

SECTION 01025

MEASUREMENT AND PAYMENT

PART 1 GENERAL

1.1 GENERAL

- A. The unit price or lump sum price bid on each item as stated in the Proposal shall include furnishing all labor, superintendence, incidentals, machinery, supplies, equipment, and materials necessary to complete the various items of work in accordance with the Design Drawings and Specifications. Cost of work or materials shown on the Design drawings, called for in the Specifications and on which no separate payment is made shall be included in the bid price on the various pay items for which they are associated.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

PART 4 MEASUREMENT AND PAYMENT

PIPELINE AND APPURTENANCES

4.1 INSURANCE, BONDS, AND MOVE-IN RELATED EXPENSES (Bid Items No. 1 and 14)

- A. Measurement: Mobilization and demobilization activities shall be measured will be paid on a lump-sum basis occurrence.
- B. Payment: This price is full compensation for mobilization, demobilization, insurance, bonds, all activities and associated costs for transportation of contractor's personnel, equipment, operating supplies to the site, the establishment of offices, buildings, job trailers, or other necessary general facilities for the contractor's operations at the site, utilities to the office, building, or job trailers including power, construction permits, and fees, site administration expenses, temporary fencing, potholing of utilities, telephone, videotaping requirements, TPDES requirements, and TPDES fees. Payment shall also include all activities and costs for demobilization to include transportation of personnel, equipment, and supplies from the site, disassembly, removal, and site cleanup of offices, buildings, job trailers, or other facilities assembled on the site, contract closeout, as-built drawings and specifications, and all other incidentals associated with contractor's demobilization from the site. This item shall be limited to five (5) percent of the total bid price for Base Bid A USDA Project Limits, Items 2-13, and five (5) percent of the total bid for Base Bid B EPA Project Limits, Items 15-27. Both Base Bids A and B shall be paid 50% at the beginning of the project and 50% at closeout on a lump sum basis.

4.2 PROVIDE AND IMPLEMENT TRENCH SAFETY SYSTEM (Bid Items No. 2 and 15)

- A. Measurement: Furnishing, installing, and implementing the trench safety system shall be measured by the linear foot.
- B. Payment: This price is full compensation for furnishing, installing, and implementing the trench safety system where necessary (deeper than 5-feet) to include excavation, backfill required for excavation protection, furnishing, placing and removing shoring, sheeting, bracing, diversion or water, jacking and jacking removal, proper disposal of spoil material, equipment, labor, materials, tools, testing, inspection, and incidentals. The Contractor shall be responsible for repairing damages or distress to adjacent properties, structures, and utilities caused by these operations. It shall also cover the design of the trench safety system prepared by a Texas Licensed Professional Engineer.

4.3 VIDEOTAPING OF PROJECT SITE (Bid Items No. 3 and 16)

- A. Measurement: All costs for this work shall be compensated under this pay item and will be paid on a lump-sum basis.
- B. Payment: Project site shall be videotaped prior to any construction and be accompanied by the Engineer or his/her representative to show the existing conditions of the roadways, adjacent properties, easements, structures, utilities, drainage structures, culverts, channels, and any other existing improvements. Following substantial completion and site cleanup/ demobilization activities, the Contractor shall videotape the post-construction conditions of the entire project site. The Contractor shall provide two (2) copies in DVD format to the Engineer documenting the before and after construction conditions. The DVD's must include labels, including project title, bid number, and date recorded.

4.4 PROVIDE AND IMPLEMENT APPROVED TRAFFIC CONTROL PLAN (TCP) (Bid Items No. 4 and 17)

- A. Measurement: Furnishing, installing, and implementing the Traffic Control Plan (TCP) shall be paid on a lump-sum basis occurrence.
- B. Payment: This price is full compensation for the TCP and shall include preparation of a formal TCP by a Texas Licensed Professional Engineer, submitting and obtaining approval of the formal TCP from the required governing agencies (El Paso Street and Maintenance Department), furnishing, installing and maintaining the approved TCP in conformance to the specifications and principles given in the "*Texas Manual on Uniform Traffic Control Devices*" over the entire project area, and all other incidentals required for the Contractor to complete, implement and maintain the TCP requirements. Conflicting pavement marking/signs must be removed/covered for a long-term project. Work-zone markings must be installed where needed. Original markings/signs that are removed must be replaced upon completion. All costs for installation, maintenance, adjustments, replacements, removal, materials, equipment, labor, tools, traffic mounted attenuators, and incidentals shall be compensated under this bid item. Payment shall include daily, overnight, and long-term traffic control.

4.5 REMOVE AND REPLACE PAVEMENT AND INSTAL 2-INCH (TYPE-C) HMAC (Bid Items No. 5 and 18)

- A. Measurement: Furnishing and installing 2-inch HMAC asphalt pavement (Type C) will be measured in square yards of surface area in place.
- B. Payment: Price is full compensation for furnishing and installing 2-inch HMAC asphalt pavement (Type C) preparation and shall include asphalt, materials, application of seal coat, adjustment of existing valves, meters, and manholes, joints to existing pavements, concrete aprons/collars at the manhole and valve frames, equipment, labor, tools, and incidentals. The Contractor shall be responsible for the repair of damages or distress to adjacent properties, structures, and utilities caused by these operations. All costs for this work shall be compensated under this pay item.

4.6 FURNISH AND INSTALL 8-INCH, 12-INCH, AND 16-INCH PVC PIPE (Bid Items No. 6, 7 19, 20, and 21)

- A. Measurement: Furnishing and install an 8-inch, 12-inch, and 16-inch PVC pipeline and shall measure by the linear foot.
- B. Payment: Work under this item shall include all costs associated with the cutting and capping of existing water lines, bonnet box, cover, lid and all other appurtenances as detailed in the contract documents; 2-sac and or flowable fill, potholing of all existing utilities; connection of new water line to existing water lines; coordination; excavation, to include additional excavation and labor for vertical and/or horizontal adjustment of the main

to clear existing utility lines and/or other structures; backfilling and embedment; compaction and compaction testing for utilities; removal and disposal of existing utility lines when in conflict with new water mains (including AC, CI, and VC pipe removal and disposal work), all pipe, fittings, and accessories; removal of abandoned utility mains (per governing agency requirements based on material disposal requirements) as needed for water line installation; mechanical joint restraints; disinfection; testing; dewatering and disposal of water where required; and all appurtenances defined herein to include, but not limited to the following items: bypass temporary services as required, concrete thrust blocks, marking tape, landscaping & irrigation system repair, and traffic control systems, and all other items of the project not indicated as being covered under the other specific bid items shown on the proposal. Such payment shall be complete compensation for the complete performance of the work in accordance with the drawings and the provisions of these specifications.

4.7 FURNISH AND INSTALL 8-IN, 12-INCH AND 16-INCH GATE VALVES AND BONNET BOXES (Bid Item No. 8, 9, 22, 23, and 24)

- A. Measurement: Furnishing and installing the 8-inch gate valves shall be measured on each basis.
- B. Payment: This price is full compensation for the furnishing and installation of the gate valves and bonnet box, including but not limited to the connection of the gate valves, the bonnet box, the excavation, backfill, compaction, testing of the valves, concrete supports, joint restraints, labor and incidentals. The Contractor shall be responsible for repairing damages or distress to adjacent structures, properties, and utilities caused by the operations.

4.8 FURNISH AND CONNECT ¾-INCH WATER SERVICE LINES (Bid Item No. 10 and 25)

- A. Measurement: Furnishing and installing the ¾-inch water service lines shall be measured on each basis.
- B. Payment: Work under this item shall include all costs associated with furnishing labor, tie in from the main distribution line in the street, the piping to the meter box, backflow preventer and piping inside the yard for connection to the house, tie in point shall be noted before the connection is made, property yards shall be restored to original condition after installation, new materials, equipment, and; coordination; location of existing service; temporary service; and all appurtenances define herein to include, but not limited to, the following items: meter boxes service pipe, valves, and fittings. The Contractor shall, at their expense, completely restore to its original condition any disturbed area associated with the installation of the new water services. Water services shall be wet tapped with the line under pressure. No dry or direct taps are authorized.

4.9 FURNISH AND INSTALL STUB-OUT CONNECTION (Bid Item No. 11 and 26)

- A. Measurement: Furnishing and installing the water service stub-out connection shall be measured on each basis.
- B. Payment: Work under this item shall include all costs associated with furnishing labor, tie in shall extend from the main distribution line in the street to the property line, the stub-out shall be capped with a marker only, new materials, equipment, and; coordination; location of existing service; temporary service; and all appurtenances define herein to include, but not limited to, the following items: service line pipe, valves, and fittings. The Contractor shall, at their expense, completely restore area to original condition any disturbed area associated with the installation of the water service stub-out services. Water services shall be wet tapped with the line under pressure. No dry or direct taps are authorized. Service stub-outs shall be installed in accordance with the specifications and drawings.

4.10 FURNISH AND INSTALL NEW FIRE HYDRANTS (Bid Item No. 12 and 27)

- A. Measurement: Furnishing and installing the new fire hydrant shall be measured on each basis.
- B. Payment: Work under this item shall include all costs associated with furnishing labor, materials, equipment, and incidents to replace and install new fire hydrants, piping, and valve as indicated on the drawings in accordance with EPW's requirements and according to typical fire hydrant installations, including Davidson Anti-Terrorism Corrosion Resistant Valve Kit (DATV), but not limited to, any spool extension, as needed.

4.11 FURNISH AND INSTALL MASTER METER (Bid Item No. 13)

- A. Measurement: Furnishing and installing the new master meter shall be measured on each basis.
- B. Payment: Work under this item shall include all costs associated with furnishing the master meter (refer to drawing plans for more details) in accordance with EPWater's requirements, the backflow preventer and insulated box, concrete thrust blocks, rock wall protection, marking tape, demolition and replacement of landscaping to original condition or better, curb and gutter, concrete sidewalk, ADA ramp, material, equipment, labor, excavation, compaction, testing, disposal of demolished material, and all other items of the project not indicated as being covered under the other specific bid items shown on the drawings. Refer to the backflow preventer detail drawings for more details.

END OF SECTION