#### SECTION 01026

### MEASUREMENT AND PAYMENT

#### PART 1 GENERAL

1	.1	SECTION INCLUDES

- A. Explanation and Definitions
- B. Measurement
- C. Payment
- D. Schedule of Values
- E. Application for Payment

#### 1.2 EXPLANATION AND DEFINITIONS

A. The following explanation of the Measurement and Payment for the bid form items is made for information and guidance. The omission of reference to any item in this description shall not, however, alter the intent of the bid form or relieve the CONTRACTOR of the necessity of furnishing such as a part of the Contract.

#### 1.3 MEASUREMENT

- A. The quantities set forth in the bid form are approximate and are given to establish a uniform basis for the comparison of bids. The OWNER reserves the right to increase or decrease the quantity of any class or portion of the work during the progress of construction in accord with the terms of the Contract.
- B. All measurements for payment shall be measured/verified by The OWNER'S REPRESENTATIVE.

#### 1.4 PAYMENT

A. Payment shall be made for the items listed on the Bid Form on the basis of the work actually performed and completed, such work including but not limited to, the furnishing and mobilization of all necessary labor, materials, equipment, transportation, clean up, restoration of disturbed areas, and all other appurtenances to complete the construction and installation of the work as shown on the drawings and described in the specifications.

- B. Payment shall fully reimburse the CONTRACTOR for cooperating with and meeting all the requirements of the State of Florida Trench Safety Act (90-96).
- C. Unit prices are used as a means of computing the final figures for bid and Contract purposes, for periodic payments for work performed, for determining value of additions or deletions and wherever else reasonable.

#### 1.5 SCHEDULE OF VALUES

- A. Approval of Schedule: Submit for approval a preliminary schedule of values, in duplicate, for all of the Work. Prepare preliminary schedule in accordance with the General Conditions. Submit preliminary schedule of values within 10 calendar days after the Effective Date of the Agreement. Submit final schedule of values in accordance with the General Conditions.
- B. Refer to the Contract Documents for additional requirements.

#### 1.6 APPLICATION FOR PAYMENT

- A. Required Copies: Submit three (3) copies of each application on the "Estimate and Requisition for Payment" form CMO:013. Present required information in typewritten form or on electronic media printout.
- B. Prepare the Application for Payment in accordance with the Contract Documents. Execute certification by signature of authorized officer, with original signature on each copy of application for payment.
- C. Use data from approved Schedule of Values.
- D. Stored Materials: When payment for materials stored is permitted, submit a separate Schedule for Materials Stored showing line item, description, previous value received, value incorporated into the Work and present value.
- E. Change Orders: List each authorized Change Order as an extension on continuation sheet, listing Change Order number and dollar amount as for an original item of work.
- F. Final Payment: Prepare Application for Final Payment as required in the Contract Documents.
- G. Submit an updated construction schedule for each Application for Payment.

## PART 2 EXECUTION

## 2.1 MEASUREMENT AND PAYMENT

- A. Payment shall be made on the basis of work actually performed completing each item in the Bid, such work including, but not limited to:
  - 1. the furnishing and mobilization of all necessary labor, materials, equipment, and transportation
  - 2. test pits or other methods required to locate existing underground utilities and/or structures
  - 3. Maintenance of Traffic
  - 4. erosion and sedimentation control
  - 5. excavation, backfilling, and compaction
  - 6. sheeting, shoring and bracing
  - 7. protection of existing structures, utilities, and customer service lines
  - 8. de-watering
  - 9. installation of Water Main and appurtenances
  - 10. grouting of existing AC Water Main (in accordance with all state, county and federal rules and safety guidelines)
  - 11. pressure testing and leakage testing
  - 12. bacteriological sampling and clearing
  - 13. reconstruction and regrading of pavement areas, road shoulders, and ditches or swales disturbed by construction activity
  - 14. finish grading and disposal of surplus material, unsuitable material and all debris
  - 15. cleanup and restorations
  - 16. All other appurtenances to complete the construction and installation of the work to the configuration and extent as shown on the drawings and described in the specifications.
  - 17. All work, materials & Installation are to be in accordance with the Technical Specifications and Project Plans
- B. Retainage will be withheld from the final payment until written acceptance by the Owners Representative for all final clean up, restoration and Record Drawings / As-Builts.
- C. LUMP SUM ITEMS: CONTRACTOR shall be solely responsible for determining the quantities of each lump sum pay item necessary to complete the work as required by the Contract Documents. When lump sum items are broken into components, the sum of the components shall be the total Contract Price for the work. The lump sum schedule of values stated on the Bid Form shall constitute full compensation for each pay item completed in accordance with the Plans and Technical Specifications. No other payments will be made to the CONTRACTOR except as specifically authorized by change order.
- D. UNIT PRICE ITEMS: Payment for unit price bid items shall be made on the basis of the work actually performed and completed, as verified by the OWNER or OWNER'S REPRESENTATIVE.

# 2.2 PAYMENT ITEMS:

- Mobilization/Demobilization: Payment for this item will be made at the contract lump sum price. This item shall include full compensation for mobilization, demobilization, surveying, layout, As-built Record Drawings, disposal of materials, clean up, all restoration and other miscellaneous items for a complete installation. This cost includes monitoring, maintenance, and restoration of the site. The Record Drawings shall be in accordance with the Plans, Technical Specifications and other Contract Documents. The CONTRACTOR will be paid 40% of this item upon completion of mobilization and 10% upon demobilization; the remainder will be paid on a prorated basis equally over the remaining scheduled construction duration.
- Clearing and Grubbing: Payment for clearing and grubbing will be made at the contract lump sum price. Price and payment will be full compensation for all clearing and grubbing required for the project area and any other clearing and grubbing indicated, or required for the construction of the entire project, including all necessary hauling, furnishing equipment, equipment operation, furnishing any areas required for disposal of debris, leveling of terrain and the landscaping work of trimming, etc. in accordance with the details in the Plans, Technical Specifications and FDOT Specifications. Contractor to completely remove and dispose of all brush, trees, stumps, roots, boulders, rubbish, debris, and existing flexible pavement and base noted in the Plans to be removed.
- 1002 Inlet Protection Systems: Payment for the inlet protection systems will be made at the contract unit price upon installation. This item includes all labor, equipment, and materials necessary to install a protection system to prevent debris from entering the inlets in accordance with the details in the Plans and Technical Specifications.
- This item includes soil tracking device and erosion control/sediment barrier. The erosion control/sediment barrier shall be maintained throughout the duration of the project. This item shall include all necessary labor, equipment and materials for the installation and removal of soil tracking devices and erosion control devices including but not limited to synthetic barriers, temporary turf, sandbags, rock bags, slope drains, sediment basins, berms, synthetic bales, temporary silt fence and staked turbidity barriers.
- at the contract lump sum price. This item shall consist of furnishing all equipment, materials, labor, appurtenances and installations required to provide the electrical site work in accordance with the Plans and Technical Specifications. This includes, but is not limited to, all clearing and grubbing, excavation, disposal of excess material, bedding, backfill and compaction, clean up and restoration of work area necessary to complete installation of the conduit. This item also includes all equipment/items including but not limited to

transformers, conduit, conductors, transfer switches, generator docking box, concrete pads for transformers, lift station disconnect, concrete post for lift station disconnect, exterior lighting time switches, strut supports, wirings, lighting, disconnects and meter enclosure, generator docking boxes and all other materials not specifically designated in the Bid documents. The lump sum price proposed shall be full compensation for performing all relevant requirements to achieve successful installation of the electrical site work items. This item excludes electrical work related to the modular building.

- <u>2000 Embankment</u>: Payment for embankment will made at the contract unit price for cubic yard of embankment placed. This item includes all necessary labor, equipment and materials to furnish and place the embankment material for the building and berm restoration areas in accordance with the Plans and Technical Specifications and FDOT Standard Specifications.
- 2001 Clean and Sealcoat Existing Parking Payment for this item will be made at the contract unit price for square feet of surface cleaned and sealcoated. This item includes all necessary labor, equipment and materials to clean and sealcoat the existing parking, in accordance with the details in the Plans, Technical Specifications and FDOT Standard Specifications.
- 2002 Type B Stabilization (12" LBR40): Payment for this item will be made at the contract unit price for square yard of stabilized subgrade placed. This item includes all necessary labor, equipment and materials to furnish and place the stabilized subgrade in accordance with the details in the Plans, Technical Specifications and FDOT Standard Specifications.
- 2003 Optional Base, Base Group 06, Limerock, LBR100 (Existing Parking): Payment for this item will be made at the contract unit price for square yard of limerock base placed. This item includes all necessary labor, equipment and materials to furnish and place the 8" limerock base in accordance with the details in the Plans, Technical Specifications and FDOT Standard Specifications.
- 2004 Asphaltic Concrete, S-III, 1.5": Payment for this item will be made at the contract unit price for ton of asphaltic concrete placed. This item includes all necessary labor, equipment and materials to furnish and place the 1.5" asphaltic concrete in accordance with the details in the Plans, Technical Specifications and FDOT Standard Specifications.
- 2005 Concrete Wheel Stops 6': Payment for furnishing and installing concrete wheel stops will be made at the contract unit price. This item includes all necessary labor, equipment and materials to furnish and place the concrete wheel stops in accordance with the details in the Plans and Technical Specifications.
- 2006 Signage and Pavement Markings: Payment for signage and pavement markings will be made at the contract lump sum price. This item includes all necessary labor, equipment and materials to replace any damaged or removed

existing pavement markings to original condition, and to install new ones in accordance to the Plans and Technical Specifications and in accordance with FDOT standard specifications. This item also includes all necessary labor, equipment and materials to install single post signs, F&I Ground Mount, Up to 12 SF in accordance to the Plans and Technical Specifications and in accordance with FDOT standard specifications. Use only materials listed on the Approved Products List (APL) in accordance with FDOT standard specifications.

- <u>2007</u> Concrete Sidewalk: Payment to install concrete sidewalk will be made at the contract unit price per square yard. This item includes all necessary labor, equipment and materials to install 4" thick concrete sidewalk including stabilized subgrade in accordance with the details in the Plans and Technical Specifications, and in accordance with FDOT standard specifications. Also, included is the installation of a detectable warning pad which shall be included in the price per square yard.
- 3000 FDOT Type P-9 (Alt B) Curb Inlet: Payment for Type P-9 inlet will be made at the unit price per inlet installed. This item includes all necessary labor, equipment and materials to furnish and install the Type P-9 inlet in accordance with the details in the Plans and Technical Specifications, and in accordance with FDOT standard specifications.
- 3001 12" x 18" ERCP: Payment for furnishing and installing the ERCP will be made at the contract unit price per linear foot for the pipe in place. This item includes all necessary labor, equipment and materials to furnish and install the ERCP in accordance with the details in the Plans and Technical Specifications, and in accordance with FDOT standard specifications.
- 3002 12" x 18" Endwall: Payment for this item will be made at the contract unit price per endwall installed. This item includes all necessary labor, equipment and materials to install the endwall in accordance with the details in the Plans and Technical Specifications, and in accordance with FDOT standard specifications.
- 3003 Rip-Rap: Payment for this item will be made at the contract lump sum. This item includes all necessary labor, equipment and materials to furnish and place rip-rap in accordance with the details in the Plans, Technical Specifications and in accordance with FDOT standard specifications.
- 4000 2" Cut-in Connection (Water): Payment for furnishing and installing materials necessary to connect the newly installed water main to the existing water main / master water meter services will be made at the contract lump sum. This item includes all labor, equipment and materials for furnishing and installing all necessary pipe, fittings, joint restraint devices, valves, connections, temporary

jumpers, protection of existing utilities and facilities, excavation, pipe bedding, dewatering, compaction, shutting down existing water main, assistance notifying customers of temporary shutdown, removal and replacement of grass, sod, shrubs, pavement, driveways, culverts and storm sewers, mailboxes, sidewalks and other surface materials not specifically designated in the Bid, cleanup, sterilization, testing and all other work for a complete installation.

4001 2"HDPE (DR17) (Water): Payment for this item will be made at the contract unit price for linear feet of pipe installed. This item shall consist of furnishing all equipment, materials, labor, and appurtenances required for installation of a 2" HDPE DR17 water service, associated cleanouts, future access points and valves as required by the Plans and Technical Specifications, to applicable standards of practice. This work includes but is not limited to, trench excavation and backfilling and compaction with onsite/offsite material. This item includes all necessary labor, equipment and materials for the furnishing and direct bury / open cut installation of the pipe, locate tape, tracer wire, signs, dewatering, compaction, pipe bedding, backfilling, sheeting, joint restraint devices, polyethylene sleeve, clamps, harnessing, plugs and caps, adapters, excavation of all material encountered including rock removal / disposal and replace with approved backfill material compacted, clearing and grubbing, sidewalk removal, mailboxes, culverts, storm sewers, clean-up, flushing, sterilization, pressure test and Bac-T tests and any and all other materials not specifically designated in the Plans and Technical Specifications. Measurement of the pipe shall be to the nearest foot along the centerline including the lengths of valves and fittings. Linear footage measurement shall be horizontal.

Payment for furnishing and installing fittings will be made at the contract unit price per linear foot price of waterline installation. All fittings installed in the work not shown on the plans and not ordered or approved by the ENGINEER in writing will not be measured for payment. No additional payment will be made for fittings.

- 4002 2" BFPD and Meter Box Assembly: Payment will be made at the Bid Schedule unit price for each backflow prevention device and meter box assembly installed. Such price and payment shall be for all equipment, materials and labor required for a complete installation. This includes, but is not limited to, all excavation, disposal of excess material, bedding, backfill, compaction, complete installation of the cross control assembly, including meter box, fittings, pipe, corporation stops, curb stops, locking devices, locating devices and tape, connection of a new meter, restoration of the surrounding surface area to match proposed finished grade, testing and all other equipment and incidentals necessary to complete the installation as shown on the Drawings.
- 4003 Fire Hydrant Assembly: Payment for furnishing and installing fire hydrant assemblies will be made at the contract unit price for each assembly installed. This item includes the tee installed on the utility main, all necessary fittings, valve, joint restraint from the valve to the tee and necessary piping from the tee to the hydrant location with the installation of barrel section to meet finished grade. All piping shall

be in accordance with the Plans and Technical Specifications. The CONTRACTOR shall be responsible to set the hydrant to grade in accordance with the detail shown on the Plans.

- <u>4004 Fire Hydrant, Relocate:</u> Payment for removing and relocating a fire hydrant will be made at the contract unit price for each hydrant assembly relocated. This item includes the tee installed on the utility main, all necessary fittings, valve, joint restraint from the valve to the tee and necessary piping from the tee to the new hydrant location with the installation of barrel section to meet finished grade. All piping shall be in accordance with the Plans and Technical Specifications. The CONTRACTOR shall be responsible to set the hydrant to grade in accordance with the detail shown on the Plans.
- 8" PVC DR14 C900 (Reuse Main): Payment for this item will be made at the 4005 contract unit price for linear feet of reuse pipe installed. This item shall consist of furnishing all equipment, materials, labor, and appurtenances required for installation of a 8" PVC DR14 reuse main, associated fittings, and valves as required by the Plans and Technical Specifications, to applicable standards of practice. This work includes but is not limited to trench excavation and backfilling and compaction with onsite/offsite material. This item includes all necessary labor, equipment and materials for the furnishing and direct bury / open cut installation of the pipe, locate tape, tracer wire, signs, dewatering, compaction, pipe bedding, backfilling, sheeting, joint restraint devices, polyethylene sleeve, clamps, harnessing, plugs and caps, adapters, excavation of all material encountered including rock removal / disposal and replace with approved backfill material compacted, clearing and grubbing, clean-up, pressure test and all other materials not specifically designated in the Plans and Technical Specifications,. Measurement of the pipe shall be to the nearest foot along the centerline including the lengths of valves and fittings. Linear footage measurement shall be horizontal.

Payment for furnishing and installing fittings will be made at the contract unit price per linear foot price of waterline installation. All fittings installed in the work not shown on the plans and not ordered or approved by the ENGINEER in writing will not be measured for payment. No additional payment will be made for fittings.

4006 Cut-In Connection (Force Main): Payment for furnishing and installing materials necessary to connect the newly installed force main to the existing gravity main will be made at the contract lump sum. This item includes all labor, equipment and materials for furnishing and installing all necessary pipe, fittings, joint restraint devices, valves, connections, temporary jumpers, protection of existing utilities and facilities, excavation, pipe bedding, dewatering, compaction, shutting down existing gravity main, assistance notifying customers of temporary shutdown, removal and replacement of grass, sod, shrubs, pavement, driveways, culverts and storm sewers, mailboxes, sidewalks and other surface materials not specifically designated in the Bid, cleanup, sterilization, testing and all other work for a complete installation.

2" HDPE Force Main: Payment for this item will be made at the contract unit 4007 price for linear feet of force main installed. This item shall consist of furnishing all equipment, materials, labor, and appurtenances required for installation of a 2" HDPE force main and associated fittings necessary to install the force main as required by the Plans and Technical Specifications, to applicable standards of practice. This work includes but is not limited to connecting force mains to existing and proposed master pump stations, trench excavation and backfilling and compaction with onsite/offsite material. The price proposed shall be full compensation for performing all relevant requirements to achieve successful installation of force main-as shown in the Plans and Technical Specifications. This item includes all necessary labor, equipment and materials for the furnishing and direct bury / open cut installation of the pipe, locate tape, tracer wire, signs, dewatering, compaction, pipe bedding, backfilling, sheeting, joint restraint devices, polyethylene sleeve, clamps, harnessing, plugs and caps, adapters, excavation of all material encountered including rock removal / disposal and replace with approved backfill material compacted, clearing and grubbing, site restoration, clean-up, pressure test and any and all other materials not specifically designated in the Bid documents. Measurement of the pipe shall be to the nearest foot along the centerline including the lengths of valves and fittings. Linear footage measurement shall be horizontal.

Payment for furnishing and installing fittings will be made at the contract unit price per linear foot price of waterline installation. All fittings installed in the work not shown on the plans and not ordered or approved by the ENGINEER in writing will not be measured for payment. No additional payment will be made for fittings.

4" SDR26 Gravity Main (SS Service with Cleanouts): Payment for this item will 4008 be made at the contract unit price for linear feet of gravity main installed. This item shall consist of furnishing all equipment, materials, labor, and appurtenances required for installation of a 4" SDR26 gravity main, associated cleanouts, wyes and other fittings necessary as required by the Plans and Technical Specifications, to applicable standards of practice. This work includes but is not limited to connecting new gravity main to proposed master pump station, trench excavation and backfilling and compaction with onsite/offsite material. This item includes all necessary labor, equipment and materials for the furnishing and direct bury / open cut installation of the pipe. locate tape, tracer wire, signs, dewatering, compaction, pipe bedding, backfilling, sheeting, joint restraint devices, polyethylene sleeve, clamps, harnessing, plugs and caps, adapters, excavation of all material encountered including rock removal / disposal and replace with approved backfill material compacted, clearing and grubbing, pressure testing and any and all other materials not specifically designated in the Bid documents. Measurement of the pipe shall be to the nearest foot along the centerline including the lengths of valves and fittings. Linear footage measurement shall be horizontal.

Payment for furnishing and installing fittings will be made at the contract unit price per linear foot price of sewer installation. All fittings installed in the work

not shown on the plans and not ordered or approved by the ENGINEER in writing will not be measured for payment. No additional payment will be made for fittings.

- Lift Station (including water service): Payment for this item will be made at the contract lump sum. This item shall consist of furnishing all equipment, materials, labor, appurtenances and installations required for the proposed lift station in accordance to the Plans and Technical Specifications. This Work includes but is not limited to dewatering and excavation, gravel bedding, fabricate and installation of HDPE wetwell, anti-floating concrete, submersible pumps and floats, concrete pads, control panels, 3/4" water service, testing and installation of other appurtenances shown in the Plans. The lump sum price proposed shall be full compensation for performing all relevant requirements associated with installation of the lift station including excavation per Trench Safety Act. The lump sum price proposed shall be full compensation for performing all relevant requirements to achieve successful installation of the lift station as shown in the Plans.
- <u>Performance Turf, Sod:</u> Payment for sod will be made at the contract unit price per square yard. Sod shall be provided and installed in all disturbed areas caused by construction of this project in accordance with the details in the Plans and Technical Specifications and in accordance with FDOT standard specifications. Sod shall be replaced with like species at no additional compensation.
- <u>Bollards:</u> Payment for bollards will made at the contract unit price for each bollard installed. Such price and payment shall be for all equipment, materials and labor required for a complete installation including but limited to the bollard, concrete, paint, all excavation, disposal of excess material, bedding, backfill, compaction, clearing and grubbing, site restoration necessary to install the bollards.
- <u>5002</u> Bonds, Insurance: Payment for this item will be made at the contract lump sum price. This item shall include full compensation for bonds, insurance, and any other project administration and management activity in accordance with the details in the Plans, Technical Specifications and other Contract Documents.
- Modular Building: Payment for the work related to the furnishing and installation of a modular building will be made at the contract lump sum price. The work includes, but is not limited to, required primary and secondary framing, structure bracing, modular building roofing system, gutters, downspouts, perimeter soffit, exterior metal wall panels, soffit framing and soffit panels, swinging personnel hollow metal frames, hollow metal doors, finish hardware for personnel hollow metal doors, finish hardware for doors and frames, interior linear metal wall panels at roof and wall panels, and all other necessary engineering, labor, equipment, materials, insurance, scaffolding, storage, etc. to provide a pre-engineered modular building in accordance with the details in the Plans and Technical Specifications. The lump sum price proposed shall be full compensation for performing all relevant requirements to achieve

successful installation of the modular building to satisfaction of the Owner, Architect of Record and Engineer of Record.

**END OF SECTION**