

SECTION 01150 MEASUREMENT AND PAYMENT

PART 1 GENERAL

1.01 SCOPE

- A. The scope of this section of the Contract Documents is to further define the items included in each Bid Item in the Bid Form section of the Contract Documents. Payment will be made based on the specified items included in the description in this section for each bid item.
- B. All contract prices included in the Bid Form section will be full compensation for all shop drawings, working drawings, labor, materials, tools, equipment and incidentals necessary to complete the construction as shown on the Drawings and/or as specified in the Contract Documents to be performed under this Contract. Actual quantities of each item bid on a unit price basis will be determined upon completion of the construction in the manner set up for each item in this section of the Specifications. Payment for all items listed in the Bid Form will constitute full compensation for all work shown and/or specified to be performed under this Contract.

1.02 ESTIMATED QUANTITIES

The quantities shown are approximate and are given only as a basis of calculation upon which the award of the Contract is to be made. The County does not assume any responsibility for the final quantities, nor shall the Contractor claim misunderstanding because of such estimate of quantities. Final payment will be made only for satisfactorily completed quantity of each item.

1.03 WORK OUTSIDE AUTHORIZED LIMITS

No payment will be made for work constructed outside the authorized limits of work.

1.04 MEASUREMENT STANDARDS

Unless otherwise specified for the particular items involved, all measurements of distance shall be taken horizontally or vertically.

1.05 AREA MEASUREMENTS

In the measurement of items to be paid for on the basis of area of finished work, the lengths and/or widths to be used in the calculations shall be the final dimensions measured along the surface of the completed work within the neat lines shown or designated.

1.06 LUMP SUM ITEMS

Where payment for items is shown to be paid for on a lump sum basis, no separate payment will be made for any item of work required to complete the lump sum items. Lump sum contracts shall be complete, tested and fully operable prior to request for final payment. Contractor may be required to provide a break-down of the lump sum totals.

1.07 UNIT PRICE ITEM

Separate payment will be made for the items of work described herein and listed on the Bid Form. Any related work not specifically listed, but required for satisfactory completion of the work shall

be considered to be included in the scope of the appropriate listed work items.

No separate payment will be made for the following items and the cost of such work shall be included in the applicable pay items of work. Final payments shall not be requested by the Contractor or made by the County until as-built (record) drawings have been submitted and approved by the County.

1. Project signs and photographs.
2. Removal, repair, replacement or relocation of all signs, walls, private irrigation systems and related items.
3. Rubbish and spoil removal.
4. Shop Drawings, Working Drawings.
5. Clearing, grubbing and grading except as hereinafter specified.
6. Trench excavation, including necessary pavement removal and rock removal, except as otherwise specified.
7. Dewatering and disposal of surplus water.
8. Structural fill, backfill, and grading.
9. Replacement of unpaved roadways, and shrubbery plots.
10. Cleanup & miscellaneous work.
11. Foundation and borrow materials, except as hereinafter specified.
12. Testing and placing system in operation.
13. Any material and equipment required to be installed and utilized for the tests.
14. Pipe, structures, pavement replacement, asphalt and shell driveways and/or appurtenances included within the limits of lump sum work, unless otherwise shown.
15. Maintaining the existing quality of service during construction.
16. Appurtenant work as required for a complete and operable system.

BID ITEM NO. 1: WET WELL CLEANING

Measurement and payment shall be per square foot of wet well wall and floor.

The unit bid price shall include, but is not limited to, pressure washing, manual cleaning, sludge removal and disposal. Contractor shall furnish all labor, materials, equipment and incidentals required to complete this bid item, ready for approval and acceptance by the County.

BID ITEM NO. 2: WET WELL DISCHARGE PIPING

Measurement shall be the length in linear feet of pipe measured along the centerline of pipe through the fittings from the pump base ell or flanged eccentric reducer to the check valve in the valve vault in place, completed and accepted.

Payment will be according to the size and type, as listed on the Bid Form.

The unit bid price shall include (unless specifically listed separately on the bid form), but is not limited to, furnishing and installing all pipe; core bores, gaskets; hardware; fittings, molded 90 degree elbows; fusible HDPE flange adapters w/ 316 S.S. backup rings to connect the piping at each end; nuts; bolts; excavation, including rock; dewatering; bedding and backfill; disposal of spoil; removal and proper disposal of existing piping; testing and other related and necessary materials, work and equipment required to complete these bid items, ready for approval and acceptance by the County.

Manatee County personnel will remove and reinstall the wet well pumps. Pump base ells, eccentric reducers, S.S. pipe bracing and pipe thru wall seals paid under separate bid items.

BID ITEM NO. 3: PUMP BASE ELLS

Measurement shall be per each pump base ell furnished and installed.

Payment will be according to the size as listed on the Bid Form.

The unit bid price shall include, but is not limited to, removal and proper disposal of existing pump base ells; new pump base ells; anchoring system; 316 stainless steel anchor rods, flat washers, lock washers and nuts. The unit bid price shall include, but is not limited to, all other items, materials, work, and equipment necessary to complete these bid items, ready for approval and acceptance by the County.

BID ITEM NO. 4: PUMP BASE ELL MOUNTING PLATES

Measurement shall be per each pump base ell mounting furnished and installed.

Payment will be according to the size as listed on the Bid Form.

The unit bid price shall include, but is not limited to, pump base ell mounting plate; anchoring system; stainless steel anchor rods, flat washers, lock washers; nuts; and removal and replacement of grout to mount plate flat and level. The unit bid price shall include, but is not limited to, all other items, materials, work and equipment necessary to complete these bid items, ready for approval and acceptance by the County.

BID ITEM NO. 5: S.S. PIPE BRACING

Measurement shall be per each S.S. pipe bracing furnished and installed.

Payment will be according to the inside diameter and type of wet well as listed on the Bid Form.

The unit bid price shall include, but is not limited to, stainless steel angles, straps, braces, anchors, clamps and all necessary hardware. Also included are 3/16" minimum thickness rubber gaskets between pipes and pipe straps, removal and proper disposal of existing pipe bracing, all materials, work and equipment necessary to complete these bid items ready, for approval and acceptance by the County.

BID ITEM NO. 6: MODIFY EXISTING RIM ELEVATION

Measurement and Payment shall be per vertical foot of reinforced concrete walls added or removed to adjust the rim elevation as per the Contract Documents.

The unit bid price shall include, but is not limited to, removal of existing top slab; concrete; reinforcement; reinstalling existing top slab; all labor and materials; excavation, including rock; dewatering; backfill; compaction; dowel rods; anchors; epoxy, sealant; mortar; and all incidentals necessary to complete these bid items, ready for approval and acceptance by the County. New top slab, PVC vent, and aluminum hatch covers paid under separate bid items.

BID ITEM NO. 7: REPLACE EXISTING TOP SLAB

Measurement shall be per each reinforced concrete top slab furnished and installed.

Payment will be according to the inside diameter of the wet well as listed on the Bid Form.

The unit bid price shall include, but is not limited to, removal and proper disposal; concrete; reinforcement; cast-in liner (if specified); all labor and materials; excavation, including rock; dewatering; backfill; compaction; dowel rods; anchors; epoxy; sealant; mortar; and all incidentals necessary to complete these bid items, ready for approval and acceptance by the County. Aluminum hatch covers, PVC vent, and spray liner (if specified) to be paid under separate bid items.

BID ITEM NO. 8: VENT, PVC

Measurement shall be per each Sch 80 PVC vent with stainless steel screen furnished and installed.

Payment will be according to the PVC vent size as listed on the Bid Form.

The unit bid price shall include, but is not limited to, removal and proper disposal of existing vent, new Sch 80 PVC vent, 316 SS stainless steel screen, sealing, core bores, repair of top slab around penetration with non-shrink grout/hydraulic cement, liner repair; all labor, materials and all incidentals necessary to complete these bid items, ready for approval and acceptance by the County.

BID ITEM NO. 9: ALUMINUM HATCH COVER

Measurement shall be per each aluminum hatch cover furnished and installed.

Payment will be according to the hatch cover size as listed on the Bid Form.

The unit bid price shall include, but is not limited to, removal and proper disposal of hatch cover; new hatch cover; all labor and materials; forms; anchors; epoxy; sealant; mortar; and all incidentals necessary to complete these bid items, ready for approval and acceptance by the County.

BID ITEM NO. 10: S.S. PUMP GUIDE RAIL SYSTEM

Measurement shall be per linear foot of pump guide rail system, which includes two (2) each continuous lengths of 316 S.S. Schedule 40 pipes per pump, furnished and installed.

The unit bid price shall include, but is not limited to, removal and proper disposal of existing guide rails; new S.S. upper guide rail brackets; S.S. pump cord hooks; S.S. lift chains; new float brackets, all necessary hardware and all other items, materials, and incidentals necessary to complete this bid item ready, for approval and acceptance by the County.

BID ITEM NO. 11: LINER, SPRAY-ON

Measurement shall be per square foot of liner and/or coating furnished and installed.

Payment will be according to the total amount of square footage of the structure covered by the applied product used as listed on the Bid Form.

The unit bid price shall include, but is not limited to, surface repair, surface preparation as recommended by the product's manufacturer (includes "skim coat"); spoil removal and disposal; all labor, materials, equipment, and incidentals necessary to complete these bid items, ready for approval and acceptance by the County. Wet well cleaning and existing liner removal paid under separate bid items.

Damage to the existing liner caused by the execution of work under a separate bid item, listed in this section, shall be repaired under that bid item. The cost to repair the existing liner shall be included in the bidder's price for the bid item. No additional cost shall be borne by the County.

BID ITEM NO. 12: REMOVE or REPAIR EXISTING LINER

Measurement and Payment shall be per square foot of existing liner removed or repaired as listed on the Bid Form.

To Be Removed:

The unit bid price shall include, but is not limited to, liner removal, spoil removal and disposal; all labor, materials, equipment, and incidentals necessary to complete these bid items, ready for approval and acceptance by the County.

To Be Repaired:

The unit bid price shall include, but is not limited to, liner repair, grout, eliminate water infiltration, spoil removal and disposal; all labor, welds, materials, equipment, etc., and all incidentals necessary to complete these bid items, ready for approval and acceptance by the County.

BID ITEM NO. 13: GROUT FILL EX. DRAIN, ABANDON (FLOWABLE FILL)

Measurement shall be for each existing drain abandoned by the means indicated on the plans.

Payment will be per each existing drain abandoned.

The unit bid price shall include, but is not limited to, cleaning, labor, materials, sludge removal and disposal, the complete removal of the drain, patching of the hole with non-shrink hydraulic grout, or equipment for mixing and placing the grout (as indicated in the plans) and all incidentals necessary to complete this bid item, ready for approval and acceptance by the County.

BID ITEM NO. 14 thru 16: VALVES

Measurement shall be per each valve, furnished and installed.

Payment will be according to the size and type of valve, as listed on the Bid Form.

The unit bid price shall include, but is not limited to, valves, valve boxes and covers, concrete pad, identification disc, extension stems, cutting, adapters, gaskets, jointing materials, restraints, connectors, pipe sleeves, detector wire, excavation, including rock, backfill, dewatering,

sheeting, shoring, and any other related and necessary materials, labor and equipment required to complete these bid items, ready for approval and acceptance by the County.

BID ITEM NO. 17 and 18: PIPE

Measurement for the quantity of pipe to be paid for under these Bid Items shall be the length in linear feet of pipe measured along the centerline of pipe through valves, fittings, and manholes, in place, completed and accepted. Installation shall be by open-cut or directional drill.

Payment will be according to the type of pipe installed (PVC, ductile iron, or HDPE), diameter of pipe as listed on the Bid Form.

The unit bid price shall include, but is not limited to, furnishing and installing all pipe; temporary blow-offs for disinfecting pipe; and materials above or below ground along pipeline alignment; joints and jointing materials; field layout; bracing, shoring and sheeting; excavation, including rock; dewatering, clearing, grubbing, stripping, and trenching, including exploratory excavation; electronic detectable path marking tape; detector wire; bedding, backfill and compaction; chlorinating; constructing the specified protection and adjusting of existing aboveground and underground utilities and service connections; polyethylene encasement; butt fusion welds; drilling fluid disposal; thrust blocking; disposal of spoil; hydrostatic testing; labor, equipment and materials required and all other related and necessary items required to complete these bid items, ready for approval and acceptance by the County.

No additional compensation shall be made for excavation below the bottom of the pipe, for rock removal or bedding and backfill material, or for repair of any trench settlement. Traffic control, erosion control, services, fittings, joint restraints, and pipe adapters paid under separate bid items. Site restoration shall be included in this bid item unless another bid items has been provided.

BID ITEM NO. 19: FITTINGS

Measurement and Payment shall be per each type of fitting installed (PVC, DI), diameter, etc. furnished and installed as listed on the Bid Form.

The unit bid price shall include, but is not limited to, furnishing and installing tees, crosses, bends, sleeves, plugs, caps, reducers, increasers, couplings; all fittings and materials above or below ground along the pipeline alignment; restraints, and jointing materials; bolts, nuts, washers, gaskets, coating, lining, excavation, including rock; thrust blocking; bracing, shoring, and sheeting; dewatering, clearing, grubbing, and stripping; trenching, bedding and backfill; constructing the specified protection and adjusting of existing aboveground and underground utilities and service connections; disposal of spoil; hydrostatic testing; and all other related and necessary materials, labor and equipment required to complete these bid items, ready for approval and acceptance by the County.

BID ITEM NO. 20: QUICK COUPLER ADAPTER

Measurement and Payment shall be per each male aluminum quick coupler adapter and aluminum dust cap furnished and installed as listed on the Bid Form.

The unit bid price shall include, but is not limited to, removal and proper disposal of existing adapters; new aluminum adapters w/ dust cap, gaskets, S.S. hardware; hydrostatic testing; and all other related and necessary materials, labor and equipment required to complete these bid items, ready for approval and acceptance by the County.

BID ITEM NO. 21: S.S. ADJUSTABLE VALVE SUPPORT

Measurement shall be per each adjustable 316 S.S. valve support.

Payment will be for the quantity of adjustable 316 S.S. valve supports furnished and installed.

The unit bid price shall include, but is not limited to, removal and proper disposal of existing pipe/valve supports; new S.S. adjustable valve supports, concrete blocks or pads; and all other related and necessary materials, labor and equipment required to complete this bid item, ready for approval and acceptance by the County. Supplied stainless steel valve/flange supports shall be adjustable after installation.

BID ITEM NO. 22: ABANDON EXISTING STRUCTURE

Measurement and Payment shall be per each existing concrete structure abandoned in place.

The unit bid price shall include, but is not limited to, labor, material, the removal and disposal of the structure top & first two feet below top, creating four holes inside the structure at each corner, removing portions of the walls as needed for reconnection of force main, clean fill dirt, compaction, testing and any and all other items necessary to complete these bid items, ready for approval and acceptance by the County.

BID ITEM NO. 23: CONCRETE SLAB

Measurement and payment shall be for each poured-in-place concrete slab constructed as listed on the Bid Form.

The unit bid price shall include, but is not limited to, all labor, materials and equipment, reinforcing, rebar, grout, anchors, expansion joint, compacting, finishing, testing and incidentals necessary to complete this bid item, ready for approval and acceptance by the County.

BID ITEM NO. 24: INFLUENT LINE PLUG

Measurement shall be per each influent line plug furnished and installed.

Payment will be according to the diameter of line to be plugged as listed on the Bid Form.

The unit bid price shall include, but is not limited to, bladders, adapters, seals, gaskets and all other related and necessary materials, labor and equipment required to complete these bid items, ready for approval and acceptance by the County.

BID ITEM NO. 25: BY-PASS PUMPING SYSTEM

Measurement shall be lump sum for the by-pass pumping system required.

Payment will be according to the maximum flow and maximum head required as listed on the Bid Form.

The lump sum price shall include, but is not limited to, pumps, piping, temporary lines, vacuum trucks, anchors, barricades, noise abatement procedures, and all other related and necessary materials, labor and equipment required to complete these bid items, ready for approval and acceptance by the County.

Lift station with flows greater the 750 GPM shall require a system operator, capable of fully operating the by-pass pumping system, to be present 24hr / 7 days a week. Measure and payment shall be per day of by-pass pumping system required as listed on the Bid Form. Determination of flows shall be from the lift station information spreadsheet maintained by the Lift Station Supervisor.

BID ITEM NO. 26: WATER SERVICE CONNECTION AND LINE

Measurement shall be per linear feet of water line installed. Length shall be measured along with centerline of installed pipe through fittings in place.

Payment will be according to the size, type and linear feet of water line installed as listed on the Bid Form. Payment shall represent full compensation for all labor, material and equipment required to complete the work.

The unit bid price shall include, but is not limited to, dewatering, directional drilling, excavation, including rock excavation, service lines, casing pipe, tapping saddles, corporation stops, curb stops, 2" gate valves (where applicable), detector wire, all necessary fittings, all service connections, backfill, compaction, testing, disinfection and equipment required to complete these bid items, ready for approval and acceptance by the County.

BID ITEM NO. 27: METER AND BACKFLOW PREVENTION ASSEMBLY

This bid item is for a completely new meter / backflow prevention assembly to be installed. Measurement shall be per each and shall include the installation of a new meter, a backflow prevention assembly, and a hose bibb furnished and installed per County standards. Hose bibb shall be installed remotely as determined in the field with County personnel.

Payment will be as per the item used as listed on the Bid Form.

The unit bid price shall include, but is not limited to, removal and proper disposal of the existing meter/backflow assembly, removal of existing concrete pad, and removal of excess tubing to allow for new construction; new backflow prevention assembly, hose bibb, mounting posts, concrete, concrete pads, corporation stops, curb stops, gate valves, camlock fittings, all tubing, casings, service saddles, tracer wires, excavation, compactions, testing, and all other related and necessary materials, labor and equipment required to complete these bid items, ready for approval and acceptance by the County. New meters shall be supplied by the County.

BID ITEM NO. 28: ABANDON THE EX. TAPPING SADDLE; INSTALL BRASS PLUG

Measurement and Payment shall be according to each type of tapping saddle abandoned with brass plug furnished and installed as listed on the Bid Form.

Payment shall represent full compensation for all labor, material and equipment required to complete the work.

The unit bid price shall include, but is not limited to, labor; dewatering, excavation, including rock excavation, brass plug, restoration, backfill, compaction, testing, all materials and equipment required to complete these bid items, ready for approval and acceptance by the County.

As determined by the County Inspector, existing deteriorated water service saddles shall be replaced prior to plugging. This portion of the bid item shall include the removal of the existing

saddle, new saddle, installation, labor, and all necessary materials to complete the bid item.

BID ITEM NO. 29: ELECTRIC METER CAN

Measurement shall be each electric meter can furnished and installed.

Payment will be according to the quantity of electric meter cans installed.

The unit bid price shall include, but is not limited to, removal and proper disposal, all connection, and all other related and necessary materials, labor and equipment required to complete this bid item, ready for approval and acceptance by the County.

BID ITEM NO. 30: FUSED SAFETY SWITCH

Measurement shall be each fused safety switch furnished and installed.

Payment will be according to the type of fused safety switch as listed on the Bid Form.

The unit bid price shall include, but is not limited to, removal and proper disposal, all connections, lighting arrestor mounted on exterior of safety switch, and all other related and necessary materials, labor and equipment required to complete these bid items, ready for approval and acceptance by the County.

BID ITEM NO. 31: CONTROL PANEL

Measurement and Payment shall be per each control panel furnished and installed.

The unit bid price shall include, but is not limited to, removal and proper disposal, conduit and wire connections to the safety switch, all conduit and wire connections to the junction box, reconnecting all ground wiring, connecting wiring from antenna tower, all conduit, and all other related and necessary materials, labor and equipment required to complete these bid items, ready for approval and acceptance by the County.

The control panel shall include a TCU Bubbler Unit (RPT-001) system provided by and installed by Data Flow Systems (DFS).

When a one-sided layout control panel configuration is used (refer to detail US-OSL), the emergency generator receptacle shall be remotely installed (refer to detail US-RGR). The bid item "Remote Emergency Generator Receptacle" shall include all items as shown on the detail plus any incidentals to complete the bid item. The conduit from the underground 90 degree bend to the control panel shall be paid under bid item "Sch 80 PVC Conduit".

BID ITEM NO. 32: TCU & FIBERGLASS ENCLOSURE (DFS)

Measurement and Payment shall be per each TCU & Fiberglass enclosure furnished and installed.

The unit bid price shall include, but is not limited to, removal and proper disposal, conduit, and wire connections to the control panel, reconnecting all ground wiring, and all other related and necessary materials, labor and equipment required to complete these bid items, ready for approval and acceptance by the County.

BID ITEM NO. 33: JUNCTION BOX, 304 SS

Measurement and Payment shall be per each junction box enclosure furnished and installed.

The unit bid price shall include, but is not limited to, removal and proper disposal, conduit, and wire connections to the wet well, reconnecting all ground wiring, connecting wiring from antenna tower, all conduit and wire connections to the flow meter vault, and all other related and necessary materials, labor and equipment required to complete these bid items, ready for approval and acceptance by the County.

BID ITEM NO. 34: CONDUIT

Measurement shall be per linear foot of conduit furnished and installed.

Payment will be according to the size schedule of the conduit as listed on the Bid Form.

The unit bid price shall include, but is not limited to, removal and proper disposal, all connections, mechanical rotary core bore holes, sealing, grout, liner repair, and all other related and necessary materials, labor and equipment required to complete these bid items, ready for approval and acceptance by the County.

BID ITEM NO. 35: ELECTRICAL SERVICE

Measurement shall be per linear foot of electrical service from the power source to the electric meter.

Payment will be according to the size and type as listed on the Bid Form.

The unit bid price shall include, but is not limited to, removal and proper disposal, wire, conduit, permits, all wire connections, and all other related and necessary materials, labor and equipment required to complete these bid items, ready for approval and acceptance by the County.

BID ITEM NO. 36: ELECTRICAL MOUNTING STRUCTURE

Measurement shall be per each electrical mount structure furnished and installed.

Payment will be according to the quantity of electrical mounting structures installed.

The unit bid price shall include, but is not limited to, removal and proper disposal of all existing electrical rack components, the installation of all new 316 S.S. pipes, channels, hardware, concrete, and all other related and necessary materials, labor and equipment required to complete this bid item, ready for approval and acceptance by the County.

The electrical rack shall be able to accommodate the new ATS enclosure.

BID ITEM NO. 37: ELECTRICAL SYSTEM STUDY & ELECTRICAL STUDY ANALYSIS - "ARC FLASH" - (NFPA 70E), COMPLETE

Measurement and Payment will be lump sum for the completed Electrical System Study and Electrical Study Analysis in compliance with NFPA 70E and acceptable to the County.

Bidder shall provide an electrical system study and electrical study analysis in compliance with

NFPA 70E “Standard for Electrical Safety in the workplace” and IEEE 1584-2018 “Guide for Performing Arc Flash Hazards Calculations”.

Applicable Standards to be used:

- NFPA 70E-2018
- IEEE 1584-2018
- IEEE 399-1986
- NEC Article 110.9, 110.24-2017
- OSHA regulation 29 CFR 1910.132

Each installed Arc Flash Safety label shall contain the following:

- Nominal system voltage
- Flash Hazard Boundary Distance (inches)
- Incident Energy at 18 inches (cal/cm²)
- PPE clothing required
- Boundary for Limited Approach (inches)
- Boundary for Restricted Approach (inches)

A final report for each lift station site will be submitted for information. A copy of all data collection information, a copy of the expanded model (EasyPower database in electronic form), and a spreadsheet of the labels will be provided for future use. Final reporting of each site shall include:

- Overcurrent protective device coordination
- Incident energy analysis
- Protective device equipment evaluation
- Short circuit analysis
- Updated one-line diagrams

BID ITEM NO. 38: EX. ANTENNA & CONCRETE BASE REMOVAL & DISPOSAL

Measurement and Payment will be the complete removal of the lift station antenna and the concrete base and its proper disposal. County reserves the right to claim any portions of the existing antenna structure.

Payment shall be the lump sum bid price and shall include, but is not limited to, the separation of the antenna from the concrete base, the complete removal of the antenna's concrete base, ground rod, all wiring, all conduit, fill dirt; compaction; all labor, supervision, supplies, tools, equipment, sod, and incidentals necessary to complete this bid item, ready for approval and acceptance by the County.

BID ITEM NO. 39: TELEMETRY TOWER BASE (ANTENNA) & CONCRETE BASE, NEW

Measurement and payment shall be lump sum for the installation of a new lift station telemetry tower base and concrete base for the existing lift station antenna at the indicated lift station site.

The lump sum bid price shall include, but is not limited to, the installation of a new lift station telemetry tower base, concrete support, new conduit and wire connections to the control panel, reconnecting all ground wiring, connecting wiring from antenna tower, sealing, grouting, non-shrink hydraulic cement, pulling existing wiring, and all other related and necessary materials, labor and equipment required to complete these bid items, ready for approval and acceptance by the County. The installation of the telemetry tower above the base will be by others. The

telemetry tower base shall be supplied by the County to the Contractor.

BID ITEM NO. 40: CONCRETE REPAIR, (inside wet well)

Payment for all work under this Bid Item shall be made at the unit price bid per square foot for repair and patching of the concrete walls in excess of the surface preparation required for the installation of the surface protection liner.

The concrete wall surfaces shall be returned to approximate original lines and dimensions and adequately sound and smooth enough to meet the new surface protection liner application standards. The depth limitation of this bid item is from the bottom of the "skim coat" to exposed rebar, 2" max.

Included are exposed rebar coating, hydraulic cement patching, grouting around support structure or any other structure or support or guides that need to be in place prior to the spray surface protection liner application. The actual number of square feet of area to be repaired shall be agreed upon with the County Inspector prior to commencement of any work.

BID ITEM NO. 41: SODDING

Measurement shall be per square yards of sodding.

Payment will be per actual quantity of square yards of sodding installed and accepted.

The unit bid price shall include, but is not limited to, all labor, materials, necessary equipment, and incidentals necessary to complete this bid item, ready for approval and acceptance by the County.

BID ITEM NO. 42: WASHED SHELL OR #57 STONE WITH WEED BARRIER

Measurement and Payment shall be per square yards of washed shell or #57 stone with weed barrier installed and accepted.

The washed shell or #57 stone and weed barrier shall be installed/replaced in accordance with the latest Manatee County Public Works Utility Standards.

The unit bid price shall include, but is not limited to, all labor, materials, and equipment, cutting, spreading, finishing, and incidentals necessary to complete this bid item, ready for approval and acceptance by the County.

BID ITEM NO. 43: INSTALL NEW LIFT STATION DRIVEWAY

Measurement shall be per actual square yard of 6-inch thick reinforced concrete driveway furnished and installed per Highway & Traffic Standards Manual Section 3.7.

Payment shall be per actual square yard of driveway furnished and installed as listed on the Bid Form.

The unit bid price shall include, but not limited to, existing curb removal and disposal, installation of new curb, cutting the edges of existing driveways, compacting subgrade, furnishing and installing the concrete, reinforcement, and all other related and necessary incidentals, materials, labor and equipment required to complete this bid item ready for approval and acceptance by the

County. Sidewalk that passes thru a driveway shall be 6" thick, reinforced, and shall have a maximum 2% cross-slope.

BID ITEM NO. 44: FILL DIRT

Measurement and Payment shall be per cubic yard of clean, compacted, fill dirt furnished and installed.

The unit bid price shall include, but is not limited to, fill dirt, hauling, compaction, clean, free of organics and debris, and any other items, labor, equipment, materials and incidentals necessary to complete this bid item, ready for approval and acceptance by the County.

BID ITEM NO. 45: AUTOMATIC TRANSFER SWITCH, COMPLETE REMOVAL

Measurement and Payment shall be per each existing automatic transfer switch (ATS) removed as listed on the Bid Form.

The unit bid price shall include, but is not limited to, the complete removal of all items associated with the automatic transfer switch, unless otherwise specified. This items include, but are not limited to, existing ATS, structure rack, enclosures, conduit, conductors / wires, concrete pads, all other related and necessary materials, labor and equipment required to complete these bid items ready for approval and acceptance by the County.

BID ITEM NO. 46: AUTOMATIC TRANSFER SWITCH, NEW

Measurement and Payment shall be per each new automatic transfer switch (ATS) furnished and installed as listed on the Bid Form.

The unit bid price shall include, but is not limited to, the complete installation of all items associated with the new automatic transfer switch. This items include, but are not limited to, new ATS, structure rack with 3" Sch 40 SS post with SS supports and hardware, NEMA 4X, 14 gauge 304 SS secure (double door) powder coated white enclosures with rain shield, conduit, conductors / wires, concrete pads, all other related and necessary materials, labor and equipment required to complete these bid items ready for approval and acceptance by the County. All ATS controls shall be secure inside the enclosure behind the front cover and not face mounted.

BID ITEM NO. 47: FLOW METER

Measurement shall be per each flow meter furnished and installed.

Payment will be according to the type and quantity of flow meters installed.

The unit bid price shall include, but is not limited to, flow meter, above-ground transmitter, all wiring, proper grounding, conduit, seals, analog monitor for connection to telemetry, and all other related and necessary materials, labor and equipment required to complete this bid item ready for approval and acceptance by the County. The meter head shall be mounted on the rack with appropriate wiring and conduit; location determined by County personnel.

BID ITEM NO. 48: 316 SS SERVICE SADDLE & BALL VALVE (DOWNWARD LEG)

Measurement and Payment will be lump sum for furnishing and installation of 316 stainless steel service saddle and 316 stainless steel ball valve as indicated on the bid form.

Payment will be according to the type and quantity of flow meters installed.

The unit bid price shall include, but is not limited to 316 stainless steel service saddle, 2" 316 stainless steel ball valve, all wiring, conduit, seals, and all other related and necessary materials, labor and equipment required to complete this bid item ready for approval and acceptance by the County.

BID ITEM NO. 49: ADJUST FRAME & COVER

Measurement shall be per each manhole frame and cover adjusted.

Payment will be per the quantity of adjustments completed and accepted according to the type, as listed on the Bid Form.

The unit bid price shall include, but is not limited to, all labor, materials and equipment required to adjust the frame and cover, dewatering, excavation, including rock excavation, pavement cutting, adjusting rings, concrete, backfill, compaction and any other related item necessary to complete these bid items, ready for approval and acceptance by the County.

BID ITEM NO. 50: REMOVE & REINSTALL PORTION OF EXISTING FENCE

Payment and Measurement will be per lump sum for the proper removal and reinstallation of a portion of existing fence.

The lump sum bid price shall include, but is not limited to, length of fence removed (or pulled back), removal & reinstallation of all existing posts, all new concrete footers, existing hardware, existing top rail, existing post caps, existing tension wire, fill, compaction, etc. all labor, materials, necessary equipment, and incidentals necessary to complete this bid item, restore natural grade, and acceptance by the County. Any items found to be in disrepair prior to removal and coordinate with County inspector shall be replaced. Cost shall come from Contingency funds.

BID ITEM NO. 51: TREE REMOVAL

All removals shall be coordinated with the County Inspector prior to removal to establish the extent of work required. Work done under this bid item completed without County Inspector prior approval shall not be paid.

This item addresses the necessary removal of trees of the size indicated in the bid item name including all tree portions above grade and the root ball portion within work area. Also included is necessary cut and fill to remove the tree and to restore the surface to required grades. All fill shall be properly compacted and tested in accordance with section 02220 and other sections as appropriate.

BID ITEM NO. 52: MOBILIZATION

Measurement and payment for this Bid Item 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 it 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 County that his 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

These payments will be subject to the standard retainage provided in the Contract. Payment of the retainage will be made after completion of the work and demobilization.

BID ITEM NO. 53: CONTRACT CONTINGENCY

Payment for all work under this Bid Item shall be made only at the County's discretion. This Bid Item shall not exceed 10% of the Bidders Total Base Bid. The Bidder shall calculate and enter a dollar amount for this Bid Item.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION