

HAND-DIG TRENCH ASSEMBLY UNITS

The hand-dig trench assembly units (SHUR2/SHURS) are the hand-dig equals to the SUR2 and SURS underground excavation units, respectively, as described above. The Contractor shall be compensated at the SHUR2 or SHURS unit cost for “Air-Knife” excavation to facilitate the ease of the hand-digging operation. This unit does not include the use of other mechanized trenching equipment. The Contractor may choose to utilize other acceptable means of excavation such as a vacuum truck but will not be entitled to additional compensation beyond the SHUR2/SHURS unit.

UNDERGROUND CONDUIT ASSEMBLY UNITS

SUME: This conduit elbow unit includes the installation of one (1) conduit elbow of the inside diameter (inches), radius (inches), degree of sweep and type as specified. This unit includes the plug, end cap, ground bushing, bell end, tags or conductor seal as required for the application.

SUM50: This conduit unit includes conduit (1,000 feet) of the inside diameter (inches), quantity and type as specified, installed in trench (refer to SUR2/S trench specification), prefabricated pipe/casing, or by directional bore (refer to SURDB). This unit also includes magnetic cable locator discs, plug, end cap, tags, or pull rope as required for the application. HDPE conduit shall be installed in accordance with the latest published Chugach HDPE installation and repair procedure.

SURB/SURBE: This road bore unit includes casing (1,000 feet) of the inside diameter (inches), and type installed by jacking or auguring. This unit includes installation of spacers and concrete or sand slurry between the casing and the conduit. The Contractor is responsible for ensuring that the method of pumping the slurry does not damage the conduit. The excavation, backfill and compaction of the backfill (in addition to any permit requirements) for the bore pits necessary to install the casing are included within this unit. Shoring and dewatering are also included within the scope of work for this unit.

No compensation will be made for casing installations that are abandoned or aborted due to deviations in excess of the specified project tolerances.

SURC: This road-crossing unit includes the additional trench depth, compaction of backfill, select material and soils stabilizer required to meet the requirements of the State or Municipality Road permit(s) and/or Chugach specified provisions.

For winter construction (after batch plant closure) the Contractor shall install a temporary cold asphalt patch that shall be replaced with a permanent patch after the batch plants reopen in the next construction season.

SURDB: This directional bore (BORE) unit includes installation of conduit (1,000 feet), inside diameter (in inches), quantity and type (as specified in the SUM50 unit) in accordance with the current Chugach conduit installation and repair procedure, or within the project specified tolerances. Electro-fusion splices required to mate with PVC or GRSC conduit/elbows and HDPE conduit are part of this unit. This unit also includes the control and disposal of surface run-off of drilling fluids. Pothole locates of intersecting subsurface utilities are included as required.

In computing compensation to the Contractor for the BORE unit, only the horizontal distance at usable depth shall be used. No compensation will be made for additional footage on bores deeper than minimum usable depth. No compensation will be made for directional bore installations that are abandoned or aborted due to deviations in excess of the specified project tolerances.

CABLE TAGGING ASSEMBLY UNIT

The cable tag assembly unit (STAG) consists of the items shown in the list of materials on the construction specification. Compensation for this unit is based on the complete tagging of a circuit terminus such as a three-phase primary or a ribbon STAG installation, with each requiring three separate tags. This unit includes continuity testing of the cable(s) to ensure cable integrity and termination identifications.

IMPORT AND EXPORT OF MATERIAL UNITS**IMPORT AND INSTALL CLASSIFIED MATERIAL UNITS (XUR2-11A, 11B-D1 and 11C)**

The import of classified material unit consists of one-ton (2,000 lbs.) of the specified material (refer to tabulated descriptions below) compacted to 95% of the maximum density as determined by ASTM D-1557 (XUR2-11C (drain rock) does not require compaction). Weights shall be obtained on a scale that is certified by the State of Alaska. All loads shall be accompanied by a serialized weight ticket witnessed at the time of weighing by a Contractor-furnished representative. Chugach may at any time verify load weights and the weighing process as well as testing of the moisture content of the material. If tests indicate that the moisture content exceeds 4% consistently, the tonnage as measured shall be reduced by the difference. Chugach must approve all weight tickets at the time of delivery. Contractor shall supply Chugach a copy of the weight ticket. No payment will be made for loads not accompanied by a weight ticket.

XUR2-11A - Type II (Municipality of Anchorage MASS)

XUR2-11B - D1 (State of Alaska)

XUR2-11C - Drain Rock (4" minus)

EXCAVATION & DISPOSAL OF UNSUITABLE MATERIAL (XUR2-12)

Material found by Chugach to be unsuitable for placement of equipment or as backfill will be removed from the project site and disposed of as specified. This does not include the removal or disposal of excess spoils resultant from the installation of equipment, conduit, cables, and boxes/vaults. Unsuitable material will be measured in cubic yards by truck count. A truckload is defined as a truck volume of the dump bed agreed upon in writing by the Contractor and Chugach prior to hauling any material. Any quantity determined not to be a full load by Chugach will be reduced on a percentage basis.

LANDSCAPING UNIT

The general landscaping unit (SURL) consists of all landscaping as required for the Project Area. This unit consists of one (1) lot and will be paid for as a lump sum. This unit includes all material and labor required to repair or replace the specified property improvements damaged while installing or repairing Chugach's facilities.

DEWATER VAULT

This unit consists of pumping and disposal of all liquid water within one (1) box or vault for the duration of construction activity at that location. This unit includes all equipment, material, labor and permitting required to discharge or dispose of water according to local, state, and federal guidelines. When it is specifically called for in the Contract documents, the Contractor shall submit as part of his proposal the method to be used in the de-watering of a defined installation.

WINTER