

PART 1 - GENERAL

1.1 GENERAL REQUIREMENTS

- .1 The Form of Tender includes one lump sum priced item and several unit priced items.
- .2 The total tendered price shall be the sum of the lump sum item plus the amounts calculated from the unit priced items based on the approximate quantities identified for each of the unit priced items.
- .3 The submitted tender prices will be inclusive of all costs for the complete supply and installation of all materials, labour and equipment required to complete the work. No separate payment will be made for any testing, inspections and approvals required by Contractor.
- .4 Tender prices for unit priced items including aggregate materials shall be inclusive of the costs for supply, placement and compaction.

1.2 LUMP SUM ITEM

- .1 No separate measurement for payment shall be for any work completed under this item.
- .2 The work of the lump sum item shall include, but not necessarily be limited to the following:
 - .1 All mobilization and demobilization to the site, access to the site, temporary utilities, construction facilities and temporary barriers and enclosures.
 - .2 Protection of all cultural resources.
 - .3 All environmental protection, including erosion controls, sedimentation controls, de-watering and dust control.
 - .4 Pre and post construction condition surveys of all existing features adjacent to the area of work.
 - .5 Field surveys for layout of the construction work items and for collection of as-built condition information
 - .6 Cleaning of work site, including removal of waste, debris and recyclable materials.
 - .7 Testing, inspections and permits from all regulatory agencies and groups required to complete work.
 - .8 Design, construction and maintenance of all temporary structures (water diversions, shoring, bracing, etc.) required to complete the work.

- .9 Protection of all features and services designated to remain.
- .10 Connections to existing water main, including all required fittings and appurtenances.
- .11 Steel floor drains, drainage piping, and polymeric grating, including penetrations through existing floor slab, perimeter sealing and anchorage.
- .12 Concrete curb, including cast in place concrete, and preparation of and connection to existing concrete floor slab.
- .13 Supply and installation of pressure sensor devices, including connection to existing local PLC, complete with all wiring, conduit, power supply, mounting hardware and all required fitting and appurtenances.
- .14 Supply and installation of total dissolved gas units, including connection to existing local PLC, complete with all wiring, conduit, power supply, mounting hardware and all required fittings and appurtenances.
- .15 Programming of PLC and commissioning of all equipment and instrumentation.
- .16 Supply and installation of level detection control devices, including connection to existing local PLC, complete with all wiring, conduit, power supply, mounting hardware and all required fittings and appurtenances.
- .17 Removal of all surplus/unusable materials from the site at completion of work.
- .18 Commissioning and demonstration of installed equipment.
- .19 Preparation and submission of all close-out submittals, maintenance manuals and as-built drawings.
- .20 Restoration of all areas disturbed by construction activities to equivalent original condition or better.
- .21 All other works which are required for completion of the project, exclusive of those covered by the unit priced items.

1.3 UNIT PRICE ITEMS

- .1 Direct Bury Pipe Installation (Owner-supplied)
 - .1 Unit of Measurement: lineal meters (m).
 - .2 Method of Measurement: Along centerline of pipe through fittings, valves and valve chambers.
 - .3 This item includes: Excavation of existing material (common) to lines and elevations indicated and stockpiling for re-use on site, sub-grade preparation, bedding, surround and backfill materials to finish grade, and installation of pipe and direct buried valves complete with valve boxes and appurtenances. Valves installed on existing water main include excavation of existing material (common), backfill, and all required fittings. Removal and replacement of culvert ends including excavation, disposal of removed piping, bedding, backfill, and connection to existing and end treatment; and aggregate materials to match existing access road structure at road crossing as indicated on drawings.

- .2 Hydroseed and Topsoil
 - .1 Unit of Measurement: square meters (m2).
 - .2 Method of Measurement: slope measure of indicated area at mean depth.
 - .3 This item includes: Supply and placement of topsoil, lime, fertilizer, mulch, erosion control agent, hydroseed and maintenance during establishment period.
- .3 Ditch Re-instatement (Rock-lined)
 - .1 Unit of Measurement: square meters (m2).
 - .2 Method of Measurement: slope measure of indicated area at mean depth.
 - .3 This item includes: Excavation and lining.
- .4 Trench Excavations (Rock)
 - .1 Unit of Measurement: cubic meters (m3).
 - .2 Method of Measurement: Average end area method for volume of rock material less theoretical trench volume. Boulders one cubic meter or larger will be classified as rock. Boulders removed from the excavation shall be measured along the three maximum perpendicular axes.
 - .3 This item includes: Excavation to lines and elevations indicated, and disposal of unsuitable material. Material deemed suitable for re-use by Departmental Representative shall be stockpiled on site.

PART 2 - PRODUCTS

Not applicable

PART 3 - EXECUTION

Not applicable
