

## SECTION 012000

### MEASUREMENT AND PAYMENT

Applies only to Collier County Public Utilities Projects or Works and Utilities Portions of Collier County Transportation Projects, but not to Private Developments.

#### PART 1 GENERAL

##### 1.1 SECTION INCLUDES

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

##### 1.2 EXPLANATION AND DEFINITIONS

- A. The following explanation of the Measurement and Payment for the Bid Schedule 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 Schedule or relieve the CONTRACTOR of the necessity of furnishing such as a part of the Contract. Measurement and payment for all Contract Items shall made be in accordance with this section or as modified by the Supplemental Terms and Conditions.

##### 1.3 MEASUREMENT

- A. The quantities set forth in the Bid Schedule are approximate and are given to establish a uniform basis for the comparison of bids. The COUNTY 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.

##### 1.4 PAYMENT

- A. Make payment for the items listed on the Bid Schedule on the basis of the work actually performed and completed, such work including but not limited to, the furnishing 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. 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 Supplemental Terms and 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 Supplemental Terms and Conditions.
- B. Format: Utilize a format similar to the Table of Contents of the Project Specifications. Identify each line item with number and title of the major specification items. Identify site mobilization, bonds and insurance. Include within each line item, a direct proportional amount of Contractor's overhead profit.
- C. Revisions: With each Application for Payment, revise schedule to list approved Change Orders.

## 1.6 Post Construction Video

- A. In addition to a pre-construction video, the contractor will be required to provide a post construction video showing final improvements within the right-of-way. This video will need to be performed and delivered sometime between substantial and final completion.

## PART 2 PRODUCTS - Not Used

## PART 3 EXECUTION

### 3.1 MEASUREMENT AND PAYMENT

- A. Make payment on the basis of work actually performed completing each item in the Bid, such work including, but not limited to, the furnishing of all necessary labor, materials, equipment, transportation, cleanup, and 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. Payment for each item includes compensation for cleanup and restorations. Cost of cleanup and surface restorations (including pavement replacement) will be considered as the percentage retained in accordance with the Contract Documents, and complete payment will not be made until cleanup, restorations and as-builts are completed.

## **PART 1: GENERAL**

- 1 **Mobilization / Demobilization:** Payment for mobilization and demobilization will be made at the Contract lump sum price in accordance with Collier County specifications.
- 2 **Maintenance of Traffic:** Payment for maintenance of traffic in accordance with the Collier County Maintenance of Traffic Policy will be made for at the Contract lump sum price. This item also includes maintaining residential traffic along Safe Harbor Drive. Contractor must provide appropriate signage for closures at the work zone and the appropriate warning signage ahead of the work zone.
- 3 **Project Signs:** Payment for providing Project Signs will be made at the Contract lump sum price in accordance with the Collier County specifications.
- 4 **Survey Layout & Record Drawings:** Payment for providing all survey and record drawings will be made at the Contract lump sum price in accordance with the Collier County specifications.
- 5 **Pre-Construction Video:** Payment for providing an acceptable Pre-Construction Video will be made at the Contract lump sum price in accordance with Collier County specifications.

## **PART 2: WATER MAIN IMPROVEMENTS (INSTALLATION ONLY)**

- 6 **36" HDPE DR11 DIPS Water Main – Directional Drill (Installation Only):** Payment for 36" HDPE DR11 water main installed via horizontal directional drill will be made at the Contract lump sum price. This item includes all labor and equipment for installation of the horizontal directional drills made in accordance with the details shown in the Plans and Collier County Standards. This item also includes all excavation, including rock, backfilling, compaction, dewatering, fittings, thrust restraint devices, bedding material, erosion and sedimentation control and finished grading. This item also includes all turbidity barriers and testing required by the Environmental Resource Permit. The plans show a suggested path for the drill, that includes an entry angle, exit angle with a radius shown for each drill. The Contractor may deviate from these criteria but will only be paid a lump sum price regardless of length. Tracer wire/wire lining will be required for all directional drills. **Pipe material to be purchased by Collier County for this item.** The Contractor will be responsible for providing necessary fittings, appurtenances, and materials not included in the

County's list of pre-purchased materials. Contractor shall provide imported backfill, if needed.

- 7 **36" PVC DR18 Water Main – Open Cut (Installation Only):** Payment for installing 36" PVC DR18 water main installed via open cut will be made at the Contract unit price per linear foot of water main acceptable installed. This item includes all labor and equipment for clearing and disposal of trees and bushes, all necessary fittings, pipe coatings and linings, labor, equipment for the laying of the pipe and furnishing signs, dewatering, compaction and density testing, pipe bedding, backfilling, sheeting, restrained joint piping, detectable tape, clamps, harnessing, plugs and caps, adapters, excavation of all material encountered, including rock, backfill, unsuitable material, replacement of grass, sod, clearing and grubbing, landscaping, pavement, driveways, sidewalks, mailboxes, culverts, storm sewers, and other surface materials not specifically designated in the Bid. Also includes clean-up, disinfection and sterilization, temporary facilities for blow-offs and testing. Measure pipe to the nearest foot along the centerline including the lengths of valves and fittings. Measure lineal footage horizontally. Measure cuts from proposed grade to the invert elevation of the pipe. **Pipe material to be purchased by Collier County for this item.** The Contractor will be responsible for providing necessary fittings, appurtenances, and materials not included in the County's list of pre-purchased materials. Contractor shall provide imported backfill, if needed.
  
- 8 **36" Gate Valves (Installation Only):** Payment for 36" gate valves will be made at the Contract unit price for each valve acceptably installed. This item includes all labor and equipment for installation of valve, box and stem and valve box extensions. This item also includes the installation of base material below the valve in accordance with the details shown in the Plans and Collier County Standards. **Valves to be purchased by Collier County for this item.** The Contractor will be responsible for providing necessary fittings, appurtenances, and materials not included in the County's list of pre-purchased materials. Contractor shall provide imported backfill, if needed.
  
- 9 **Air Release Valves (Installation Only):** Payment for installing air release valves will be made at the Contract unit price for each air release valve acceptably installed. This item includes all labor and equipment for installation of valve, box and stem and valve box extensions. This item also includes the installation of base material below the valve in accordance with the details shown in the Plans and Collier County Standards. **Air Release Valve material to be purchased by Collier County for this item.** The Contractor will be responsible for providing necessary fittings, appurtenances, and materials not included in the

County's list of pre-purchased materials. Contractor shall provide imported backfill, if needed.

- 10 Connect to Existing 36" Water Main (Installation Only):** Payment for connecting to existing 36" water main will be made at the appropriate Contract unit price for each connection to existing 36" water main acceptably installed. This item includes all labor and equipment to install all necessary pipe, fittings, connections, protection of existing facilities, excavation, pipe bedding, dewatering, compaction, surface restoration, testing, bacteriological sample points testing, cleanup and all other work for a complete installation according to the details shown in the Plans and Collier County Standards. **Pipe material to be purchased by Collier County for this item.** The Contractor will be responsible for providing necessary fittings, appurtenances, and materials not included in the County's list of pre-purchased materials. Contractor shall provide imported backfill, if needed.
- 11 Leak Detection Device (Installation Only):** Payment for installing leak detection device will be made at the Contract unit price for each leak detection device acceptably installed. This item also includes the installation of base material below the device in accordance with the details shown in the Plans and Collier County Standards. **Leak Detection Device material to be purchased by Collier County for this item.** The Contractor will be responsible for providing necessary fittings, appurtenances, and materials not included in the County's list of pre-purchased materials. Contractor shall provide imported backfill, if needed.

### **PART 3: RESTORATION**

- 12 Abandon 36" Water Main (underground only):** Payment to abandon and grout or remove the 36" water main underground only will be made at the appropriate Contract Unit price per linear foot of water main acceptable abandoned in accordance with the Collier County specifications. This will include capping both sides of the existing above ground main crossing the Golden Gate Canal.
- 13 General Restoration:** Payment for general restoration will be made at the appropriate Contract lump sum price. This item includes all labor and materials required for clearing and grubbing, removal of trees and shrubs within the working area as directed by Collier County, clean-up, replacement of grass, sod, sidewalks, mailbox, culverts, storm sewers and other surface materials not specifically designated in the Bid.

**PART 4: ALLOWANCE**

- 14 **Allowance:** An allowance for unforeseen conditions will be made at the appropriate contract price of time & materials, lump sum, and / or contract unit price. Use of allowance must be approved by Collier County prior to the execution of the work.

**ALTERNATE BID ITEM**

- 15 **Abandon and Remove 36" Water Main:** Payment for abandon and remove 36" water main will be made at the appropriate Contract Unit price per linear foot of water main acceptable abandoned and removed in accordance with the Collier County specifications. This item may or may not be used by the County to determine the low bidder.

END OF SECTION

# Materials List

	-- BI6 --		
SP-PED11BS3650	36X50 DIPS SDR11 HDPE PIPE BLUE	700	FT
C1230BHS1000	12GA 30MM 1000 FT COP TRCR WIRE BLU	2000	EA
SP-PED11HMJ36	36 DIPS SDR11 MJ ADPT ONLY	2	EA
MJG36	36 MJ C153 GLAND	2	EA
SP-PED11316SSAK36	36" MJ ADPT ACCE KIT 316SS	2	EA
	TOTAL BI6		
	-- BI7 --		
DR18BP36	36 C905 DR18 CL235 PVC GJ BLUE PIPE	180	FT
SPWPC36	36 SIGMA BELL REST F/ C900 *PVLOK	2	EA
PD3105B52737	3X1000 UG DET WTR BLUE	1	EA
	SUBTOTAL		
MJTLA36	36 MJ C153 TEE L/A	1	EA
SSLCEP36	36 PVC WDG REST GLND PK *ONELOK	3	EA
I161	OMNI MRKR BLUE F/ WTR	1	EA
	SUBTOTAL		
MJ4LA36	36 MJ C153 45 BEND L/A	9	EA
SSLCEP36	36 PVC WDG REST GLND PK *ONELOK	17	EA
I161	OMNI MRKR BLUE F/ WTR	9	EA
	1- 36" MJ ADAPTER IN BI6		
	SUBTOTAL		
MJ2LA36	36 MJ C153 22-1/2 BEND L/A	1	EA
SSLCEP36	36 PVC WDG REST GLND PK *ONELOK	2	EA
I161	OMNI MRKR BLUE F/ WTR	1	EA
	SUBTOTAL		
MJTCAPLA36K	36X2 MJ C153 TAP CAP L/A	2	EA
SSLCEP36	36 PVC WDG REST GLND PK *ONELOK	2	EA
IBRLFCLUGK	LF 2 BRS SQ HD CORED PLUG	2	EA
	SUBTOTAL		
MJLSLA36	36X24 MJ C153 LONG SLV L/A	2	EA
SSLCEP36	36 PVC WDG REST GLND PK *ONELOK	3	EA
	1- 36" MJ ADAPTER IN BI6		
	SUBTOTAL		
	TOTAL BI7		
	-- BI8 --		

AFC2536MMLAOL	36 DI MJ RW OL GATE VLV L/A W/ BG	3	EA
SSLCEP36	36 PVC WDG REST GLND PK *ONELOK	5	EA
SSLDEP36	36 DI MJ WDG REST GLND PK *ONELOK	1	EA
I461SW	2PC SC CI VLV BX 19-22 WTR	3	EA
BVTM	3 BRS VLV ID TAG	3	EA
	TOTAL BI8		
	-- BI9 --		
P3416AS36B2IP	36X2 IP ALL SS SDL 37.90-39.10	2	EA
FFB17007NL	LF 2 MIP X FIP BALL CORP	2	EA
GBRNKM	LF 2X3 BRS NIP GBL	2	EA
IBRLF4K	LF 2 BRS 45 ELL	4	EA
GBRNK48	LF 2X48 BRS NIP GBL	2	EA
GBRNK24	LF 2X24 BRS NIP GBL	2	EA
FB11777WNL	LF 2 FIP X FIP BALL CURB ST LW	2	EA
P80NK12	2X12 PVC S80 NIP	2	EA
P80TCK	2 PVC S80 THRD COUP	2	EA
AD040K	2 COMB AIR RELEASE VLV	2	EA
FSCPH121215000288	PED HSNG F/ AIR RELEASE	2	EA
	TOTAL BI9		
	-- BI10 --		
MJLSLA36	36X24 MJ C153 LONG SLV L/A	4	EA
SSLCEP36	36 PVC WDG REST GLND PK *ONELOK	8	EA
	TOTAL BI10		
	-- BI11 --		
P3416AS36B1IP	36X1 IP ALL SS SDL 37.90-39.10	2	EA
FF17004NL	LF 1 MIP X FIP CORP	2	EA
IBRLF BGF	LF 1X3/4 BRS BUSH	2	EA
P80SMAF	3/4 PVC S80 SXM ADPT	5	EA
P80BF	3/4 X 20 FT PVC S80 BE PIPE	20	C
W975XL2F	LF 3/4 RED PRES BFP W/ BV	1	EA
P80S9F	3/4 PVC S80 SXS 90 ELL	2	EA
P80SFAF	3/4 PVC S80 SXF ADPT	1	EA
FC382325NL	LF 3/4X2-1/2 MIP STRT MTR COUP	2	EA
	METER BY COUNTY		
FB11333WNL	LF 3/4 FIP X FIP BALL CURB ST LW	1	EA
DD1200DISB	12 STD MTR BX W/PLS SLD LID	1	EA
	TOTAL BI11		