L. Check motors for proper rotation after insulation tests and lubrication check but before coupling motor to the load.
- M. Perform insulation resistance test from load side of motor starter on each complete motor circuit, both phase-to-phase and phase-to-ground. Perform insulation resistance testing of the motor windings. Testing shall be performed in compliance with the latest edition of NETA ATS 1 International Electrical Testing Association Acceptance Testing Specifications for Electric Power Distribution Equipment and Systems, and as specified in the TSPs. The values of the insulation resistance measurements required by the NETA ATS 1 International Electrical Testing Association Acceptance Testing Specifications for Electric Power Distribution Equipment and Systems will be the minimum acceptable values. Record results and submit to the Engineer.

T508-13.4 Movable Bridge Functional Checkout

Meet the requirements of TSP T465.

T508-14 METHOD OF MEASUREMENT

T508-14.1 Movable Bridge Gate

The quantity to be paid for removal, furnish and install the replacement of movable bridge traffic gate assemblies will be at the Contractor assembly price. The quantity to be paid for furnish and install the sidewalk gate assemblies will be at the Contractor assembly price. The quantity to be paid for furnish and install the barrier gate arm and components will be at the Contractor assembly price.

T508-14.2 Movable Bridge Signal

The quantity to be paid for removal, furnish and install the replacement of movable bridge traffic signal and sign assemblies will be at the Contractor assembly price.

T508-14.3 Movable Bridge Electrical Equipment

The quantity to be paid for the rehabilitation, removal, and replacement of movable bridge electrical equipment, including, replacement of the main service feeders, meter, disconnect switches, surge suppressors, grounding, conduit, wiring, conduit supports, mounting hardware, CCTV cameras, navigational lights, sump pump, communication systems, submarine cable supports, new lighting and receptacles throughout the control house building and bascule piers (machinery room, outside of control house), conduits, wiring, start-up and commissioning, will be at the Contractor lump sum price.

T508-14.4 Movable Bridge - Rehab, Span Motors & Controllers

The quantity to be paid for removal of movable bridge main span motors and controllers will be at the Contractor lump sum price.

T508-14.5 Movable Bridge-Rehab, Control Panel - Motor Controller

The quantity to be paid for removal, or furnishing and installing of movable Motor Control Center (MCC) starters and components shall be the plan quantity completed and accepted.

T508-14.6 Movable Bridge-Rehab, Integrated Drive System

The quantity to be paid for furnish and install the replacement of the movable bridge main span motors, auxiliary motor and drive control system assemblies will be at the Contractor assembly price.

T508-14.7 Light Pole Complete - Special Design

The quantity to be paid for removal, or furnishing and installing of roadway light poles and components shall be the plan quantity completed and accepted.

T508-15 BASIS OF PAYMENT

Price and payment will be full compensation for all work specified in this Technical Special Provision.
Item No. 508-2-1 Movable Bridge Gate, F&I(AS)
Item No. 508-2-6 Movable Bridge Gate, Remove & Dispose(AS)
Item No. 508-3-1 Movable Bridge Signal, F&I(AS)
Item No. 508-4 Movable Bridge Electrical Equipment, Rehabilitation(LS)
Item No. 508-76-1 Movable Bridge - Rehab, Span Motors & Controllers, F&I(LS)
Item No. 508-76-4 Movable Bridge - Rehab, Span Motors & Controllers, Remove(LS)
Item No. 508-82-5 Movable Bridge-Rehab, Control Panel - Motor Controller, Replace(EA)
Item No. 508-83-101 Movable Bridge-Rehab Integrated Drive System Replace –25 KW or Less (AS)
Item No. 715-515-240 Light Pole Complete (F&I) Bridge Mounted(40'MH)(EA)

EXHIBIT L FDOT AND LEE COUNTY DESIGN STANDARDS

The following design standards are expressly agreed to be incorporated by reference and made a part of this Agreement:

1. Florida Department of Transportation **FY 2024-25** Standard Plans as published at the following link:

https://www.fdot.gov/design/standardplans/SPRBC.shtm

2. Lee County Department of Transportation Plan Specifications for Sign Installation, the latest edition as published at the following link:

http://www.leegov.com/dot/traffic/trafficsigninstallation

3. Lee County Department of Transportation Plan Specifications for Signal & Street Lighting, the latest edition as published at the following link:

http://www.leegov.com/dot/traffic/trafficstandard

4. Lee County Utilities Design Manual, the latest edition as published at the following link:

http://www.leegov.com/utilities/design-manual

In the event of discrepancies between the Lee County and FDOT Design Standards, Lee County Standards shall govern.

EXHIBIT M <u>DEVELOPMENTAL SPECIFICATIONS</u>

"RESERVED"



I hereby certify that these Developmental Specifications have been properly prepared by me, or under my responsible charge:

Developmental Specifications Section(s):				
Signature:				
Date:				
Engineer of Record:				
Florida License No.:				
Firm Name:				
Firm Address:				
City, State, Zip Code:				
Cert. of Authorization No:				

EXHIBIT N CONTRACTOR'S BACKGROUND SCREENING AFFIDAVIT



CONTRACTOR BACKGROUND SCREENING AFFIDAVIT

Florida Statutes Chapter 435 governs required background screenings for any employees, contractors, subcontractors, or agents of the Contractor who will have contact with any vulnerable person, as defined by statute, or who otherwise are required to undergo a Level 1 or Level 2 background screening in accordance with Florida law.

The Contractor is responsible for ensuring that such required background screenings are conducted in accordance with Florida Statutes Chapter 435. Documentation of such completed background screenings must be maintained for a period of no less than five (5) years and are subject to audit by Lee County at any time during such five (5) year period.

Under penalty of perjury, I declare that I have read and understand the requirements stated above, and that all required background screenings shall be conducted in accordance with this affidavit. I further understand that there may be additional local, state, and federal regulations that may require background screening, and that the Contractor will be solely responsible for complying with such legal requirements. Furthermore, the Contractor shall indemnify and hold Lee County harmless from any and all claims or actions resulting from failure to comply with this affidavit.

Date:	Signature
STATE OF	Name/Title
presence or □ online notarization, this	affirmed) and subscribed before me by means of □ physical _ day of,, by the above-named person ersonally known to me or who has produced the following type
Type of Identific	eation
[Stamp/seal required]	Signature, Notary Public

EXHIBIT O OTHER RELEVANT FORMS

275-030-11 EQUAL OPPORTUNITY OFFICE 07/24

DBE BID PACKAGE INFORMATION

DBE Utilization

The Department began its DBE race neutral program January 1, 2000. **Contract specific goals are not placed on Federal/State contracts;** however, the Department has an overall 10.54% DBE goal it must achieve. In order to assist contractors in determining their DBE commitment level, the Department has reviewed the estimates for this letting.

As you prepare your bid, please monitor potential or anticipated DBE utilization for contracts. When the low bidder executes the contract with the Department, information will be requested of the contractor's DBE participation for the project. While the utilization is not mandatory in order to be awarded the project, continuing utilization of DBE firms on contracts supports the success of Florida's DBE Program, and supports contractors' Equal Employment Opportunity and DBE Affirmative Action Programs.

Any project listed as 0% DBE availability does not mean that a DBE may not be used on that project. A 0% DBE availability may have been established due to any of the following reasons: limited identified subcontracting opportunities, minimal contract days, and/or small contract dollar amount. Contractors are encouraged to identify any opportunities to subcontract to DBE's.

Please contact the Equal Opportunity Office at (850) 414-4747 if you have any questions regarding this information.

DBE Reporting

If you are the prime contractor on a project, enter your DBE participation in the Equal Opportunity Compliance system prior to the pre-construction or pre-work conference for all federal and state funded projects. This **will not** become a mandatory part of the contract. It will assist the Department in tracking and reporting planned or estimated DBE utilization. <u>During</u> the <u>contract</u>, the prime contractor is required to report actual payments to DBE and MBE subcontractors through the web-based Equal Opportunity Compliance (EOC) system.

All DBE payments must be reported whether or not you initially planned to utilize the company. In order for our race neutral DBE Program to be successful, your cooperation is imperative. If you have any questions, please contact EOOHelp@dot.state.fl.us.

Bid Opportunity List

The Federal DBE Program requires States to maintain a database of all firms that are participating or attempting to participate on FDOT-assisted contracts. The list must include all firms that bid on prime contracts or bid or quote subcontracts on FDOT-assisted projects, including both **DBE's and non-DBEs**.

Please complete the Bidders Opportunity List through the Equal Opportunity Compliance system within 3 business days of submission of the bid or proposal for ALL subcontractors or sub-consultants who quoted to you for specific project for this letting. The web address to the Equal Opportunity Compliance system is: https://www.fdot.gov/equalopportunity/eoc.shtm.

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

EQUAL OPPORTUNITY OFFICE 07/24

DBE BID PACKAGE INFORMATION

DBE/AA Plans

Contractors bidding on FDOT contracts are to have an approved DBE Affirmative Action Plan (FDOT Form 275-030-11B) on file with the FDOT Equal Opportunity Office before execution of a contract. DBE/AA Plans must be received with the contractors bid or received by the Equal Opportunity Office <u>prior to the award</u> of the contract.

Plans are approved by the Equal Opportunity Office in accordance with Ch. 14-78, Florida Administrative Code. Plans that do not meet these mandatory requirements may not be approved. Approvals are for a (3) three year period and should be updated at anytime there is a change in the company's DBE Liaison Officer and/or President. Contractors may evidence adoption of the DBE/AA Policy and Plan and/or a change in the designated DBE Liaison officer as follows:

- Print the first page of the document on company stationery ("letterhead") that indicates the company's name, mailing address, phone number, etc.
- Print the company's name in the "____" space; next to "Date" print the month/day/year the policy is being signed; record the signature of the company's Chief Executive Officer, President or Chairperson in the space next to "by" and print the full first and last name and position title of the official signing the policy.
- Print the DBE Liaison's full name, email address, business mailing address and phone number the bottom of email.

E-mail the completed and signed DBE AA Plan to: eeoforms@dot.state.fl.us.

The Department will review the policy, update department records and issue a notification of approval or disapproval; a copy of the submitted plan will not be returned to the contractor.

REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

- I General
- II. Nondiscrimination
- III. Non-segregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- V. Contract Work Hours and Safety Standards Act
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- X. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion
- XI. Certification Regarding Use of Contract Funds for Lobbying
- XII. Use of United States-Flag Vessels:

ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under title 23, United States Code, as required in 23 CFR 633.102(b) (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services). 23 CFR 633.102(e).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider. 23 CFR 633.102(e).

Form FHWA-1273 must be included in all Federal-aid designbuild contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services) in accordance with 23 CFR 633.102. The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in solicitation-for-bids or request-for-proposals documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract). 23 CFR 633.102(b).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work

performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract. 23 CFR 633.102(d).

- 3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.
- 4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. 23 U.S.C. 114(b). The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors. 23 U.S.C. 101(a).
- II. NONDISCRIMINATION (23 CFR 230.107(a); 23 CFR Part 230, Subpart A, Appendix A; EO 11246)

The provisions of this section related to 23 CFR Part 230, Subpart A, Appendix A are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR Part 60, 29 CFR Parts 1625-1627, 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), and related regulations including 49 CFR Parts 21, 26, and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR Part 60, and 29 CFR Parts 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), and Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), and related regulations including 49 CFR Parts 21, 26, and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR Part 230, Subpart A, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

- 1. Equal Employment Opportunity: Equal Employment Opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (see 28 CFR Part 35, 29 CFR Part 1630, 29 CFR Parts 1625-1627, 41 CFR Part 60 and 49 CFR Part 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140, shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR Part 35 and 29 CFR Part 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:
- a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract. 23 CFR 230.409 (g)(4) & (5).
- b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, sexual orientation, gender identity, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."

- 2. **EEO Officer:** The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.
- 3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action or are substantially involved in such action, will be made fully cognizant of and will implement the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:
- a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer or other knowledgeable company official.
- b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.
- c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women

- d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.
- e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.
- **4. Recruitment:** When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.
- a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.
- b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.
- c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.
- **5. Personnel Actions:** Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age or disability. The following procedures shall be followed:
- a. The contractor will conduct periodic inspections of project sites to ensure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.
- b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.
- c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.
- d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action

within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

6. Training and Promotion:

- a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.
- b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs (i.e., apprenticeship and on-the-job training programs for the geographical area of contract performance). In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).
- c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.
- d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.
- 7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. 23 CFR 230.409. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:
- a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.
- b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability.
- c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.
- d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide

sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

- 8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established thereunder. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.
- 9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.
- a. The contractor shall notify all potential subcontractors, suppliers, and lessors of their EEO obligations under this contract.
- b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

10. Assurances Required:

- a. The requirements of 49 CFR Part 26 and the State DOT's FHWA-approved Disadvantaged Business Enterprise (DBE) program are incorporated by reference.
- b. The contractor, subrecipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate, which may include, but is not limited to:
 - (1) Withholding monthly progress payments;
 - (2) Assessing sanctions;
 - (3) Liquidated damages; and/or
- (4) Disqualifying the contractor from future bidding as non-responsible.
- c. The Title VI and nondiscrimination provisions of U.S. DOT Order 1050.2A at Appendixes A and E are incorporated by reference. 49 CFR Part 21.
- 11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.
- a. The records kept by the contractor shall document the following:

- (1) The number and work hours of minority and nonminority group members and women employed in each work classification on the project;
 - (2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and
 - (3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women.
- b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391. The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of more than \$10,000. 41 CFR 60-1.5.

As prescribed by 41 CFR 60-1.8, the contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, sexual orientation, gender identity, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location under the contractor's control where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size), in accordance with 29 CFR 5.5. The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. 23 U.S.C. 113. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. 23 U.S.C. 101. Where applicable law requires that projects be treated as a project on a Federal-aid highway, the provisions of this subpart will apply regardless of the location of the project. Examples include: Surface Transportation Block Grant Program projects funded under 23 U.S.C. 133 [excluding recreational trails projects], the Nationally Significant Freight and Highway

Projects funded under 23 U.S.C. 117, and National Highway Freight Program projects funded under 23 U.S.C. 167.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

1. Minimum wages (29 CFR 5.5)

- a. Wage rates and fringe benefits. All laborers and mechanics employed or working upon the site of the work (or otherwise working in construction or development of the project under a development statute), will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of basic hourly wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. As provided in paragraphs (d) and (e) of 29 CFR 5.5, the appropriate wage determinations are effective by operation of law even if they have not been attached to the contract. Contributions made or costs reasonably anticipated for bona fide fringe benefits under the Davis-Bacon Act (40 U.S.C. 3141(2)(B)) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.e. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics must be paid the appropriate wage rate and fringe benefits on the wage determination for the classification(s) of work actually performed, without regard to skill, except as provided in paragraph 4. of this section. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classifications and wage rates conformed under paragraph 1.c. of this section) and the Davis-Bacon poster (WH-1321) must be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.
- b. Frequently recurring classifications. (1) In addition to wage and fringe benefit rates that have been determined to be prevailing under the procedures set forth in 29 CFR part 1, a wage determination may contain, pursuant to § 1.3(f), wage and fringe benefit rates for classifications of laborers and mechanics for which conformance requests are regularly submitted pursuant to paragraph 1.c. of this section, provided that:
 - (i) The work performed by the classification is not performed by a classification in the wage determination for which a prevailing wage rate has been determined;

- (ii) The classification is used in the area by the construction industry; and
- (iii) The wage rate for the classification bears a reasonable relationship to the prevailing wage rates contained in the wage determination.
- (2) The Administrator will establish wage rates for such classifications in accordance with paragraph 1.c.(1)(iii) of this section. Work performed in such a classification must be paid at no less than the wage and fringe benefit rate listed on the wage determination for such classification.
- c. Conformance. (1) The contracting officer must require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract be classified in conformance with the wage determination. Conformance of an additional classification and wage rate and fringe benefits is appropriate only when the following criteria have been met:
 - (i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
 - (ii) The classification is used in the area by the construction industry; and
 - (iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.
- (2) The conformance process may not be used to split, subdivide, or otherwise avoid application of classifications listed in the wage determination.
- (3) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken will be sent by the contracting officer by email to DBAconformance@dol.gov. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30–day period that additional time is necessary.
- (4) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer will, by email to DBAconformance@dol.gov, refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30–day period that additional time is necessary.
- (5) The contracting officer must promptly notify the contractor of the action taken by the Wage and Hour Division

- under paragraphs 1.c.(3) and (4) of this section. The contractor must furnish a written copy of such determination to each affected worker or it must be posted as a part of the wage determination. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 1.c.(3) or (4) of this section must be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.
- d. Fringe benefits not expressed as an hourly rate. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor may either pay the benefit as stated in the wage determination or may pay another bona fide fringe benefit or an hourly cash equivalent thereof.
- e. Unfunded plans. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, in accordance with the criteria set forth in § 5.28, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.
- f. *Interest.* In the event of a failure to pay all or part of the wages required by the contract, the contractor will be required to pay interest on any underpayment of wages.

2. Withholding (29 CFR 5.5)

- a. Withholding requirements. The contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for the full amount of wages and monetary relief, including interest, required by the clauses set forth in this section for violations of this contract, or to satisfy any such liabilities required by any other Federal contract, or federally assisted contract subject to Davis-Bacon labor standards, that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to Davis-Bacon labor standards requirements and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld. In the event of a contractor's failure to pay any laborer or mechanic, including any apprentice or helper working on the site of the work all or part of the wages required by the contract, or upon the contractor's failure to submit the required records as discussed in paragraph 3.d. of this section, the contracting agency may on its own initiative and after written notice to the contractor. take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.
- b. *Priority to withheld funds*. The Department has priority to funds withheld or to be withheld in accordance with paragraph

- 2.a. of this section or Section V, paragraph 3.a., or both, over claims to those funds by:
- (1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;
 - (2) A contracting agency for its reprocurement costs;
- (3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;
 - (4) A contractor's assignee(s);
 - (5) A contractor's successor(s); or
- (6) A claim asserted under the Prompt Payment Act, <u>31</u> U.S.C. 3901–3907.

3. Records and certified payrolls (29 CFR 5.5)

- a. Basic record requirements (1) Length of record retention. All regular payrolls and other basic records must be maintained by the contractor and any subcontractor during the course of the work and preserved for all laborers and mechanics working at the site of the work (or otherwise working in construction or development of the project under a development statute) for a period of at least 3 years after all the work on the prime contract is completed.
- (2) Information required. Such records must contain the name; Social Security number; last known address, telephone number, and email address of each such worker; each worker's correct classification(s) of work actually performed; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in 40 U.S.C. 3141(2)(B) of the Davis-Bacon Act); daily and weekly number of hours actually worked in total and on each covered contract; deductions made; and actual wages paid.
- (3) Additional records relating to fringe benefits. Whenever the Secretary of Labor has found under paragraph 1.e. of this section that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in 40 U.S.C. 3141(2)(B) of the Davis-Bacon Act, the contractor must maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits.
- (4) Additional records relating to apprenticeship. Contractors with apprentices working under approved programs must maintain written evidence of the registration of apprenticeship programs, the registration of the apprentices, and the ratios and wage rates prescribed in the applicable programs.
- b. Certified payroll requirements (1) Frequency and method of submission. The contractor or subcontractor must submit weekly, for each week in which any DBA- or Related Acts-covered work is performed, certified payrolls to the contracting

- agency. The prime contractor is responsible for the submission of all certified payrolls by all subcontractors. A contracting agency or prime contractor may permit or require contractors to submit certified payrolls through an electronic system, as long as the electronic system requires a legally valid electronic signature; the system allows the contractor, the contracting agency, and the Department of Labor to access the certified payrolls upon request for at least 3 years after the work on the prime contract has been completed; and the contracting agency or prime contractor permits other methods of submission in situations where the contractor is unable or limited in its ability to use or access the electronic system.
- (2) Information required. The certified payrolls submitted must set out accurately and completely all of the information required to be maintained under paragraph 3.a.(2) of this section, except that full Social Security numbers and last known addresses, telephone numbers, and email addresses must not be included on weekly transmittals. Instead, the certified payrolls need only include an individually identifying number for each worker (e.g., the last four digits of the worker's Social Security number). The required weekly certified payroll information may be submitted using Optional Form WH-347 or in any other format desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division website at https://www.dol.gov/sites/dolgov/files/WHD/ legacy/files/wh347/.pdf or its successor website. It is not a violation of this section for a prime contractor to require a subcontractor to provide full Social Security numbers and last known addresses, telephone numbers, and email addresses to the prime contractor for its own records, without weekly submission by the subcontractor to the contracting agency.
- (3) Statement of Compliance. Each certified payroll submitted must be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor, or the contractor's or subcontractor's agent who pays or supervises the payment of the persons working on the contract, and must certify the following:
 - (i) That the certified payroll for the payroll period contains the information required to be provided under paragraph 3.b. of this section, the appropriate information and basic records are being maintained under paragraph 3.a. of this section, and such information and records are correct and complete;
 - (ii) That each laborer or mechanic (including each helper and apprentice) working on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in 29 CFR part 3; and
 - (iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification(s) of work actually performed, as specified in the applicable wage determination incorporated into the contract.
- (4) Use of Optional Form WH–347. The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH–347 will satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(3) of this section.

- (5) Signature. The signature by the contractor, subcontractor, or the contractor's or subcontractor's agent must be an original handwritten signature or a legally valid electronic signature.
- (6) Falsification. The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under 18 U.S.C. 1001 and 31 U.S.C. 3729.
- (7) Length of certified payroll retention. The contractor or subcontractor must preserve all certified payrolls during the course of the work and for a period of 3 years after all the work on the prime contract is completed.
- c. Contracts, subcontracts, and related documents. The contractor or subcontractor must maintain this contract or subcontract and related documents including, without limitation, bids, proposals, amendments, modifications, and extensions. The contractor or subcontractor must preserve these contracts, subcontracts, and related documents during the course of the work and for a period of 3 years after all the work on the prime contract is completed.
- d. Required disclosures and access (1) Required record disclosures and access to workers. The contractor or subcontractor must make the records required under paragraphs 3.a. through 3.c. of this section, and any other documents that the contracting agency, the State DOT, the FHWA, or the Department of Labor deems necessary to determine compliance with the labor standards provisions of any of the applicable statutes referenced by § 5.1, available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and must permit such representatives to interview workers during working hours on the job.
- (2) Sanctions for non-compliance with records and worker access requirements. If the contractor or subcontractor fails to submit the required records or to make them available, or refuses to permit worker interviews during working hours on the job, the Federal agency may, after written notice to the contractor, sponsor, applicant, owner, or other entity, as the case may be, that maintains such records or that employs such workers, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available, or to permit worker interviews during working hours on the job, may be grounds for debarment action pursuant to § 5.12. In addition, any contractor or other person that fails to submit the required records or make those records available to WHD within the time WHD requests that the records be produced will be precluded from introducing as evidence in an administrative proceeding under 29 CFR part 6 any of the required records that were not provided or made available to WHD. WHD will take into consideration a reasonable request from the contractor or person for an extension of the time for submission of records. WHD will determine the reasonableness of the request and may consider, among other things, the location of the records and the volume of production.
- (3) Required information disclosures. Contractors and subcontractors must maintain the full Social Security number and last known address, telephone number, and email address

of each covered worker, and must provide them upon request to the contracting agency, the State DOT, the FHWA, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or other compliance action.

4. Apprentices and equal employment opportunity (29 CFR 5.5)

- a. Apprentices (1) Rate of pay. Apprentices will be permitted to work at less than the predetermined rate for the work they perform when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship (OA), or with a State Apprenticeship Agency recognized by the OA. A person who is not individually registered in the program, but who has been certified by the OA or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice, will be permitted to work at less than the predetermined rate for the work they perform in the first 90 days of probationary employment as an apprentice in such a program. In the event the OA or a State Apprenticeship Agency recognized by the OA withdraws approval of an apprenticeship program, the contractor will no longer be permitted to use apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.
- (2) Fringe benefits. Apprentices must be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringe benefits must be paid in accordance with that determination.
- (3) Apprenticeship ratio. The allowable ratio of apprentices to journeyworkers on the job site in any craft classification must not be greater than the ratio permitted to the contractor as to the entire work force under the registered program or the ratio applicable to the locality of the project pursuant to paragraph 4.a.(4) of this section. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated in paragraph 4.a.(1) of this section, must be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under this section must be paid not less than the applicable wage rate on the wage determination for the work actually performed.
- (4) Reciprocity of ratios and wage rates. Where a contractor is performing construction on a project in a locality other than the locality in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyworker's hourly rate) applicable within the locality in which the construction is being performed must be observed. If there is no applicable ratio or wage rate for the locality of the project, the ratio and wage rate specified in the contractor's registered program must be observed.
- b. Equal employment opportunity. The use of apprentices and journeyworkers under this part must be in conformity with

the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

c. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. 23 CFR 230.111(e)(2). The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeyworkers shall not be greater than permitted by the terms of the particular program.

- **5. Compliance with Copeland Act requirements.** The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract as provided in 29 CFR 5.5.
- **6. Subcontracts**. The contractor or subcontractor must insert FHWA-1273 in any subcontracts, along with the applicable wage determination(s) and such other clauses or contract modifications as the contracting agency may by appropriate instructions require, and a clause requiring the subcontractors to include these clauses and wage determination(s) in any lower tier subcontracts. The prime contractor is responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in this section. In the event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and may be subject to debarment, as appropriate. 29 CFR 5.5.
- **7. Contract termination: debarment.** A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.
- 8. Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract as provided in 29 CFR 5.5.
- 9. Disputes concerning labor standards. As provided in 29 CFR 5.5, disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.
- **10. Certification of eligibility**. a. By entering into this contract, the contractor certifies that neither it nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of <u>40 U.S.C. 3144(b)</u> or § 5.12(a).

- b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of 40 U.S.C. 3144(b) or § 5.12(a).
- c. The penalty for making false statements is prescribed in the U.S. Code, Title 18 Crimes and Criminal Procedure, <u>18</u> U.S.C. 1001.
- **11. Anti-retaliation**. It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:
- a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the DBA, Related Acts, this part, or 29 CFR part 1 or 3;
- b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under the DBA, Related Acts, this part, or 29 CFR part 1 or 3;
- c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under the DBA, Related Acts, this part, or 29 CFR part 1 or 3; or
- d. Informing any other person about their rights under the DBA, Related Acts, this part, or 29 CFR part 1 or 3.

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

Pursuant to 29 CFR 5.5(b), the following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchpersons and guards.

- 1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek. 29 CFR 5.5.
- 2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph 1. of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages and interest from the date of the underpayment. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages shall be computed with respect to each individual laborer or

mechanic, including watchpersons and guards, employed in violation of the clause set forth in paragraph 1. of this section, in the sum currently provided in 29 CFR 5.5(b)(2)* for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph 1. of this section.

* \$31 as of January 15, 2023 (See 88 FR 88 FR 2210) as may be adjusted annually by the Department of Labor, pursuant to the Federal Civil Penalties Inflation Adjustment Act of 1990.

3. Withholding for unpaid wages and liquidated damages

- a. Withholding process. The FHWA or the contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for any unpaid wages; monetary relief, including interest; and liquidated damages required by the clauses set forth in this section on this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract subject to the Contract Work Hours and Safety Standards Act that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to the Contract Work Hours and Safety Standards Act and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld.
- b. *Priority to withheld funds*. The Department has priority to funds withheld or to be withheld in accordance with Section IV paragraph 2.a. or paragraph 3.a. of this section, or both, over claims to those funds by:
- (1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;
 - (2) A contracting agency for its reprocurement costs;
- (3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate:
 - (4) A contractor's assignee(s);
 - (5) A contractor's successor(s); or
- (6) A claim asserted under the Prompt Payment Act, <u>31</u> U.S.C. 3901–3907.
- **4. Subcontracts.** The contractor or subcontractor must insert in any subcontracts the clauses set forth in paragraphs 1. through 5. of this section and a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor is responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs 1. through 5. In the

event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and associated liquidated damages and may be subject to debarment, as appropriate.

- **5. Anti-retaliation.** It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:
- a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the Contract Work Hours and Safety Standards Act (CWHSSA) or its implementing regulations in this part;
- b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under CWHSSA or this part;
- c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under CWHSSA or this part: or
- d. Informing any other person about their rights under CWHSSA or this part.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System pursuant to 23 CFR 635.116.

- 1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).
- a. The term "perform work with its own organization" in paragraph 1 of Section VI refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions: (based on longstanding interpretation)
- (1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees:
 - (2) the prime contractor remains responsible for the quality of the work of the leased employees;

- (3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and
 - (4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.
- b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract. 23 CFR 635.102.
- 2. Pursuant to 23 CFR 635.116(a), the contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.
- 3. Pursuant to 23 CFR 635.116(c), the contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.
- 4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract. (based on long-standing interpretation of 23 CFR 635.116).
- 5. The 30-percent self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements. 23 CFR 635.116(d).

VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

- 1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR Part 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract. 23 CFR 635.108.
- 2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and

health standards (29 CFR Part 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704). 29 CFR 1926.10.

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR Part 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 11, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT (42 U.S.C. 7606; 2 CFR 200.88; EO 11738)

This provision is applicable to all Federal-aid construction contracts in excess of \$150,000 and to all related subcontracts. 48 CFR 2.101; 2 CFR 200.327.

By submission of this bid/proposal or the execution of this contract or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, subcontractor, supplier, or vendor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251-1387). Violations must be reported to the Federal Highway Administration and the Regional Office of the Environmental Protection Agency. 2 CFR Part 200, Appendix II.

The contractor agrees to include or cause to be included the requirements of this Section in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements. 2 CFR 200.327.

X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and 1200. 2 CFR 180.220 and 1200.220.

1. Instructions for Certification – First Tier Participants:

- a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.
- b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction. 2 CFR 180.320.
- c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default. 2 CFR 180.325.
- d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances. 2 CFR 180.345 and 180.350.

- e. The terms "covered transaction," "debarred,"
 "suspended," "ineligible," "participant," "person," "principal,"
 and "voluntarily excluded," as used in this clause, are defined
 in 2 CFR Parts 180, Subpart I, 180.900-180.1020, and 1200.
 "First Tier Covered Transactions" refers to any covered
 transaction between a recipient or subrecipient of Federal
 funds and a participant (such as the prime or general contract).
 "Lower Tier Covered Transactions" refers to any covered
 transaction under a First Tier Covered Transaction (such as
 subcontracts). "First Tier Participant" refers to the participant
 who has entered into a covered transaction with a recipient or
 subrecipient of Federal funds (such as the prime or general
 contractor). "Lower Tier Participant" refers any participant who
 has entered into a covered transaction with a First Tier
 Participant or other Lower Tier Participants (such as
 subcontractors and suppliers).
- f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction. 2 CFR 180.330.
- g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold. 2 CFR 180.220 and 180.300.
- h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. 2 CFR 180.300; 180.320, and 180.325. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. 2 CFR 180.335. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (https://www.sam.gov/). 2 CFR 180.300, 180.320, and 180.325.
- i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default. 2 CFR 180.325.

* * * * *

2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

- a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:
- (1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.335;.
- (2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property, 2 CFR 180.800;
- (3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification, 2 CFR 180.700 and 180.800: and
- (4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default. 2 CFR 180.335(d).
- (5) Are not a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and
- (6) Are not a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability (USDOT Order 4200.6 implementing appropriations act requirements).
- b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal. 2 CFR 180.335 and 180.340.

* * * * *

3. Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders, and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200). 2 CFR 180.220 and 1200.220.

- a. By signing and submitting this proposal, the prospective lower tier participant is providing the certification set out below.
- b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which

this transaction originated may pursue available remedies, including suspension and/or debarment.

- c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances. 2 CFR 180.365.
- d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180, Subpart I, 180.900 - 180.1020, and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a recipient or subrecipient of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a recipient or subrecipient of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).
- e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated. 2 CFR 1200.220 and 1200.332.
- f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold. 2 CFR 180.220 and 1200.220.
- g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (https://www.sam.gov/), which is compiled by the General Services Administration. 2 CFR 180.300, 180.320, 180.330, and 180.335.
- h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily

excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment. 2 CFR 180.325.

* * * * *

4. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

- a. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals:
- (1) is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.355;
- (2) is a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and
- (3) is a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability. (USDOT Order 4200.6 implementing appropriations act requirements)
- b. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal.

* * * * *

XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000. 49 CFR Part 20, App. A.

- 1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief. that:
- a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or

cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

- 2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.
- 3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

XII. USE OF UNITED STATES-FLAG VESSELS:

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, or any other covered transaction. 46 CFR Part 381.

This requirement applies to material or equipment that is acquired for a specific Federal-aid highway project. 46 CFR 381.7. It is not applicable to goods or materials that come into inventories independent of an FHWA funded-contract.

When oceanic shipments (or shipments across the Great Lakes) are necessary for materials or equipment acquired for a specific Federal-aid construction project, the bidder, proposer, contractor, subcontractor, or vendor agrees:

- 1. To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels. 46 CFR 381.7.
- 2. To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (b)(1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Office of Cargo and Commercial Sealift (MAR-620), Maritime Administration, Washington, DC 20590. (MARAD requires copies of the ocean carrier's (master) bills of lading, certified onboard, dated, with rates and charges. These bills of lading may contain business sensitive information and therefore may be submitted directly to MARAD by the Ocean Transportation Intermediary on behalf of the contractor). 46 CFR 381.7.

ATTACHMENT A - EMPLOYMENT AND MATERIALS PREFERENCE FOR APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS ROAD CONTRACTS (23 CFR 633, Subpart B, Appendix B) This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

- 1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:
- a. To the extent that qualified persons regularly residing in the area are not available.
- b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.
- c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.
- 2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.
- 3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.
- 4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above
- 5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region
- 6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

"General Decision Number: FL20240255 09/13/2024

State: Florida

Construction Type: Highway

County: Lee County in Florida.

HIGHWAY CONSTRUCTION PROJECTS

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(1).

If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an $|\cdot|$ The contractor must pay option is exercised) on or after January 30, 2022:

- Executive Order 14026 generally applies to the contract.
- all covered workers at least \$17.20 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2024.

If the contract was awarded on . or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022:

- Executive Order 13658 generally applies to the contract.
- The contractor must pay all covered workers at least \$12.90 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours performing on that contract in 2024.

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this

wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at http://www.dol.gov/whd/govcontracts.

Modification Number Publication Date 0 09/13/2024

SUFL2022-024 06/27/2024

	Rates	Fringes
CARPENTER	\$ 22.38	0.00
CEMENT MASON/CONCRETE FINISHER	\$ 23.06	0.00
ELECTRICIAN	\$ 21.00	3.53
IRONWORKER	\$ 24.16	0.00
LABORER: Asphalt, Includes Raker, Shoveler, Spreader and Distributor	\$ 15.88 **	0.86
LABORER: Common or General	\$ 17.61	0.00
LABORER: Mason Tender - Cement/Concrete	\$ 20.24	2.01
LABORER: Pipelayer	\$ 20.10	8.99
LABORER: Grade Checker	\$ 17.21	0.00
OPERATOR: Backhoe/Excavator/Trackhoe	\$ 26.47	0.00
OPERATOR: Bobcat/Skid Steer/Skid Loader	\$ 21.33	0.00
OPERATOR: Boom	\$ 33.61	11.50
OPERATOR: Broom/Sweeper	\$ 19.52	0.82
OPERATOR: Bulldozer	\$ 24.85	0.00
OPERATOR: Crane	\$ 30.80	11.50

OPERATOR:	Grader/Blade\$ 25.02	0.00
OPERATOR:	Loader\$ 21.04	0.00
OPERATOR:	Mechanic\$ 27.61	1.00
OPERATOR:	Milling Machine\$ 19.68	0.00
OPERATOR: Aggregate,	Paver (Asphalt, and Concrete)\$ 22.70	0.00
OPERATOR:	Piledriver \$ 22.98	0.00
OPERATOR:	Roller\$ 20.71	0.00
OPERATOR:	Scraper \$ 15.54 **	0.00
OPERATOR:	Screed\$ 22.92	0.00
OPERATOR:	Tractor \$ 16.91 **	0.66
PAINTER	\$ 21.02	0.00
TRAFFIC CO	NTROL PERSON \$ 16.87 **	0.00
TRUCK DRIV	ER: Dump Truck\$ 19.33	4.47
TRUCK DRIV	ER: Flatbed Truck\$ 20.00	0.00
TRUCK DRIV	ER: Lowboy Truck\$ 20.71	4.23
	ER: Off the Road \$ 16.55 **	0.00
TRUCK DRIV	ER: Water Truck\$ 18.27	0.00
Truck	ER: Distributor \$ 22.43	0.00

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

^{**} Workers in this classification may be entitled to a higher minimum wage under Executive Order 14026 (\$17.20) or 13658 (\$12.90). Please see the Note at the top of the wage determination for more information. Please also note that the minimum wage requirements of Executive Order 14026 are not

currently being enforced as to any contract or subcontract to which the states of Texas, Louisiana, or Mississippi, including their agencies, are a party.

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at

https://www.dol.gov/agencies/whd/government-contracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (iii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198

indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

State Adopted Rate Identifiers

Classifications listed under the ""SA"" identifier indicate that the prevailing wage rate set by a state (or local) government was adopted under 29 C.F.R §1.3(g)-(h). Example: SAME2023-007 01/03/2024. SA reflects that the rates are state adopted. ME refers to the State of Maine. 2023 is the year during which the state completed the survey on which the listed classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 01/03/2024 reflects the date on which the classifications and rates under the ?SA? identifier took effect under state law in the state from which the rates were adopted.

WAGE DETERMINATION APPEALS PROCESS

- 1.) Has there been an initial decision in the matter? This can be:
- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour National Office because National Office has responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations Wage and Hour Division U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator U.S. Department of Labor 200 Constitution Avenue, N.W.

Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

END OF GENERAL DECISION"