

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

BID ITEM NO. 1 - 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. 2 - MAINTENANCE OF TRAFFIC

Payment for all work included, but is not limited to, under this Bid Item shall represent full compensation in accordance with the lump sum price bid for all maintenance of traffic including all local agencies and municipalities, and all equipment and manpower necessary to comply with the FDOT Design Standards 600 Series.

Measurement for periodic payments of this lump sum bid item will be in accordance with the approved Schedule of Values, to be supplied by the Contractor in accordance with the Contract Documents.

BID ITEM NO. 3 - EROSION AND SEDIMENT CONTROL

Payment for all work included, but is not limited to, under this Bid Item shall represent full compensation in accordance with the lump sum price bid for erosion and sediment control, including permitting if required, coordination with federal, state and local agencies and all equipment and manpower necessary to comply with necessary agencies.

Measurement for periodic payments of this lump sum bid item will be in accordance with the approved Schedule of Values, to be supplied by the Contractor in accordance with the Contract Documents.

BID ITEM NO. 4 - CLEARING AND GRUBBING

Payment for all work included under this Bid Item shall be quantified by the Contractor per acre and paid for as a lump sum amount for all of the areas that will require clearing and grubbing for the pipe installation and in accordance with the plans and specifications. Clearing and grubbing shall include the removal and disposal of vegetation, trees, tree roots, rock, abandoned pipe and other features not part of the proposed improvements. The Contractor shall include the cost of any and all permitting required for the burning or disposal of removed trees and vegetation.

Unless otherwise indicated herein these documents or in the construction plans, clearing and grubbing includes a ten (10) foot strip along the pipeline route. The contractor will be responsible for making their own determination as to the acreage and quantity of clearing and grubbing.

BID ITEM NO. 5 - RECORD DRAWINGS

Payment for all work included, but is not limited to, under this Bid Item shall represent full compensation in accordance with the lump sum price bid for as-built record drawings or any other required certifications to put proposed project into service. All items are subject to approval by the Engineer and the County.

Measurement for periodic payments of this lump sum bid item will be in accordance with the approved Schedule of Values, to be supplied by the Contractor In accordance with the Contract Documents.

BID ITEM NO. 6 - PRECONSTRUCTION VIDEO

Payment for all work included in this Bid Item will be made at the applicable Contract lump sum bid for the preconstruction video of the existing site conditions. Payment shall represent full compensation for all labor, materials, necessary equipment, and incidentals necessary to complete the work, ready for approval and acceptance by the County.

Measurement for periodic payments of this lump sum bid item will be in accordance with the approved Schedule of Values, to be supplied by the Contractor In accordance with the Contract Documents.

BID ITEM NO. 7 - BYPASS PUMPING

Payment for all work included, but is not limited to, under this Bid Item shall represent full compensation in accordance with the lump sum price bid for any bypassing required to make connections to existing force mains, proposed force mains, existing manholes and/or lift stations, as well as manhole rehabilitation. Payment for all work included, but is not limited to, under this Bid Item shall also represent full compensation in accordance with the lump sum price bid for all labor, fittings, excavation, dewatering, bedding, backfill, compaction, testing, equipment, line stops, necessary septage trucks, and the bypassing of the existing lift stations and manholes in order to complete the proposed improvements.

Information on lift stations connected to the existing 16-inch force main are shown below for informational purpose only:

Lift Station #6 - RTU #59 - 5901 Marina Drive - 260 GPM
Lift Station #7 - RTU #62 - 6900 Holmes Blvd - 600 GPM
Lift Station #11 - RTU #64 - 8501 Gulf Drive - 900 GPM

Measurement for periodic payments of this lump sum bid item will be in accordance with the approved Schedule of Values, to be supplied by the Contractor in accordance with the Contract Documents.

BID ITEM NO. 8 - PROJECT SIGNS

Payment for all work included in this Bid Item will be made at the applicable Contract lump sum bid for the necessary signage required during construction. At least two (2) project signs should be used per project. Payment shall represent full compensation for all labor, materials, necessary equipment, and incidentals necessary to complete the work, ready for approval and acceptance by the County.

Measurement for periodic payments of this lump sum bid item will be in accordance with the approved Schedule of Values, to be supplied by the Contractor In accordance with the Contract Documents.

BID ITEM - PVC DR 18 PIPE

Payment for all work included in these Bid Items shall be made at the applicable Contract unit price bid per the schedule of prices for furnishing and installing the listed diameter PVC force main (AWWA C900-16 CL-235) pipe as shown on the Contract Drawings and listed on the Bid Form. Measurement and Payment shall be made for the actual length of the listed diameter pipe and installed and will represent full compensation for all labor, materials, tracer wire, excavation, including rock, dewatering, bedding, backfill, compaction, equipment, and utility locates required to complete these Bid Items. Included in this pay item is the removal/relocation of existing roadway signs required for the construction of the pipeline. 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.

BID ITEM	DESCRIPTION	UNITS
9	16" PVC DR 18 Pipe (Open-Cut)	LF
10	8" PVC DR 18 Pipe (Open-Cut)	LF

BID ITEM - DI CLASS 350 PIPE (OPEN CUT)

Payment for all work included in this Bid Item shall be made at the applicable Contract unit price bid per the schedule of prices for furnishing and installing the listed diameter Ductile Iron Pipe (AWWA A21.50 and A21.51, and ANSI C150 and C151) as shown on the Contract Drawings and listed in the Bid Form. The thickness of pipe shall be pressure Class 350. Measurement and Payment shall be made for the actual length of the listed diameter pipe installed and will represent full compensation for all labor, materials, tracer wire, excavation, including rock, dewatering, bedding, backfill, compaction, polyethylene wrapping, bacteriological sampling and disinfection, equipment, and utility locates required to complete these Bid Items, including removal of existing abandoned pipelines that may be in conflict.

Included in these bid item is the removal/relocation of existing roadway signs required for the construction of the pipeline. No additional compensation will be made for excavation below the bottom of the pipe, for rock removal or bedding and backfill materials, or for repair of any trench settlement.

BID ITEM	DESCRIPTION	UNITS
11	10" DI Class 350 Pipe (Open Cut)	LF
12	6" DI Class 350 Pipe (Open Cut)	LF
13	4" DI Class 350 Pipe (Open Cut)	LF

BID ITEM - PIPE REMOVAL

Payment for all work included in this Bid Item shall be made at the applicable Contract unit price bid per the schedule of prices removing the listed pipe as shown on the Contract Drawings and listed in the Bid Form. Measurement and Payment shall be made for the actual length of the listed diameter pipe removed and disposed, and will represent full compensation for all labor, materials, excavation, including rock, dewatering, bedding, backfill, compaction, equipment, and utility locates required to complete these Bid Items. No additional compensation will be made for excavation below the bottom of the pipe, for rock removal or bedding and backfill materials, or for repair of any trench settlement.

BID ITEM	DESCRIPTION	UNITS
14	Remove 10" Water Main	LF
15	Remove 6" Water Main	LF
16	Remove 4" Water Main	LF

BID ITEM NO. 17 - 30" STEEL CASING WITH 16" CARRIER PIPE (JACK AND BORE)

Payment for all work included, but is not limited to, under this Bid Item shall represent full compensation in accordance with the unit price bid per length foot of jack and boring including furnishing and installing 0.406-inch steel casing, 16-inch PVC DR 18 carrier pipe, pipe joint bell restraints, centered and restrained casing spacers, and end seals furnished, installed as shown in the Contract Drawings, and accepted by the County.

Pay Item also represent full compensation for all labor, materials, tracer wire, grout, excavation, including rock, dewatering, bedding, backfill, compaction, testing and equipment required to complete these Bid Items. No additional compensation shall be made for excavation below the bottom of the casing pipe, for rock removal or bedding and backfill material, or for repair of any trench settlement. Payment shall represent full compensation for all labor, materials, equipment, restoration and incidental items necessary to complete.

BID ITEM - DUCTILE IRON FITTINGS, WASTEWATER

Payment for all work included in these Bid Items will be made at the applicable Contract unit price bid for furnishing and installing each listed ductile iron fitting (Holiday-Free Permax CTF or Tnemec Series 431 Perma-Shield PL epoxy lined) as shown on the Contract Drawings and listed on the Bid Form. Payment will be made for each fitting installed and will represent full compensation for all labor, material, excavation, blue fluoropolymer coated high-strength low alloy steel or uncoated 316 stainless steel hardware, mechanical joint restraint, including rock, bedding, backfill, compaction, polyethylene wrapping, testing and equipment required to complete these Bid Items.

BID ITEM	DESCRIPTION	UNITS
18	16" 45 Degree Bend (Wastewater)	EA
19	16" 22.5 Degree Bend (Wastewater)	EA
20	16" 11.25 Degree Bend (Wastewater)	EA
21	16" x 12" Reducer (Wastewater)	EA
22	16" x 8" Tee (Wastewater)	EA
23	8" 45 Degree Bend (Wastewater)	EA
24	8" 22.5 Degree Bend (Wastewater)	EA
25	8" x 4" Reducer (Wastewater)	EA

BID ITEM - DUCTILE IRON FITTINGS, WATER

Payment for all work included in these Bid Items will be made at the applicable Contract unit price bid for furnishing and installing each ductile iron fitting (double standard thickness cement-lined) as shown on the Contract Drawings and listed on the Bid Form. Payment will be made for each fitting installed and will represent full compensation for all labor, material, excavation, blue fluoropolymer coated high-strength low alloy steel or uncoated 316 stainless steel hardware, mechanical joint restraint, including rock, bedding, backfill, compaction, polyethylene wrapping, testing and equipment required to complete these Bid Items.

BID ITEM	DESCRIPTION	UNITS
26	6" 45 Degree Bend (Water)	EA
27	6" 22.5 Degree Bend (Water)	EA
28	6" Plug with 2" Threaded Port (Water)	EA
29	6" x 4" Reducer (Water)	EA
30	4" Plug with 2"	EA

BID ITEM - TAPPING SLEEVES/VALVES

Payment for all work included in these Bid Items shall be at the applicable Contract unit price bid per each tapping sleeve and tapping valve for furnishing and installing the listed diameter tapping sleeve and tapping valve, box, cover and concrete pad as shown on the Contract Drawings and listed on the Bid Form. Prior to the tapping operation, the Contractor will contact the County as to the date and time of the proposed work to coordinate water main isolations. The tapping operation itself up to 12-inches in diameter will be performed by the County. All tapping operations larger than 12 inches in diameter shall be performed by the Contractor with the County's Representative present. All necessary ductile iron sleeves (double standard thickness cement lined) required to construct a fully operable water main tie in shall be included in this pay item, unless called out in the Contract Drawings. Where a tapping sleeve and valve is removed and replaced, the proposed tapping sleeve shall be aligned so that the tapping sleeve outlet is centered where the existing tap on the main is located. Payment shall represent full compensation for all labor, material, excavation, including rock as necessary, bedding, backfill, compaction, polyethylene wrapping all valves, pressure and leak testing, disinfection and equipment required to complete these Bid Items.

BID ITEM	DESCRIPTION	UNITS
31	16" x 6" Tapping Sleeve and Valve	EA
32	16" x 4" Tapping Sleeve and Valve	EA
33	12" x 6" Tapping Sleeve and Valve	EA

BID ITEM - TAPPING SLEEVES WITH 2" THREADED PLUG

Payment for all work included in these Bid Items shall be at the applicable Contract unit price bid per each listed diameter tapping sleeve and threaded plug furnished and installed as shown on the Contract Drawings and listed on the Bid Form. Prior to installation, the Contractor will contact the County as to the date and time of the proposed work to coordinate water main isolations. Where a tapping sleeve and valve is removed and replaced, the proposed tapping sleeve shall be aligned so that the tapping sleeve outlet is centered where the existing tap on the main is located. The proposed tapping sleeve and plug shall create a leak free plug on the existing water main tap. Payment shall represent full compensation for all labor, material, excavation, including rock as necessary, bedding, backfill, compaction, polyethylene wrapping all sleeves and valves, pressure and leak testing, disinfection and equipment required to complete these Bid Items.

BID ITEM	DESCRIPTION	UNITS
34	16" x 2" Tapping Sleeve with 2" Threaded Plug	EA

BID ITEM - REMOVE TAPPING SLEEVES/VALVES

Payment for all work included in these Bid Items shall be at the applicable Contract unit price bid per each listed diameter tapping sleeve and tapping valve, box, cover and concrete pad removed as shown on the Contract Drawings and listed on the Bid Form. Prior to the removal operation, the Contractor will contact the County as to the date and time of the proposed work to coordinate water main isolations. Payment shall represent full compensation for all labor, material, excavation, including rock as necessary, bedding, backfill, compaction testing, disinfection and equipment required to complete these Bid Items.

BID ITEM	DESCRIPTION	UNITS
35	16" x 6" Tapping Sleeve and Valve	EA
36	16" x 4" Tapping Sleeve and Valve	EA
37	16" x 2" Tapping Sleeve and Valve	EA

BID ITEM - GATE VALVES

Payment for all work included in this Bid Item shall be made at the applicable Contract unit price bid per each valve, box, cover and concrete pad installed as shown on the Contract Drawings and listed on the Bid Form to isolate that segment of water main. Prior to the installation operation, the Contractor will contact the County as to the date and time of the proposed work to coordinate water main isolations. All removal of pipe between the water main branch fitting to the proposed gate valve (spools pieces up to 5 linear feet) shall be included in this pay item and replaced with ductile iron class 350 pipe of the same size. Any necessary ductile iron sleeve (double standard thickness cement-lined) shall be included in this bid item, unless called out in the Contract Drawings, to perform the work. Payment shall represent full compensation for all labor, material, excavation, including rock as necessary, bedding, backfill, compaction, polyethylene wrapping all valves, pipe, fittings, pressure and leak testing, and disinfection and equipment required to complete these Bid Items.

BID ITEM	DESCRIPTION	UNITS
38	10" Gate Valve	EA
39	6" Gate Valve	EA
40	4" Gate Valve	EA

BID ITEM - REMOVE GATE VALVES

Payment for all work included in this Bid Item shall be made at the applicable Contract unit price bid per each valve, stem, valve box and lid, and concrete pad removed as shown on the Contract Drawings and listed on the Bid Form to isolate that segment of water main. Prior to the removal operation, the Contractor will contact the County as to the date and time of the proposed work to coordinate water main isolations. Payment shall represent full compensation for all labor, material, excavation, including rock as necessary, bedding, backfill, compaction, temporary plugs/caps, and disinfection and equipment required to complete these Bid Items.

BID ITEM	DESCRIPTION	UNITS
41	Remove 10" Gate Valve	EA
42	Remove 6" Gate Valve	EA
43	Remove 4" Gate Valve	EA

BID ITEM - PLUG VALVES

Payment for all work included in these Bid Items shall be made at the applicable Contract unit price bid per each valve for furnishing and installing the listed diameter valve, box, cover, and concrete pad as shown on the Contract Drawings and listed on the Bid Form. All Plug Valves shall be "true" full 100% port eccentric plug valves with Holiday-free interior lining. Any necessary ductile iron sleeve (Holiday-Free Permax CTF or Tnemec Series 431 Perma-Shield PL epoxy lined) shall be included in this bid item. Payment shall represent full compensation for all labor, material, excavation, including rock as necessary, bedding, backfill, compaction, testing and equipment required to complete these Bid Items.

BID ITEM	DESCRIPTION	UNITS
44	16" Plug Valves	EA
45	8" Plug Valves	EA

BID ITEM - REMOVE AND REPLACE SERVICE SADDLES

Payment for all work included in this Bid Item shall be made at the applicable Contract unit price bid per each service saddle and corporation stop removed and for furnishing and installing the listed diameter saddle and threaded plug as shown on the Contract Drawings and listed on the Bid Form. Prior to the replacement operation, the Contractor will contact the County as to the date and time of the proposed work to coordinate water main isolations. The proposed service saddle shall be aligned so that the service saddle outlet is centered where the existing tap to the main is. The new service saddle and threaded plug shall create a leak free plug on the existing water main tap. Payment shall represent full compensation for all labor, material, excavation, including rock as necessary, bedding, backfill, compaction, polyethylene wrapping all saddles and plugs, pressure and leak testing, and disinfection and equipment required to complete these Bid Items.

BID ITEM	DESCRIPTION	UNITS
46	Remove and Replace 12" x 2" Service Saddle	EA
47	Remove and Replace 16" x 2" Service Saddle	EA

BID ITEM - AIR RELEASE VALVES

Payment for all work included in this Bid Item shall be at the applicable Contract unit price bid per each air release valve for furnishing and installing the listed diameter air release valve, 316 stainless steel backflush attachments, piping, fittings, box, cover, enclosure, concrete bollards, and concrete pad as shown on the details in the Contract Drawings and listed on the Bid Form. Payment shall represent full compensation for all labor, material, excavation, including rock as necessary, bedding, backfill, compaction testing, disinfection and equipment required to complete these Bid Items.

BID ITEM	DESCRIPTION	UNITS
48	2" ARV Type 2 (Above Ground)	EA

BID ITEM - BELL JOINT PIPE RESTRAINTS

Payment for all work included in these Bid Items shall be made at the applicable Contract unit price bid per each restraint required to restrain the piping required by the Contract Drawings. Measurement will be based on each complete restraint furnished and installed except where specifically included in another pay item. Payment shall represent full compensation for all labor, material, equipment, excavation, including rock, bedding, backfill, compaction, and testing required to complete this Bid Item. This Bid Item includes the installation of blue fluoropolymer coated high-strength low alloy steel or uncoated 316 stainless steel hardware, restraints used in restraining PVC and ductile iron pipe of the specified type acceptably furnished and installed as shown on the drawings or where directed by the Project Representative and in accordance with the pipe and restraint manufacturer's requirements. The work shall include, but is not limited to, all bolts, nuts, washers, gaskets, and all other related and necessary materials, polyethylene wrapping restraints and hardware, work and equipment required or associated with this item.

BID ITEM	DESCRIPTION	UNITS
49	16" Bell Joint Pipe Restraints	EA
50	10" Bell Joint Pipe Restraints	EA
51	8" Bell Joint Pipe Restraints	EA
52	6" Bell Joint Pipe Restraints	EA
53	4" Bell Joint Pipe Restraints	EA

BID ITEM - FORCE MAIN CONNECTIONS

Payment for all work included, but is not limited to, under these Bid Items shall be made at the applicable Contract unit price bid per each force main connection. Payment for all work included, but is not limited to, under this Bid Item shall represent full compensation in accordance with unit price bid for all labor, additional necessary fittings not shown on the Contract Drawings (Holiday-Free Permax CTF or Tnemec Series 431 Perma-Shield PL epoxy lined), polyethylene wrapping fittings and restraints, grout, excavation, dewatering, bedding, backfill, compaction, testing, equipment, and thrust blocks for force main connections. Contractor shall make provisions to have an adequate number of septage trucks available to make the necessary force main connections.

Coordinate with Nick Wagner (Lift Station Superintendent) with Manatee County for shutdown of Lift Stations. At least four days' notice needs to be provided to Nick to coordinate shutdown.

Phone Number: 941-792-8811 EXT 5377. Connection must also be made outside of peak hours between 9PM and 5AM.

BID ITEM	DESCRIPTION	UNITS
54	Connection to Existing 12" Force Main	EA
55	Connection to Existing 4" Force Main	EA

BID ITEM - CUT AND CONNECT TO EXISTING WATER MAIN

Payment for all work included, but is not limited to, under these Bid Items shall represent full compensation for each proposed connections to water mains. Prior to the connections, the Contractor will contact the County as to the date and time of the proposed work to coordinate water main isolations. Payment for all work included, but is not limited to, under this Bid Item shall represent full compensation for all labor, additional fittings not shown on the Contract Drawings (double cement lined), thrust blocks, polyethylene wrapping fittings and restraints, excavation, dewatering, bedding, backfill, compaction, bacteriological sampling and disinfection, and equipment necessary to complete the work.

BID ITEM	DESCRIPTION	UNITS
56	Cut and Connect to Existing 10" Water Main	EA
57	Cut and Connect to Existing 6" Water Main	EA
58	Cut and Connect to Existing 4" Water Main	EA
59	Cut and Connect to Existing 2" Water Main	EA

BID ITEM NO. 60 - REMOVE AND REPLACE FIRE HYDRANT ASSEMBLY

Payment for all work included in this Bid Item shall be made at the applicable Contract unit price bid per each hydrant assembly removed and replaced, including 6" hydrant lead, hydrant elbow, ductile iron fitting and gate valve, or tapping sleeve and valve, box cover, concrete pads, restraining rods and/or thrust blocks, with a new fire hydrant assembly as shown on the Contract Drawings and listed on the Bid Form. Payment shall represent full compensation for all labor, material, equipment, excavation, including rock, bedding, backfill, compaction, polyethylene wrapping all buried pipe, fittings, and valves, testing and disinfection required to complete this Bid Item.

BID ITEM NO. 61 - CONNECTION TO MANHOLE

Payment for all work included in these Bid Items shall be made at the applicable Contract unit price bid per each manhole connection. Payment shall represent full compensation for all labor, materials, and equipment. This bid item includes, but is not limited to, connecting the new force main to the terminal manhole, rebuilding the existing bench, coring as necessary, additional ductile iron fittings not shown in the Contract Drawings, all necessary grout required to seal the manhole connection, removing and replacing the jack-in manhole boot per ASTM C-923, and removing the existing force main from the manhole.

BID ITEM NO. 62 - MANHOLE REHABILITATION

Payment for work under this Bid Item shall be made at the Contract unit price bid for each manhole rehabilitation including removing the existing liner if applicable, pressure washing, injection grouting to stop any infiltration, concrete restoration to ensure a smooth surface for coating, applying a primer and protective liner, repairing dilapidated bench work and inverts, installing a rainwater dish, and replacing manhole frame and cover with County approved

products as shown on the Contract Drawings. The proposed manhole frame and cover shall be made of heavy duty composite materials with min. three (3) 316 stainless steel bolts and associated hardware. Payment shall represent full compensation for all labor, materials, equipment and incidental items necessary to complete each manhole rehabilitation, ready for approval and service by the County.

This pay item shall also include any restoration associated with the manhole rehabilitation, including but not limited to sidewalk, grass, and miscellaneous concrete, in accordance with the Contract Documents shall be included. No additional compensation will be made by the County for any damage to manhole structures due to liner installation. It shall be the responsibility of the Contractor to repair the manhole structure. Repair work shall ensure manhole structure is structurally rigid and leakproof. Sealants used shall be flexible and withstand horizontal and vertical movement due to traffic loading and shall be approved by the County.

BID ITEM - WATER SERVICES

Payment for all work included in this Bid Item shall be made at the applicable Contract unit price bid for each service type for furnishing and installing the listed blue-coded single, double, and triple water service lines, both short and long side, as listed on the Bid Form. Included in these bid items is the removal, relocation, and reconnection of water meter and meter boxes that do not meet the County standards (refer to County details). Included in this bid item is the installation of a new backflow prevention assembly downstream of the meter installed per the County details. If the relocated meter was connected to an existing backflow preventer assembly, the County inspector will determine if the assembly is acceptable to be reused. The meter and backflow prevention assembly proposed locations shall be coordinated with the County Inspector and property owner in order to meet County standards. All pipe, fittings, connections, concrete pads, and landscaping restoration required to perform the complete removal, relocation, new installations, and reconnections of the water meter, meter box, and backflow preventer assembly to the private property service line are included in this pay item.

Water service casing is required on all roadway crossings and shall extend outside pavement edge per County standard details. Contractor shall replace all water services from water main to the meter, including service saddle, corporation stop, piping, and ancillary fittings. The new service saddle port shall be aligned over the already existing tap of the water main. Included in these bid items are reconnections and new installations of the meter boxes, backflow preventer assemblies, and private side plumbing. Contractor shall employ a licensed plumber for any work within private property and shall pay for any applicable permit fees to complete the work. Payment shall represent full compensation for all labor, material, excavation, including rock, bedding, backfill, compaction, testing and disinfection and equipment required to complete these Bid Items.

BID ITEM	DESCRIPTION	UNITS
63	Single Short Water Service	EA
64	Double Short Water Service	EA
65	Single Long Water Service with Casing	EA
66	Double Long Water Service with Casing	EA
67	Triple Short Water Service	EA

BID ITEM - PAVEMENT REPAIR AND ROAD RESTORATION

Payment for all work included in these Bid Items will be made at the applicable Contract unit price listed below for selected common fill, crushed concrete, milling and asphaltic concrete, for the roadway restoration related to the subsurface utility construction as listed on the Bid Form. Payment shall represent full compensation for all labor, materials and equipment for cutting the edges of existing roadway, compacting subgrade, furnishing and installing the crushed concrete, asphaltic concrete and all incidentals necessary to complete the roadway restoration as shown on the Contract Drawings and included in the Specifications, all ready for approval and acceptance by the County. Contractor will only be paid for the base and asphaltic concrete thicknesses specified in these bid items. No additional payment will be made for restorations beyond the specified thicknesses.

BID ITEM	DESCRIPTION	UNITS
68	Selected Common Fill	CY
69	Crushed Concrete Base, 8" Thick	SY
70	Asphaltic Concrete Structure Course - Type S-I, 1-1/4" Thick	TN
71	Friction Course Overlay - Type S-III, 3/4" Thick	TN
72	Milling	SY

BID ITEM - REMOVAL AND REPLACEMENT OF UNSUITABLE MATERIAL

Payment for all work included in these Bid Items will be made at the applicable Contract unit price listed below for removal and replacement of unsuitable material encountered during excavation for pipeline installation; including but not limited to muck, debris, stone, concrete, and shell. Payment shall represent full compensation for all labor, materials, equipment, and dewatering for properly removing and disposing of all unsuitable material, including the import of suitable backfill material. Contractor shall notify Owner/Engineer when unsuitable materials are encountered. Contractor shall provide backup documentation (load tickets) to County Inspector at time of export or import or material.

BID ITEM	DESCRIPTION	UNITS
73	Removal of Unsuitable Material	CY
74	Import of Suitable Backfill	SY

BID ITEM NO. 75 - SODDING

Payment for all work included in this Bid Item will be made at the applicable Contract unit price bid per square yard for furnishing and installing sodding to restore areas to preconstruction conditions, as listed on the Bid Form. Payment shall represent full compensation for all labor, materials, necessary equipment, and incidentals necessary to complete the work, ready for approval and acceptance by the County.

BID ITEM - DRIVEWAY RESTORATION

Payment for all work included in this Bid Item will be made at the applicable Contract unit price bid per square yard of driveway restoration as listed on the Bid Form. Measurement of driveway restoration will be per the actual number of square yards of brick, concrete, or shell furnished and installed. Payment shall represent full compensation for all labor, materials and equipment for cutting the edges of existing driveways, compacting subgrade, furnishing and installing the brick, concrete, or shell driveway, including all incidentals necessary to complete the driveway restoration as shown on the Contract Drawings and included in the Specifications, all ready for approval and acceptance by the County.

BID ITEM	DESCRIPTION	UNITS
76	Brick Driveway Repair	SY
77	Concrete Driveway Repair	SY
78	Shell Driveway Repair	SY

BID ITEM NO. 79 - CONCRETE SIDEWALK REPAIR

Payment for all work included under this Bid Item will be made at the Contract unit price bid per square yard of concrete sidewalk installed as shown in the Contract Drawings and as listed on the Bid Form. Measurement will be based on the actual number of square yards of concrete sidewalk installed, tested, completed and approved. No payment for restoration of a private driveway within or outside the right-of-way shall be made under this Bid Item. Sidewalks shall meet the requirements of the Manatee County Transportation Design Standards.

BID ITEM NO. 80 - MAILBOX REMOVAL AND REPLACEMENT

Payment for all work included in this Bid Item shall be per each mailbox removed and replaced as shown in the construction plans. Payment shall represent full compensation for all labor, excavation, compaction, material, preparation, installation and equipment required to complete this Bid Item.

BID ITEM NO. 81 - REMOVAL AND REPLACEMENT OF INFILTRATION TRENCH

Payment for all work included in this Bid Item will be made at the applicable Contract unit price bid per square yard for the necessary removal and replacement of infiltration trench per City of Bradenton Beach detail. Payment shall represent full compensation for all labor, materials, necessary equipment, and incidentals necessary to complete the work, ready for approval and acceptance by the County.

Measurement will be based on the actual number of square yards of infiltration trench installed, tested, completed and approved.

BID ITEM NO. 82 - PIGGING AND PRESSURE TESTING

Payment for all work included in this Bid Item will be made at the applicable Contract lump sum bid for test pigging and pressure testing the proposed force mains and water mains. Payment shall represent full compensation for all labor, materials, fittings, necessary equipment, and incidentals necessary to complete the work, ready for approval and acceptance by the County.

Measurement for periodic payments of this lump sum bid item will be in accordance with the approved Schedule of Values, to be supplied by the Contractor In accordance with the Contract Documents.

BID ITEM NO. 83 - GROUT FILL & ABANDON EXISTING PIPELINES

Payment for all work included, but is not limited to, under this Bid Item shall represent full compensation in accordance with the unit price bid per cubic yard of grout fill that is required to abandon all of the existing pipelines to be deactivated; wasted/spilled grout will not be paid for, only the required amount of grout in the abandoned pipe. Payment will include all equipment, labor, fittings including plugs and caps whether shown on the plans or not, decommissioning valves, removal of valve boxes, restraints, concrete blocks, temporary

connections, flushing of existing pipelines, and appurtenances required to abandon the existing mains in accordance with County standards.

The existing pipelines that are being grouted and abandoned must be cut and capped at a maximum distance of 2,000 linear foot segments. The caps must have offset grout port on the top side of the cap. The County preferred grout mix in the contract specifications must be used.

BID ITEM ON. 84 -TREE REMOVAL AND REPLACEMENT

Payment for all work included in these Bid Items will be made at the applicable Contract unit for each tree removed and replaced for construction activities. Contractor shall determine size and type of tree to be replaced at the time of construction. Tree removal shall be coordinated with home owners prior to removal and replacement. Payment shall represent full compensation for all coordination between the County's representatives, home owners, and local agencies, including all labor, materials, necessary equipment, and incidentals necessary to complete the work, ready for approval and acceptance by the County.

BID ITEM NO. 85 - PERMIT ALLOWANCE

The County is allowing for a City of Holmes Beach Right-of-Way permitting allowance of \$5,000. Contractor shall include this allowance in his bid. Payment will only be made for the actual Permit Fee. Contractor shall provide justification for payment at time of billing.

BID ITEM NO. 86 - REMOVAL AND REPLACEMENT OF STORMWATER INLET AND PIPING

Payment for all work included in this Bid Item will be made at the applicable Contract lump sum bid for the necessary removal and replacement of all stormwater inlets and piping required for the construction or removal of pipelines, whether shown on the plans or not. Payment shall represent full compensation for all labor, materials, necessary equipment, and incidentals necessary to complete the work, ready for approval and acceptance by the County.

Measurement for periodic payments of this lump sum bid item will be in accordance with the approved Schedule of Values, to be supplied by the Contractor In accordance with the Contract Documents.

BID ITEM NO. 87 - LIFT STATION WATER SERVICE MODIFICATION

Payment for all work included in this Bid Item will be made at the applicable Contract lump sum bid for upgrading the existing water service to a 2-inch water service at Lift Station #59. Included in this bid item is all work required for removing the existing 6" service saddle and replacing with a new saddle and threaded plug, furnishing a new 6"X2" service saddle, 2" polyethylene tubing, removing and replacing the existing backflow prevention assembly and concrete pad with a 2" backflow prevention & meter assembly, and furnishing and installing the hose bib & camlock connection assembly, as shown on the plans. Payment shall represent full compensation for all labor, materials, fittings, appurtenances, piping, concrete, necessary equipment, restoration, and incidentals necessary to complete the work, ready for approval and acceptance by the County.

Measurement for periodic payments of this lump sum bid item will be in accordance with the approved Schedule of Values, to be supplied by the Contractor In accordance with the Contract

Documents.

BID ITEM NO. 88 - 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