

**CONTRACT DOCUMENTS**

**SPECIAL PROVISIONS**

**FOR**

**75<sup>th</sup> Street West at Manatee Avenue  
Capacity Improvements**

**COUNTY PROJECT No. 6108260**

July 2023

**PROJECT OWNER:**

County of Manatee, Florida  
c/o Manatee County Procurement Division  
1112 Manatee Avenue West  
Bradenton, Florida 34205  
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**&**

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# SPECIAL PROVISIONS

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**1. GENERAL**

The Special Provisions amend, enhance or otherwise revise the FDOT Standard Specifications and Manatee County Public Works Technical Specifications to be used for this Project.

**2. CONTRACT PLANS**

The Contract Plans include the following plan sets:

- a. Roadway Plans
- b. Signing & Pavement Marking Plans
- c. Signalization Plans
- d. Lighting Plans
- e. Utility Plans

**3. STANDARD AND TECHNICAL SPECIFICATIONS**

The Standard Specifications to be used for this work shall be Division II and III of the Florida Department of Transportation (FDOT) *Standard Specifications for Road and Bridge Construction*, latest edition at time of bid, and all Supplemental Specifications thereto, hereinafter referred to as the *Standard Specifications*, for roadway construction, except as amended, enhanced or revised under this Contract per the Special Provisions, or as noted on the construction plans meeting the Manatee County Highway, Traffic & Stormwater Standards, latest edition at time of bid.

The Contractor’s work shall follow the Manatee County Public Works Utility Standards Manual and Technical Specifications, latest editions at time of bid, hereinafter referred to as the *Technical Specifications*, for all utility work. All items and/or materials furnished and installed shall conform to the Manatee County Utilities Approved Products List, latest edition, and supersede any items listed within the Technical Specifications for utility work. All items listed in the submittal requirements under each section shall be required to be submitted for review and acceptance by the Engineer of Record and the County, unless otherwise specified.

The Standard Specifications and Technical Specifications cover the usual construction requirements for work specified by the Manatee County Public Works Department; however, in the event it is determined that the specific work to be done is of such a nature that the method of construction, type and/or kind of material is not defined by the Standard Specifications or Technical Specifications, such work shall be performed in accordance with the Special Provisions.

The apparent silence of the Standard Specifications, Technical Specifications or Special Provisions as to any detail or the apparent omission from them of a detailed description concerning any work to be done and materials to be furnished shall be regarded as meaning that only the best general practice is to prevail and that only material and workmanship of the best quality is to be used. Interpretation of these specifications shall be made upon that basis.

#### **4. GOVERNANCE ORDER**

In any instance where there is an apparent conflict between the language of the Standard Specifications, Technical Specifications, Construction Plans and Special Provisions, the Special Provisions shall govern, followed by the Technical Specifications, Construction Plans and then the Standard Specifications.

#### **5. MEASUREMENT AND PAYMENT**

- a. All work completed under the terms of this contract shall be measured according to United States Standard Measures.
- b. All measurements shall be taken horizontally or vertically unless specifically provided otherwise.
- c. No payment will be made for construction over a greater area than authorized, nor for material moved from outside of stakes and data shown on the plans, except when such work is performed upon instructions of the Engineer.
- d. Whenever any change, or combination of changes, on the plans results in an increase or decrease in the original contract quantities, and the work added or decreased/eliminated is of the same general character as that called for on the plans, the Contractor shall accept payment in full at the original contract unit prices for the actual quantity of work performed, with no allowance for any loss of anticipated profits.
- f. It is the Contractor's responsibility to perform a detailed quantity take-off from the plans to determine actual quantities for ordering and delivery purposes. The Owner will not be responsible for quantities ordered in excess of those installed and constructed. The Contractor should be aware that some of the pay items may have contingency quantities. Payment shall be made only for final in-place quantities.

No payment shall be made for contingency quantities or additional work unless otherwise directed and approved in writing by the Engineer.

- g. Bid Schedule Completion - the blank spaces in the bid schedule shall be filled in correctly where each and every item for which a description is given, as the bidder must state the unit prices for which he proposes to do each part of the work contemplated, and the total price for all the parts included in any or all of the combinations of the work. In case of a discrepancy, the written words for "unit price", where stated, shall be considered as being the unit price. If the bid schedule does not use the written words for the unit price, then the numerically correct "total price", shall be considered as being the total price.

## **6. NO SEPARATE PAYMENT FOR SPECIAL PROVISIONS**

No separate payment will be made for the Contractor to execute Special Provisions. All expenses borne by the Contractor shall be included in the individual unit prices for the particular pay item or as specified herein.

## **7. CONTRACT CONTINGENCY**

The discretionary work (Contingency) pay item shall cover the cost for various contingencies and contract amendments authorized by the Owner. Any amount of extra work and/or alterations to the proposed work charged to the allowance shall be fully documented and authorized by the Project Manager before the start of the work. No payment shall be made for work completed without written authorization from the Owner.

## **8. NOTICE AND SERVICE THEREOF**

All notices, which shall include demands, instructions, requests, approvals, and claims shall be in writing. Any notice to or demand upon the Contractor shall be sufficiently given if delivered to the office of the Contractor specified in the bid (or to such other office as the Contractor may, from time to time, designate to the Owner in writing), or if deposited in the United States mail in a sealed, postage prepaid envelope, or delivered, with charges prepaid, sent via fax transmission, or to any telegraph company for transmission, in each case addressed to such office.

All notices required to be hand delivered to the Owner, unless otherwise specified in writing to the Contractor, shall be delivered to the Manatee County Project Manager (Project Manager), and any notice to or demand upon the Owner shall be sufficiently given as delivered to the office of the Project Manager, or if deposited in the United States mail in a sealed, postage prepaid envelope, sent via fax transmission, or delivered with charges prepaid to any telegraph company for transmission, in each case addressed to said Project Manager or to such other representative of the Owner or to such other address as the Owner may subsequently specify in writing to the Contractor for such purposes.

Any such notice or demand shall be deemed to have been given or made as of the time of actual delivery or (in the case of mailing) when the same should have been received in

due course of post or in the case of a fax transmission or telegram at the time of actual receipt, as the case may be.

## **9. CONTRACTOR'S SUPERVISION**

- a. Execution of Work: The Contractor shall give the work the constant attention necessary to assure the scheduled progress. He shall cooperate fully with the Project Manager and with other Contractors at work in the vicinity.
- b. Contractor's Superintendent: The Contractor shall at all times have on the work site as his agent, a competent superintendent capable of thoroughly interpreting the plans and specifications and thoroughly experienced in the type of work being performed, who shall receive the instructions from the Project Manager or his authorized representatives. The superintendent shall have full authority to execute the orders or directions of the Project Manager and to supply promptly any materials, tools, equipment, labor and incidentals that may be required. Such superintendence shall be furnished regardless of the amount of work sublet.
- c. The Contractor's superintendent shall speak and understand English, and at least one responsible person who speaks and understands English shall be on the project during all working hours, and wherever work is being done by the Contractor.
- d. Supervision for Emergencies: The Contractor shall have a responsible person available at or reasonably near the work site on a 24-hour basis, 7 days a week, in order that he may be contacted for emergencies and in cases where immediate action must be taken to maintain traffic or to handle any other problem that may arise. The Contractor's responsible person for supervision for emergencies shall speak and understand English. The Contractor shall submit, by certified mail, 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.

## **10. LIST OF EMERGENCY CONTACT NUMBERS & UTILITY SERVICE MAINTENANCE**

The Contractor shall obtain and maintain a list of emergency contact phone numbers for all utilities during the course of the project. The Contractor shall maintain utility service during the project except for interruptions authorized by the utility owner. If interruptions are required, the Contractor shall notify the Project Manager 48 hours in advance.

## **11. E-BUILDER ENTERPRISE™**

### **a. e-Builder Enterprise™: Project Management Tool**

The Contractor shall be required to use the Internet web-based project management tool, e-Builder Enterprise™ (e-Builder), and protocols included in that software during this project; and shall take any training courses required by the Owner, at no additional cost to the Owner. The use of this project management

system does not replace or change any contractual responsibilities of the participants.

User registration, electronic and computer equipment, and Internet connections required for e-Builder are the responsibility of the Contractor and its subcontractors. The sharing of user accounts is prohibited. Individuals who are granted log-in access to the e-Builder platform shall be responsible for the proper use of their passwords and access to data as agents of the Contractor. For documents requiring original signature such as Contracts, paper documents may be required in addition to submittal via e-Builder.

**b. Owner Responsibilities**

User licenses for e-Builder Enterprise™ will be provided and paid for by the Owner.

**12. SHOP DRAWINGS**

The Contractor shall submit all working drawings and shop drawings with descriptive specifications and engineering calculations necessary for the successful completion of the Project in pdf format using the Submittals (SUB) process in e-Builder for review and approval by the Engineer of Record (EOR). Each shop drawing shall have a cover sheet and reference the submittal number, following the sample format provided in the Special Provisions.

For items that do not meet current FDOT specifications, any working drawings shall be certified by a Florida licensed Professional Engineer and state that the design is sufficient for the successful completion of the Work. Shop drawings do not require the signature, date and seal of a professional engineer.

e-Builder will serve as the Submittal Activity Record (Logbook) and historical record of all submittals and can be accessed by all members of the project that have an e-Builder account. It can serve as a verification of review time and to respond to inquiries of a particular submittal's status.

**13. SHOP DRAWING SUBMITTAL COVER SHEET**

The Shop Drawing Submittal cover sheet shall contain the following information:

Date: \_\_\_/\_\_\_/\_\_\_\_\_

Submittal No. \_\_\_\_\_

(IFB) # [Insert IFB Number]

Project Name: [Insert Full Project Name]

Project File No.: [Insert Project Number]

Specification Title Number: [Insert Section No.]

Specification No.: Part [Insert Part No.], [Insert Item No.]

Page(s): [Insert Page No.]

Submittal Description: [Insert Title, Description of Submittal and Use]

SHOP DRAWING REVIEW	
RESPONSE NOT REQUIRED	RESPONSE REQUIRED
<input type="checkbox"/> NO EXCEPTIONS TAKEN <input type="checkbox"/> NOTE MARKINGS	<input type="checkbox"/> NOTE MARKINGS, CONFIRM <input type="checkbox"/> NOTE MARKINGS, RESUBMIT <input type="checkbox"/> REJECTED, RESUBMIT
<p>Engineer's review is for general conformance with the design concept and contract documents. Markings or comments shall not be construed as relieving the Contractor from compliance with the project drawings and specifications, nor departure therefrom. The Contractor remains responsible for details and accuracy, for confirming and correlating all quantities and dimensions, for selecting fabrication processes, for techniques of assembly, and for performing his work in a safe manner.</p> <p style="text-align: center;"><b>MANATEE COUNTY PUBLIC WORKS DEPARTMENT</b></p> <p>By: _____ Date: _____</p>	

Your Company Logo and/or information

[Contractor's Name]

[Contractor's Title]

[Company Name]

[Company Address]

[Office Number]

[Fax Number]

[email address]

[Approval Signature: \_\_\_\_\_]

[Approval Date: \_\_\_/\_\_\_/\_\_\_]

#### 14. MATERIALS

- a. **Delivery Tickets:** A copy of all delivery tickets for materials used on the project, regardless of the basis of payment shall be provided to the Owner upon request.
- b. **Job Mix Formula for Asphaltic Concrete:** Job mix formulas for asphaltic concrete, of the type specified, shall be submitted at least 14 days before plant operations begin. The submitted formula should be derived from or approved by the laboratory approved by the Owner and/or its agents. Costs for such job mix formulation will be paid by the Contractor directly to the assigned laboratory.
- c. **Job Mix Formula for Portland Cement Concrete:** Job mix design formulas for all Portland Cement Concrete, of the type specified, shall be submitted at least 14 days prior to use on the project. The submitted formulas shall be derived from or



approved by the Owner and/or its agents. All concrete mix designs shall meet FDOT Concrete Class mix guidelines, except as follows: when approved, in writing by the Engineer, an Alternate Class I Concrete mix design formula, for concrete curb and gutter to be placed by automated curb machines, may show, as a substitution for #57 aggregate, an amount of #89 aggregate not to exceed 33 percent, by weight, of the #57 aggregate.

## **15. REQUIREMENTS FOR CONTROL OF THE WORK**

Prior to the start of the Work described in this contract, a pre-construction conference may be held by the Project Manager to be attended by the Contractor, County staff, Engineer, other consultants, representatives of the various utilities, and others as required, for the purpose of establishing a schedule of operations and to coordinate the work to be done under this contract with all related work to be done by others within the limits of the project.

All items of work in this contract shall be coordinated so that progress of each related item will be continuous from week to week. The progress of the work will be reviewed by the Project Manager at the end of each week, and if the progress of any item of work during that week is found to be unsatisfactory, the Contractor shall be required to adjust the rate of progress on that item or other items as directed by the Project Manager without additional compensation. The Contractor will continuously control the work until completed.

## **16. PROJECT SCHEDULE**

The Contractor shall submit a preliminary construction schedule with the bid. The preliminary schedule shall show major work items and any phases the Contractor proposes. The schedule will show duration of work items and phases.

The Contractor shall submit via the Submittals (SUB) process in e-Builder a detailed Critical Path Method (CPM) construction schedule within 15 days of the notification of award for the Project Manager to review. The submittal shall meet the following requirements:

- a. The schedule shall be submitted in PDF format sized to be printed on 11-inch by 17-inch paper.
- b. The time scale (horizontal) shall be in weeks. The activities shall be listed on the left-hand side (vertical).
- c. Activities shall show most Work activities. The listing from top to bottom shall be in a logical sequence of how the Work will be accomplished. Space shall be provided between activities or within bars to allow for marking of actual progress.

A copy of the CPM schedule, clearly showing progress made, shall be submitted with each monthly pay application. Review or acceptance will neither impose on the Owner responsibility for the progress or scheduling of the Work, nor relieve the Contractor from full responsibilities.

The Contractor shall provide a revised schedule if, at any time, the Owner considers the completion date to be in jeopardy because of "activities behind schedule". An activity that cannot be completed by its original or latest completion date shall be deemed to be behind schedule. The revised schedule is designed to show how the Contractor intends to accomplish the Work to meet the contractual completion date. The form and method employed by the Contractor shall be the same as for the original schedule. The cost to prepare and revise the schedule is considered incidental to the Work.

## **17. SITE INVESTIGATION**

The Contractor acknowledges that he has satisfied himself as to the nature and location of the work; the general and local conditions, including but not restricted to those bearing upon transportation, disposal, handling and storage of materials; availability of labor, water, electric power, roads; and uncertainties of weather, water stages, tides or similar physical conditions at the site; the conformation and conditions of the ground; the character of equipment and facilities needed preliminary to and during prosecution of the work.

The Contractor further acknowledges that he has satisfied himself as to the character, quality and quantity of surface and subsurface materials or obstacles to be encountered, insofar as this information presented by the drawings and Specifications made a part of this contract.

The Contractor shall carefully review and adhere to conditions and recommendations made in the project geotechnical report.

Any failure by the Contractor to acquaint himself with the available information will not relieve him from responsibility for estimating properly the difficulty or cost of successfully performing the work.

The Owner assumes no responsibility for any conclusions or interpretations made by the Contractor on the basis of the information made available by the Owner. The Owner also assumes no responsibility for any understanding or representations made by its officers or agents during or prior to the execution of this Contract, unless (1) such understanding or interpretations are made in writing by the Engineer or are expressly stated in the Contract and (2) the Contract expressly provides that the responsibility therefore is assumed by the Owner.

## **18. UNDERGROUND UTILITY LOCATIONS**

The Contractor shall field verify existing underground utility locations by means of subsurface locating or other approved method. All existing utilities shall remain unless otherwise noted on the plans. The Contractor shall locate all existing utilities to remain at potential conflict locations prior to construction activities and before ordering any proposed structures. The Contractor shall contact and coordinate with "Sunshine State One Call 811" as well as the individual utilities prior to and during construction for utility locations, relocation and assistance while installing in potential conflict areas. All utility

coordination and relocations shall be factored into the Contractor's construction schedule at no additional cost to the Owner.

The cost of all labor, materials and incidentals required for the performance of any survey and utility location work shall be included as part of the lump sum quantity under the pay item for Mobilization. A Florida Registered Professional Surveyor and Mapper shall perform all survey work.

## **19. UTILITY COORDINATION**

The Contractor shall be responsible for coordination of the work with all affected utility owners. The Contractor must take into consideration the required utility adjustments and relocations in development of his schedule for completing the work including construction of temporary work to allow phased construction of the permanent facilities.

The Contractor shall coordinate and schedule utility relocations and/or adjustments with the utility owners within or adjacent to the project limits to avoid delays. The work includes remobilization if required after utility relocation is complete. The intent is to coordinate utility construction activities, so the project construction continues and is not stopped or delayed at any time due to utility work being done. Once Notice to Proceed is issued, the Contractor shall contact the affected utilities to discuss the Contractor's anticipated means and methods so temporary and permanent relocation plans can be implemented as needed to meet OSHA safety requirements. Any work in the vicinity of the electric lines shall be coordinated with the power company for the setback requirements.

The Contractor shall hold a utility owner's meeting every two weeks / or alternate time schedule agreed to by the Owner. The meeting shall review current and upcoming activities for the project. Written meeting minutes will be prepared by the Contractor and distributed to the meeting participants within 3 calendar days of the meeting.

## **20. UTILITY CONFLICTS**

It shall be the Contractor's responsibility to avoid conflicts with other utilities. The Owner will not be responsible for additional costs incurred by the Contractor for incorrect installations, relocations and breaks due to service conflicts. The Contractor's equipment shall maintain a minimum clearance distance to the power line following the latest OSHA and FDOT Roadway Design Bulletin.

## **21. CONTRACTOR TO EXECUTE NPDES "NOTICE OF INTENT"**

Prior to proceeding with construction, the Contractor shall prepare and submit a "Notice of Intent to Use Generic Permit for Stormwater Discharge from Construction Activities that Disturb One or More Acres of Land" to the Florida Department of Environmental Protection (FDEP). The Contractor shall monitor the site at all times and take appropriate action to prevent erosion including the use of BMPs. No pumping of ground or surface water shall be performed without approval from the Water Management District. Following completion of construction, Contractor shall prepare and submit a "Notice of

Termination of Generic Permit Coverage” to FDEP. Payment for this item shall be included as part of the lump sum quantity under the pay item for Mobilization.

## **22. COMPLIANCE WITH THE SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT (SWFWMD) STORMWATER MANAGEMENT AND DISCHARGE PERMIT REQUIREMENTS AND/OR THE DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP) DREDGE AND FILL PERMIT REQUIREMENTS**

Southwest Florida Water Management District Stormwater Management and Discharge permits or exemptions, if any, and/or a Department of Environmental Protection Dredge and Fill permit, if any, required for this project have been obtained by the Owner. The Contractor shall comply with the stipulations of the Permits or Exemptions as stated herein.

The Contractor shall allow periodic inspection of the work by authorized representatives of the Florida Department of Environmental Protection, the Southwest Florida Water Management District, as well as other duly authorized law enforcement officers of the State.

## **23. PROJECT IDENTIFICATION SIGNS**

The Contractor shall be responsible for furnishing, installing and maintaining (2) County project identification signs and for the removal upon completion of the construction. The sign shall be installed prior to the commencement of work. Sign locations will be coordinated with the County Inspector to ensure maximum public visibility and to avoid conflicts and unsafe conditions in accordance with Manatee County Land Development Code, Section 1002 - Visibility Triangles. Signs shall be posted at each end of the project or in the direction of visibility to the most traffic. The Contractor shall relocate the sign as directed by the Owner for the duration of the Project.

The signs shall be a minimum of 8 feet wide and 4 feet high mounted on 4-inch by 4-inch pressure treated lumber. The signs shall be constructed of high density  $\frac{3}{4}$ -inch exterior plywood, or equivalent with approval from the Owner, without waves or buckles, mounted and braced with pressure treated lumber as necessary and maintained in a presentable condition for the duration of the project. Hardware shall be galvanized. The surface of the sign shall be of either an overlay or laminate mounted on the plywood.

The information to be provided on the signs shall include and be formatted per the following project identification sign template. A digital copy of the template will be provided to the Contractor by the Owner. The contractor shall submit the final template as a shop drawing in the e-Builder Submittals (SUB) process

Payment for installing and maintaining the project identification signs shall be included as part of the lump sum quantity under the pay item for Mobilization. The sign will remain the property of the Owner upon completion of the Project unless otherwise directed.



**75<sup>TH</sup> STREET WEST  
CAPACITY IMPROVEMENTS**  
Board of County Commissioners

KEVIN VAN OSTENBRIDGE

**CHAIR**

AMANDA BALLARD

GEORGE KRUSE

VANESSA BAUGH

MICHAEL RAHN

JASON BEARDEN

JAMES SATCHER

CONSTRUCTION COST

\$ (Enter Amount)

PRIME CONTRACTOR

(Enter Contractor Name)

## **24. CONSTRUCTION PHOTOGRAPHY**

### **a. General**

The Contractor shall employ a competent photographer to take pre-construction and construction progress record photographs and perform video recording, in digital format, including providing all labor, materials, equipment and incidentals necessary to obtain photographs and/or video recordings of all areas specified in the Contract specifications.

### **b. Qualifications**

A competent camera operator who is fully experienced and qualified with the specified equipment shall do all photography. For the video recording, the audio portion should be done by a person qualified and knowledgeable in the specifics of the Contract, who shall speak with clarity and diction so as to be easily understood.

### **c. Project Photos for Construction Progress**

Provide construction progress photos of the entire work area during construction for the purpose of creating records of completed work. Photos should be spaced at approximately 100-foot intervals or as needed to properly document the completed work. Digital photographs shall be provided to the Owner with the monthly pay applications via the e-Builder Invoice Approval (INV) process.

The Contractor shall pay all costs associated with the required photographs. Any parties requiring additional photography will pay the photographer directly.

All project photos shall be taken from locations to adequately illustrate conditions prior to construction, or conditions of construction and state of progress. The Contractor shall consult with the Owner's Representative at each period of photography for instructions concerning views required.

The Contractor shall deliver photos in conformance with the above requirements to the Owner's Representative. No construction shall begin until pre-construction photos and video recordings are completed and submitted to the Owner's Representative.

### **d. Record Photos**

The Contractor shall require that photographer maintain digital copies of photos for a period of three years from date of Substantial Completion of the Project.

Photographer shall agree to furnish prints to the Owner's Representative at commercial rates applicable at the time of purchase. Photographer shall also agree to participate as required in any litigation requiring the photographer as expert witness.

### **e. Video Recording for Pre-Construction**

Video recording shall be used in lieu of photos for pre-construction. It shall be of sufficient quality to fully illustrate details of conditions and construction, including special features.

Video recording shall be accomplished along all routes that are scheduled for construction.

The video recording shall, when viewed, depict an image with  $\frac{1}{4}$  of the image being the roadway fronting of property and  $\frac{3}{4}$  of the image being of the property. The video recording shall be done so as to show the roadway and property in an oblique view (30 degrees).

A complete view, in sufficient detail, of all driveways, with audio description of the exact location shall be provided.

The Engineering plans shall be used as a reference for stationing in the audio portion of the video recording for easy location identifications. If visible, house numbers shall be mentioned on the audio.

A complete set of video recordings shall be submitted in e-Builder via the Submittals process for the permanent and exclusive use of the Owner prior to the start of any construction on the project.

All video recordings shall contain the name of the project, the date and time of the video recording the name and address of the photographer and any other identifying information required.

Payment for this item shall be included as part of the lump sum quantity under the pay item for Mobilization.

## **25. HURRICANE PREPAREDNESS**

Within 30 days of the Contract award, the Contractor shall submit to the Owner for approval via the Submittals (SUB) process in e-Builder a Hurricane Preparedness Plan. The plan should outline the necessary measures which the Contractor proposes to perform, at no additional cost to the Owner, to prepare and secure the project site prior to a hurricane event and to recover the project site after a hurricane event.

In the event of inclement weather, or whenever the Owner shall direct, the contractor shall ensure the work and materials shall carefully be secured and protected against damage or injury from the weather. If, in the opinion of the Owner, any portion of work or materials is damaged due to the failure on the part of the contractor or subcontractors to protect the work, such work and materials shall be removed and replaced at the expense of the Contractor.

## **26. CONSTRUCTION STAKING**

All construction staking and survey work shall be completed by a Florida Registered Professional Surveyor and Mapper. The right-of-way shall be staked prior to Clearing and Grubbing activities and shall include all easements (TCE or permanent) and maintained through the duration of construction. Right-of- way stakes shall be placed at all right-of-

way corners and a maximum of 200 feet between corners, and shall be visible for Contractor personnel, utility companies, and County representatives.

## **27. LABORATORY TESTING**

Testing for the Work shall be performed at no expense to the Contractor. However, any test that fails or is not performed, as a result of the Contractor's action will, in turn, be back-charged to the Contractor, including the cost of all re-testing due to defective materials or construction. The testing laboratory shall be approved by the Owner.

The samples and tests used for determining the quality and acceptability of the materials and workmanship, which have been or are to be incorporated in the Work, shall conform to the requirements of the State of Florida Department of Transportation Materials Sampling, Testing and Reporting Guide, latest edition.

Testing shall also be in accordance with the applicable portions of the *FDOT Standard Specifications* and the Technical Specifications.

## **28. COOPERATION WITH OTHERS**

The Contractor shall cooperate with the owners of any underground or overhead utility lines in their removal and rearrangement operations, in order that these operations may progress in a reasonable manner and that service rendered by these parties will not be interrupted. The Owner shall not be responsible for costs associated with delays, disruptions and remobilizations attributed to utility agency scheduling.

The Contractor shall coordinate with owners of driveways impacted by construction to maintain access as required by the property owner. Contractor shall make every effort not to disrupt business access during business operation hours unless otherwise approved by the business owner or the Owner (County) in advance of the work being performed.

The Contractor shall coordinate impacts with property owners abutting the project area and shall make every effort to expedite the work to minimize the duration of the impacts. Contractor is responsible for daily cleanup, access, and reimbursement or restoration of any damages done to the property by the Contractor and their subcontractors to the satisfaction of the property owner. It is important to keep pre- and post-construction photos of the work areas.

## **29. USE OF PRIVATE PROPERTY**

All construction activities required to complete this project in accordance with the Contract Documents shall be confined to public right-of-way, easements of record or temporary construction easements, unless the Contractor makes specific arrangements with private property owners for his use of their property. Written authorization from the granting property owner shall be placed on file with the Project Manager prior to utilization of said private properties. The Owner assumes no responsibility for damage to private property



in such instances. The Contractor is responsible for protection of private property abutting all work areas on this project. Adequate equipment storage and material storage shall also be accomplished outside the Owner's right-of-way. Pipe and other materials shall not be strung out along the right-of-way but will be delivered in quantities adequate for one day's installation.

### **30. MAINTENANCE OF TRAFFIC**

The Contractor shall provide continuous access to local businesses during operational hours, or as acceptable to the business owners, and shall coordinate with residents on access to their properties. Lane closures with major disruption or delays must include alternating traffic and are only permitted under special approval of the Owner, and during non-rush hour traffic times (9:00 AM - 2:00 PM or 8:00 PM – 6:00 AM). School drop-off and pick-up shall not be impacted. No work on weekends or legal holidays without prior written approval of the County Project Manager, except emergency work, will be allowed. Road closures are not allowed between the hours of 7:00 AM to 7:00 PM per County Ordinance unless prior written approval is provided by the Owner. Temporary by-pass lanes may be constructed at all tie-in locations during the MOT phasing. The payment for temporary by-pass lanes shall be included in Maintenance of Traffic pay item, as previously described. Business Entrance signs per FDOT Standard Plans Index 102-600 shall be placed at all business entrance points and maintained during all phases of construction. Payment for these items shall be included under the pay item for Maintenance of Traffic.

Temporary pavement marking shall be paid under the Maintenance of Traffic pay item, in accordance with FDOT Standard Specifications Section 102.

If there are any impacts to existing traffic lanes, the Contractor shall prepare and submit to the Owner for approval, a Maintenance of Traffic plan to obtain a Manatee County Right-of-Way Utilization Permit. This Maintenance of Traffic plan shall either be provided in the construction plans or be prepared in accordance with FDOT Standard Specifications Section 102-4. Lane and road closures require approval from the County Right of Way Supervisor and Zoning/MOT Inspector, with the Public Works Director having ultimate approval authority.

### **31. PEDESTRIAN ACCESS TO REMAIN OPEN**

Existing pedestrian access shall be maintained throughout construction unless approved by the Engineer and Owner.

Temporary sidewalk shall be constructed as shown in the plans or as required to maintain pedestrian movement. Payment for these items shall be included under the lump sum pay item for Maintenance of Traffic.

If the Contractor, in the process of performing his contract operations, breaks any of the existing sidewalk that is to remain in place, replacement of this sidewalk will be at the Contractor's expense.

### **32. WORKSITE TRAFFIC SUPERVISOR**

- a. The Contractor shall have a Worksite Traffic Supervisor who will be responsible for initiating, installing and maintaining all traffic control devices as described in Section 102 of the FDOT Standard Specifications and in the Plans. The Worksite Traffic Supervisor shall have at least one year of experience directly related to work site traffic control in a supervisory or responsible capacity and shall be certified by the American Traffic Safety Services Association Worksite Traffic Supervisor Certification Program or an equal approved by FDOT. Approved alternate Worksite Traffic Supervisors may be used when necessary.
- b. The Worksite Traffic Supervisor shall be available on a 24-hour per day basis and shall review the project on a day-to-day basis as well as being involved in all changes to traffic control. The Worksite Traffic Supervisor shall have access to all equipment and materials needed to maintain traffic control and handle traffic related situations. The Worksite Traffic Supervisor shall ensure that routine deficiencies are corrected within a 24-hour period.
- c. The Worksite Traffic Supervisor shall be available on the site within 45 minutes after notification of an emergency situation, prepared to positively respond to repair the work zone traffic control or to provide alternate traffic arrangements.
- d. Failure of the Worksite Traffic Supervisor to comply with the provisions of the Sub-article may be grounds for decertification or removal from the project or both. Failure to maintain a designated Worksite Traffic Supervisor or failure to comply with these provisions will result in temporary suspension of all activities except traffic and erosion control and such other activities deemed to be necessary for project maintenance.
- e. Payment for Worksite Traffic Supervisor shall be included under the pay item for Maintenance of Traffic.

### **33. MAINTENANCE OF STORM DRAINAGE SYSTEM**

The Contractor shall be responsible to maintain the operation of existing stormwater facilities, or, when existing stormwater facilities are removed, to provide, as necessary, temporary alternate forms of equivalent stormwater conveyance and storage capacity to adequately prevent upstream flooding in excess of existing conditions. This responsibility shall include the installation of temporary connections, bypass pumping, or other temporary means necessary until the new drainage system is fully operational. Payment for these items shall be included under the applicable pay item for new storm systems.

### **34. DEWATERING, SHEETING AND BRACING**

The Contractor shall determine the need of dewatering, sheeting and bracing to facilitate the construction, conforming to current SWFWMD/FDEP rule and OSHA safety criteria. Payment for dewatering, sheeting and bracing shall be included in the applicable item for earthwork, unless separate pay items are specified.

At least 10 days prior to the commencement of any dewatering activity, the Contractor shall obtain the approval from SWFMWD, or FDEP (if water needs to be discharged offsite into the state surface water), and submit the permit with a detailed description of the proposed dewatering system to the Project Manager. The dewatering plan shall include design computations, layout, type, and spacing of dewatering devices, number and size of pumps and other equipment, with a description of the installation and operating procedures.

### **35. EARTHWORK**

Quantities included in the contract plans and bid form represent estimated in-place quantities and do not include shrinkage and expansion factors unless otherwise specified. Payment for Earthwork shall be made based on average end area method calculations or by other methods as approved by the Engineer and Owner. Contractor shall provide supporting survey data (before and after cross-sections) and calculations for payment purposes

The ownership of excavated materials shall be by the Owner unless otherwise specified in the contract documents.

### **36. SUBSOIL EXCAVATION**

The Contractor shall detect and remove all unsuitable material, such as plastic/organic soil, rock, hard pan, debris, and trash, within project limit, following FDOT Standard Plans Index 120-002. Payment for subsoil excavation shall be included in the subsoil excavation pay items.

### **37. DUST CONTROL**

The Contractor shall always control dust resulting from construction operations. The locations and frequencies of applications shall be as directed by the Engineer. Contractor shall provide dust control measures using water sources as needed and maintaining dust control throughout duration of the project. Payment for Dust Control shall be made under Maintenance of Traffic unless separate pay item for Dust Control is specified.

### **38. SOIL EROSION AND SILTATION**

The Contractor shall plan and control the Work to minimize all soil erosion and siltation. At the pre-construction meeting, the Contractor shall present his proposed plan and schedule, which shall specifically indicate the proposed usage of temporary erosion control features if they vary from the plans.

### **39. THERMOPLASTIC TRAFFIC STRIPES AND MARKINGS**

The application of thermoplastic traffic stripes and markings on newly constructed final surface courses shall be in accordance with current FDOT specifications. The Engineer may require longer asphalt cure periods, if specified in the construction plans. Provide

temporary pavement markings during the interim period if the road is open to traffic. The price of temporary pavement marking shall be included in the Maintenance of Traffic.

#### **40. CRUSHED CONCRETE BASE**

Crushed Concrete Base shall follow the most current FDOT Standard Specifications, Section 911. The layer coefficient of 0.18 with Limerock Bearing Ratio (LBR) minimum 150 is allowed to calculate the base thickness if from an FDOT approved source and meeting FDOT specifications.

a. Material source inspection:

Prior to acceptance of base product, a representative of the Owner may visit the Producer's location and obtain a sample of the proposed base for the specified project at the discretion of the Owner. In addition to sampling, the pile will be visually inspected for deleterious materials, substantial segregation, or any other undesirable characteristics. The pile shall have a traceable identification by pile number or lot number and an accurate quality assessment.

b. Regarding source approval:

FDOT approved source, allocated lot sufficient to serve project's needs, delivery tickets stating FDOT approved source, project name, FDOT preapproved lot or pile number.

c. Import and placement of base product:

During import of base product, a County inspector or duly designated representative of the Owner will be onsite monitoring incoming loads, making visual assessments of the product and checking load tickets for verification of materials.

After spreading out, prior to compacting, samples of the base product will be obtained by the Owner approved testing lab, every 500 LF, or as directed by Owner, staggering right, left, center of the roadway for Limerock Bearing Ratio, gradation and deleterious material testing.

d. Deleterious materials:

Deleterious material content in addition to the FDOT Specifications 2020 (July), Section 911, should state that no construction debris such as Styrofoam insulation, telephone wire, lumber, shingles, aluminum window or door frames, etc., or household trash ie: bottles, cans, paper goods etc. is acceptable.

e. Rejection of materials:

Material not meeting above requirements will subject to rejection and be removed from the project site. Any three (3) concurrent rejections will require immediate shut down of imported material and require review and remedies prior to restart.

f. Compaction of material:

In place material shall achieve 98% of AASHTO T-180 compaction.

#### **41. TEMPORARY PAVEMENT**

Temporary pavement shall consist of a minimum of Optional Base Group 4 and ¾-inch of Type S-III structural course over a firm, unyielding, well-compacted subgrade, or as specified in the contract plans, if greater. If the temporary pavement is not specified in the contract plans, the proposed pavement section shall be submitted to the Owner for review. The Contractor shall immediately repair all potholes that develop within the project limits and shall maintain a supply of cold mix on the project site to expedite these repairs.

Temporary by-pass roads shall provide adequate cover and protection of existing utilities. It is the Contractor's responsibility to coordinate with utility companies to repair any damages to the exiting utilities during the construction at no additional cost to the Owner.

Payment for temporary pavement and maintenance of this pavement shall be included under Maintenance of Traffic. A breakdown of the temporary road quantities in the lump sum MOT pay item shall be provided by the Contractor.

#### **42. STORMWATER DRAINAGE PIPES AND STRUCTURES**

All proposed storm structures shall have a wall thickness no less than 6 inches. Metal storm pipe or metal mitered end section shall not be used in the road right of way or carry right of way runoff.

#### **43. CLARIFICATION OF SPECIFIC LINE ITEMS**

Clarifications are provided below of specific line items on the Bid Form to identify the Owner's requirements of what is to be included in the line item and/or how it is to be paid. Where a FDOT Pay Item number is indicated for a line item, the clarification is provided to amend, enhance or otherwise revise the FDOT pay item description to meet the Owner's requirements for the project. Where a FDOT pay item number is not indicated, the clarification shown herein is provided to amend, enhance or otherwise revise the pay item description provided in the County Technical Specifications to meet the Owner's requirements for the project. For line items that are not included in either the FDOT or Manatee County Specifications, the pay item description provided herein shall govern.

**Line Item #1, [FDOT 101-1] – Mobilization**, shall include full compensation for the required 100 percent (100%) Performance Bond, 100 Percent (100%) Payment Bond, all required insurance for the project and the Contractor's mobilization and demobilization costs as shown in the Bid Form. Mobilization includes but is not limited to: preparation and movement of personnel, equipment, supplies and incidentals such as safety and sanitary supplies/facilities.

Payment for mobilization shall not exceed 10 percent (10%) of the total Contract cost unless the Contractor can prove to the Owner that the actual mobilization cost exceeds 10 percent (10%).

Partial payments for this Bid Item will be made in accordance with the following schedule:

Percent of Original Contract Amount	Percent Allowable Payment of Mobilization/Demobilization Bid Item Price
5	25
10	35
25	45
50	50
75	75
100	100

Payments for this line item will be subject to the standard retainage provided in the Contract. Payment for the retainage will be made after completion of the work and demobilization.

**Line Item #2, [FDOT 102-1] – Maintenance of Traffic**, shall include the cost of all maintenance of traffic operations and incidental MOT items unless a separate pay item is provided. Provide a separate schedule of values to include quantities, unit prices, and total to equal bid for all MOT as a separate pay item upon receiving bid award, otherwise the quantity will be based on percent of construction completed.

**Line item #10, “Clearing and Grubbing”**, shall also include the removal of existing underdrains, trees, stumps, roots, and bushes, ripraps, concrete structures, fencing and the plugging of the artesian wells as well as tree trimming. The payment for this line item shall be per acre.

**Line item #13, “Regular Excavation”**; the quantity shall be “in place” value.

**Line item #14, “Embankment”**; the quantity shall be “in place” value.

**Line Item #54, [FDOT 522-1] - Concrete Sidewalk and Driveways, 4" thick**, shall follow Manatee County's Highway, Traffic & Stormwater Standards (current edition). The payment shall include reinforcement.

**Line Item #55, [FDOT 522-2] - Concrete Sidewalk and Driveways, 6" thick**, shall follow Manatee County's Highway, Traffic & Stormwater Standards (current edition). The payment shall include reinforcement and ramps.

**Line item #61, “Performance Turf, Sod”**, shall include litter removal, mowing, fertilizer and watering for the duration of construction.

**[FDOT 630-2-12] – Conduit, F&I, Directional Bore**, shall provide bore logs for all conduit installed using directional bore method. Install electronic route markers (ERM) and wire grounding units (WGU) where indicated.

**[FDOT 632-7-1] – Signal Cable, F&I**, shall contact Manatee County for color code verification. This pay item includes conductors to power the overhead illuminated street name signs.

**[FDOT 635-2-12, 635-2-13, & 635-2-14] – Pull & Splice Box, F&I**, pull boxes shall be traffic bearing, all polymer construction (not concrete). Pull boxes are to be placed behind curb and gutter. If there is no curb and gutter, pull boxes shall be placed a minimum of 7' from the edge of pavement. All pull boxes and splice boxes shall have traffic bearing lids with a minimum load rating of 20,000 lb.

Standard pull box dimensions shall be 17"x30"x12" and the lid shall be stamped "MANATEE COUNTY TRAFFIC SIGNAL" on the cover. Fiber optic pull boxes shall be 24"x36"x36" and the lid shall be stamped "MANATEE COUNTY FIBEROPTIC SYSTEM". The fiber optic splice vaults shall be 30"x60"x48" and the lid shall be stamped "MANATEE COUNTY FIBEROPTIC SYSTEM" on the cover.

**[FDOT 639-1-122 & 639-3-11] – Electrical Power Service & Electrical Service Disconnect**, includes the cost of all special impact connection fees charged by the local power company for electrical service connection. It also includes the cost of a photocell attached to the service disconnect to power the overhead street name signs.

The electrical service disconnect shall be 100 amp minimum, comprised of a six (6) circuit disconnect box with three circuit breakers: one 40 amp for controller cabinet, one 15 amp/120 volt for internally illuminated street name signs and one 15 amp/120 volt for future use.

Use rigid aluminum conduit for above-ground application.

**[FDOT 639-4-6] – Emergency Generator**, includes furnishing and installing a base mounted generator cabinet assembly compatible with Manatee County's generator/inverter back up program. Cabinet dimensions are approximately 36"x26"x43" with a pullout shelf and internal fan. The generator cabinet base is 36"x48" with the base top at same elevation as the top of the controller assembly base. The generator cabinet and controller cabinet can be mounted on a shared base if field conditions allow.

The cabinet shall be capable of housing to operate a 2500 watt inverter generator to provide power to operate the traffic signal, controller cabinet and all peripheral equipment housed therein, excluding lighting circuits such as illuminated street name signs and street lighting.

This cabinet assembly requires specific design and installation requirements including power connection to the proposed power service and controller cabinet. See Traffic Infrastructure Design Guide for more details.

**[FDOT 650-1-14 & 650-1-16] – Vehicular Traffic Signal**, shall use aluminum louvered backplates on all signal heads. All backplates shall include a 2" yellow reflectorized (Type III reflectivity) outer edge border.

**[FDOT 653-1-11] – Pedestrian Signal**, shall use locking collars for mounting pedestrian signal heads to pedestals.

**[FDOT 660-3-11 & 660-3-12] – Vehicle Detection System**, shall coordinate with the vendor and provide detection overlay plans to the County for review prior to finalizing installation in the field. Consult with the manufacturer and use recommended materials and installation methods. Use equipment compatible with Manatee County's existing ATMS system.

Use Wavetronix Smartsensor matrix units for stop bar detection. Use Wavetronix Smartsensor advance extended range units for advance detection. Use Wavetronix Smartsensor HD at the MVDS site.

Install all microwave detection cabling in continuous lengths from the control cabinet to point of device termination. Attach detection devices to the proposed mast arms using manufacturer's recommended hardware and positioning as required for optimal operation. Modify the existing cabinet at Manatee Avenue under these pay items to enable all microwave detection.

**[FDOT 670-5-110] – Traffic Controller Assembly**, the traffic signal controller, controller cabinet and associated hardware shall meet current Manatee County specifications and be compatible with the Manatee County ATMS system. The controller supplied with the cabinet shall be a NAZTEC 980 ATC equipped with serial ports, (1) ethernet port and (1) USB port. See Appendix 'A' of the Traffic Infrastructure Design Guide for details. Contact Manatee County Traffic Design Division prior to ordering controller assembly to confirm equipment compatibility.

The cabinet mounting surface of the controller cabinet should be oriented to ensure the main cabinet door will open away from oncoming traffic. Controller cabinet foundations shall be built to the latest FDOT Standards. The controller cabinet shall be located away from drainage ditches, swales, and apex of curves. The contractor shall make every attempt to locate the controller cabinet in an effort to minimize exposure to errant vehicles.

All signal controller cabinets shall have a front and back access door. All controller cabinet door diagrams shall reflect the current, correct data and documentation. Controller cabinets shall be wired for sop 10 regardless of the proposed signal operation at the intersection and shall operate as per signal operating plan shown.



Submit cabinet design and components to the County for approval.

**[FDOT 684-1-1] – Managed Field Ethernet Switch**, provide RUGGEDCOM RSG920P (6GK6092-0PS23-0BA0-Z A05+B05+C02+D02) with Type SC connectors and a RUGGEDCOM RPS1300 Power-Over-Ethernet power supply.

**[FDOT 685-1-11 & 685-1-13] – Uninterruptable Power Supply**, shall include an uninterrupted power supply unit (UPS) equipped with an ethernet port. All uninterruptible power supplies shall support SNMP (Protocol) for remote monitoring and management. The UPS shall be sized to accommodate the maximum connected load. The battery bank shall be sized to provide a minimum 8 hours run time under full load including all its devices.

Coordinate with the County for an acceptable UPS model prior to purchase.

## **UTILITY ITEMS**

### **Pressure Test / Chlorination**

The price and payment for utility testing is for all materials and labor necessary to complete and certify the project to the County and Florida Department of Environmental Protection (pressure testing and bacteriological testing). Testing includes the potable water main.

Payment for Pressure Test and Chlorination will be made on a lump sum basis. Includes all necessary equipment, apparatuses, pumps, water supply, water quality measuring devices, pressure gauges, chemicals, sampling points, etc. necessary for the entire intended construction limits. No separate payment will be made for multiple pressure tests within the project limits due to construction phases/sequences. Payment to be made only for percentage of piping, valves, connections, fittings, services, etc. that has been successfully pressure tested. Any additional testing required by the contractor to obtain results acceptable to the County, will be performed at no additional cost to the County.

### **As-Built Drawings**

The work specified in this Item shall conform to Manatee County Utilities' requirements. The contractor is made aware the County has specific as-built survey and electronic file requirements noted in the plan notes and on the County web site.

This item will not be paid until files are confirmed to meet the County's requirements and acceptance by Manatee County Utilities.

Payment of the final asbuilt drawings and final submittals shall be made at the Bid Form lump sum basis for providing complete data and will be considered complete upon the approval of all the asbuilt drawings and final submittals listed in the specs by the County, which will be full compensation for all labor, materials, and equipment necessary to prepare and deliver the asbuilt drawings and final submittals. Asbuilt plans must include vertical and horizontal alignment of all water, reclaimed and sewer lines, valves, tees,

bends, reducers, hydrants, service connections, meter boxes and/or pad, and other pertinent structures. Pipelines runs in excess of 100 feet without fittings are to include vertical alignment information at 100 feet intervals. Said alignment is to be tied to State Plane coordinates, referenced to NAVD88, and is to be certified by a professional land surveyor, licensed in the State of Florida. All points (X, Y, Z) provided are to indicate the size, elevation, type and material (including class or DR) item identified. The Professional Land Surveyor shall coordinate with the Contractor to install the necessary appurtenances on buried utilities to facilitate the survey at periodic intervals throughout construction. The contractor is to connect the as-built and ensure the accuracy of the data prior to providing the data/drawings to the engineer.

Contractor shall submit progress sets of as-builts of work completed to date with each project pay application in order for the pay application to be processed. If as-builts do not accurately represent work completed to date the pay application will be held for processing until representative as-builts are supplied.

The following rules of credit will be used for payment of Work:

Accepted Certified As-Builts 50%

Final Accepted Submittals 50%

### **Pipe Removal**

Measurement for payment for Utility Pipe Removal and Disposal will be based on a linear foot basis and shall be based on the centerline measured length of PVC or DIP potable water line removed.

Payment for removing existing water mains will be made at the Contract unit price per linear foot of main removed. The work of this item is to include all labor, materials and equipment to excavate, drain, dewater, properly dispose of contents, plug or cap and remove existing water, and pipes (including structures, fittings, casings, restraints and other in-line devices) designated to be removed. Also included in this item are the removal, disposal, and salvage of existing valves, and valve boxes, air release valves and vaults, hydrants, water meters, and backflow preventers located on piped to be removed. This item also includes all necessary labor, equipment and material to restore the work area to the Engineer's satisfaction.

### **CL350 DIP Water Mains**

Payment for furnishing and installing utility pipelines (various sizes and types) will be made at the Contract unit price per lineal foot for the pipe in place via open cut, directional drilling or jack and bore. This item includes piping material, labor, equipment and other materials for the furnishing and laying of the pipe, signs, maintenance of traffic, dewatering, compaction, pipe bedding, backfilling, sheeting, mylar detectable tape, locator wire, clamps, harnessing, plugs and caps, adapters, protection of existing utilities and facilities, excavation of all material encountered including rock, backfill, clearing and grubbing, pavement, driveways, sidewalks, mailboxes, culverts, storm sewers, and other surface materials not specifically designated in the Bid, coordination with other

contractors, clean-up, sterilization, and temporary facilities for testing. Measurement of the pipe shall be to the nearest foot along the centerline including the lengths of, valves and fittings. No distinction will be made for varying depths of bury for the pipelines. Payment for all pipe will be made horizontally per linear foot.

### **Ductile Iron Fittings, Water**

Measurement and payment for utility fittings (various sizes/types) will be made at the Contract unit price per each fitting installed.

This item includes fittings, bends, sleeves, restraining glands, restraining devices, where specific items are reference in the pay items. All other fittings, bends, etc. which do not have specific pay items are to be paid under the respective Utility Pipe section. Connections to existing and proposed mains, labor, equipment and materials for the furnishing and laying of the pipe, dewatering, compaction, pipe bedding, backfilling, furnishing and installing sheeting, shoring and bracing, sheeting design and analysis, mylar detectable tape, tracer wire, polyethylene sleeve, clamps, harnessing, adapters, excavation of all material encountered including rock, backfill, sod, clearing and grubbing, pavement, and other surface materials not specifically designated in the Bid Schedule, coordination with other contractors, cleanup, temporary facilities for testing and all required testing and chlorination.

All mechanical joints are to be restrained; the restraints are included in the price of the fitting. Moreover, for a complete and functional service connection the removal or relocation of old service is incidental. In addition, the reuse of existing meter (if functional) and its relocation and adjustment to proposed grade is also included in this pay item.

### **Water Services**

This Bid Item includes the construction of potable water services including service line, and appurtenances of the specified type acceptably furnished and installed as shown on the Drawings or where directed by the Project Representative. The work includes removal and disposal of the existing meter box and appurtenances, connection of the new water service to the existing water service line, and installation of new service line as required. Payment for all work under this Bid Item shall be made at the applicable Contract unit price bid according to the type of services. The work shall include, but is not limited to; service piping, excavation, directional drilling, restoration, compaction, casing pipe, tapping saddles, corporation stops, curb stops, curb or pavement location disks, 10 gauge copper clad steel tracer wire, all necessary fittings, all service connections, disinfection, coordination with service customers, and all other related and necessary materials, work and equipment associated with this item.

### **Gate Valves**

Measurement for payment for Utility Fixture – Valve Assembly will be based on each valve installed.

Payment for furnishing and installing valves will be made at the appropriate Contract unit price per valve acceptably installed. This item shall include, but not limited to, the valve, valve box, vault or housing, concrete work, valve pad & ID, local wire test box, operators, stems, incidentals, electronic marker, valve box extensions, and adjustments, protection of existing utilities and facilities, all excavation, including rock, backfilling, dewatering, compaction, thrust restraint devices, bedding material, and other surface material not specifically designated in the Bid, cleanup, and all other work for a complete installation. This item also includes the installation of base material below the valve in accordance with the detail shown in the Contract Plans.

### **Relocation of Existing Fire Hydrant Assembly**

Measurement for payment for relocation of existing fire hydrant will be based on each unit relocated.

Payment will be made at the Bid Schedule unit price for each hydrant relocated, including all labor, equipment and materials for a complete acceptable relocation. This includes all necessary equipment for the complete relocation of the hydrant, concrete pad, gate valve, valve box and cover, restraints, thrust blocks, etc. as well as the associated water main pipe to the adjacent mainline tee. Any embankment material and compaction efforts required to fill any void(s) left by the existing fire hydrant assembly is to be included in this item.

### **Adjust Existing**

Payment shall be made at the Bid Schedule unit price per each unit for the adjustment of existing valve boxes, manhole rim and covers, relocation of existing water meter, box and backflow prevention devices, which shall include all excavation (including rock and inorganic unsuitable material), asphalt pavement and or concrete removal and replacement where applicable, backfilling, adjustment and leveling of existing valve box, valve box extension, pad, id and all materials including pipe fittings, transportation, labor, equipment, restoration of the surrounding surface to match prior proposed finished grade, and all other incidentals necessary to properly adjust the existing valve boxes, manhole rim and covers, relocation of existing water meter, box and backflow prevention devices.

## **44. POST-CONSTRUCTION STORM PIPE TESTING**

The Contractor shall inspect and televise all newly constructed storm pipes, structures, new connections, and any existing storm pipe systems identified to be cleaned in the construction plans. Video DVD and report shall be provided for those pipes whose diameters are equal or smaller than 48 in, with Laser profile data included for newly installed non-RCP pipes, following FDOT Specifications latest version. The purpose is to assure the pipes are properly constructed and do not leak at the joints. Payment for this item shall be included as incidental to the cost per foot of new storm pipe installed.

#### **45. MAINTENANCE AND RESTORATION OF JOB SITE**

The Contractor shall conduct his operations in such a manner as will result in a minimum of inconvenience to occupants of adjacent homes, business establishments and the general public, and shall provide temporary access as directed or as may be required by the Project Manager. All final restoration must be performed to an equal or better condition than that which existed prior to construction.

Good housekeeping on this project is extremely important and the Contractor will be responsible for keeping the construction site neat and clean, with debris being removed daily as the work progresses or as otherwise directed by the Project Manager. Good housekeeping at the job site shall include mowing as necessary to prevent grass and other vegetation within the work area from exceeding 18 inches in height or causing unsafe conditions; removing all tools and temporary structures, dirt, rubbish, etc.; hauling all excess dirt, rock, etc., from excavations to a dump provided by the Contractor; and all clean up shall be accomplished to the satisfaction of the Project Manager. Each Friday, the Contractor shall prepare the road surface and barricades in an acceptable manner for weekend traffic use. Immediately after construction completion in an area or part thereof (including restoration), barricades, construction equipment and surplus and discarded materials shall be removed by the Contractor.

If timely housekeeping and restoration of the job site is not accomplished to the satisfaction of the Owner, the Owner shall make arrangements to affect the necessary housekeeping and restoration by others. The Contractor shall be charged for these costs through deductions in payment due the Contractor. If such action becomes necessary on the part of and in the opinion of the Owner, the Owner shall not be responsible for the inadvertent removal from the work site of materials which the Contractor would not normally have disposed of had he affected the required clean up.

#### **46. RESTORATION**

Payment for restoration shall be covered under the applicable restoration Pay Items as specified in the proposal. If a specific restoration Pay Item is not listed in the proposal, the cost of such work shall be included in the applicable Pay Item unless otherwise provided under separate restoration section or pay quantity of these Specifications.

#### **47. RECORD DRAWINGS AND PROJECT CERTIFICATION**

The Owner will furnish the Contractor copies of the bid plans to be used for the Record Drawings. A Florida Registered Professional Surveyor and Mapper shall perform a field survey and any differences between the plan elevations or dimensions shall be marked through and the as-built elevation or dimension legibly entered. All elevations and dimensions that are correct shall have a check mark placed beside it.

The Contractor shall keep a complete set of surveyed "As-built" records. These records shall show all items of Work and existing features of utilities revealed by excavation work. The records shall be kept in a professional manner, in a form that shall be approved by

the Owner prior to the Work. These results shall be available at all times during construction for reference by the Engineer and shall be delivered to the Engineer upon completion of the Work. All completed "As-builts" must be certified by a Florida Registered Professional Surveyor and Mapper or Engineer per Chapter 61 G 17-6, Florida Administrative Code, pursuant to Sec. 47207, Florida Statutes.

The Record Drawings shall be prepared in accordance with the requirements of the Manatee County Public Works Standards, Parts 1 and 3, latest edition at time of project completion and shall be submitted at time of Substantial Completion. The Owner will review and approve the Record Drawings within 30 days of submittal unless additional information is required.

Following completion of construction and prior to final payment, the Contractor shall submit a Certification by the Contractor and Manufacturer including test data that the materials (filter fabric, filter media, etc.) installed meet plan specifications and regulatory requirements.

All Digital Drawings shall be identical to those submitted as hard copy. The Digital Drawing files shall be AutoCAD format (Release 2016 or later) and shall include all external reference drawings, text fonts, shape files and all other files necessary to make use of the drawings.

Unless there is a separate pay item for Record Drawings, payment shall be included as part of the lump sum quantity under the pay item for Mobilization.