



April 5, 2022

**TO: HOLDERS LIST**

**SUBJECT: Terminal 3 & Terminal 4 Shore Power Project**  
**CONTRACT NO. 071664**

**ADDENDUM NUMBER # 06**

This addendum is issued to revise and clarify the following:

**SPECIFICATIONS**

**SECTION 26 05 00 – Common Work Results for Electrical**

- Revise Article 1.03B to clarify medium voltage substation enclosure requirements.
- Revise title and footer to reflect new contract number 071664.

**SECTION 33 71 19 – Electrical Underground Ducts and Manholes**

- Revise Article 2.05 to clarify applicability of Tacoma Public Utilities (TPU) Electrical Construction Standards to TPU vaults.
- Revise Article 2.05 to clarify manhole/vault cover sizing requirements.
- Revise footer to reflect new contract number 071664.

B. All metal fabrications are to be 316 stainless-steel for exterior installations, and painted steel for interior installations, except the two medium voltage power substations shall be per Section 26 12 16 – Medium Voltage Power Substations and the two power factor correction capacitors enclosures shall be per Section 26 28 00 - MV Automatic Power Factor Correction Capacitors. The work shall consist of furnishing all materials, labor, and equipment for fabricating and/or repairing, PVC coating, painting, and erecting metal fabrications, all in accordance with the Drawings, notes, and this specification. Exposed galvanized steel is not allowed.

C. General requirements for materials and installation methods.

D. As part of this project, Contractor is required to perform civil work as related to Tacoma Power vaults, conduits and trench requirements as indicated on the drawings, all per Tacoma Power Standard Requirements. Prior to bid, Contractor shall become familiar with Tacoma Power Electrical Construction Standards. These can be reviewed at [www.mytpu/tacomapower/electrical-permitting/electrical-construction-standards.htm](http://www.mytpu/tacomapower/electrical-permitting/electrical-construction-standards.htm). This work will be inspected by a Tacoma Power Construction Inspector. This is a different electrical inspector and inspection from the NEC inspector and inspections required by the electrical permit. The portion of the electrical work associated with Tacoma Power's conduits and vaults must be done by an electrical sub-contractor listed on Tacoma Power's pre-qualified electrical contractors list. The list is available at:

<http://www.mytpu.org/contact/bids-contracts/prequalification-electrical-contractors.htm>

#### 1.04 INTENT OF DRAWINGS:

A. The Electrical Drawings are intended to serve as working Drawings for general layout. Equipment, concrete vaults, switches, panels, disconnects and raceway locations are partially diagrammatic and do not necessarily indicate actual routings or all appurtenances required for a complete installation.

B. Minor changes in the locations of concrete vaults, raceways, outlets and the like, from those shown on the Drawings, shall be made without extra charge if so directed before installation.

C. Contractor is required to take all working dimensions from civil drawings and field measurements. Do not scale electrical Drawings.

#### 1.05 MANUFACTURERS' RECOMMENDATIONS:

A. Make all installations in strict accordance with manufacturers' published recommendations and details. All equipment, materials and installation methods recommended by manufacturers shall be considered as part of this contract.

#### 1.06 RELATED WORK:

##### A. TEMPORARY CONSTRUCTION POWER:

1. Arrange with the Port of Tacoma for a new 480V temporary electrical service at both Pier 3 and Pier 4 construction areas.
2. Contractor is responsible for all costs associated with setup and removal of the temporary service and construction utility meter to serve the Contractor construction trailers.

5. Provide grounding insert on one wall of the handhole. Bond to all metal components in handhole.
- B. Cover shall incorporate an all 316 stainless steel nitrogen gas spring, to achieve one-man lift capability, with a 20lb. maximum opening force through the 90-degree opening range. The cover latch shall be 316 stainless steel recessed handle with no above-grade protrusions, spring loaded handle return to closed position automatically. Concealed mounting hardware, all stainless-steel construction.
- C. A self-engaging hold-open bar shall be provided to safely hold the cover in the open position and to protect against cover over-travel while opening.

## 2.05 MANHOLES / VAULTS

- A. Provide all Tacoma Public Utilities (TPU) vaults per TPU's Electrical Construction Standards. All other vaults shall be per the following specifications.
- BA. Precast Concrete Units: Rated minimum 200 KIP, interlocking, mating sections, complete with accessory items, hardware, and features as indicated on Drawings. Include term-a-ducts for conduit entrances and sleeves for ground rods.
- CB. Design structure according to ASTM C 858.
- DC. Joint Sealant: Continuous extrusion of asphaltic butyl material with adhesion, cohesion, flexibility, and durability properties necessary to withstand the maximum hydrostatic pressures at the installation location with the ground water level at grade.
- ED. Source Quality Control: Inspect structures according to ASTM C 1037. Units shall be capable of supporting designed loads.
- FE. Manhole/Vault Covers: Cast iron, capable of supporting minimum 200 KIP designed loads. Cast iron cover with cast-in legend "ELECTRIC", "CONTROL", or "COMMUNICATION" as appropriate. Machine cover-to-frame bearing surfaces. All manhole covers shall be a minimum of 42" in diameter for all vaults with a minimum footprint of 50" by 50" or larger.
- GE. All manholes/vaults shall be set level on 12 inches of crushed surfacing base course, except where otherwise specifically directed by the Engineer. Contractor shall be responsible for measuring and calculating elevations which will result in top of manhole/vault flush with final asphalt paving grade. Contractor to provide riser extensions and/or grade rings to adjust for manhole depths as indicated in the ductbank profiles as shown on the Civil drawings. In the event the manhole/vault installation does not conform to the foregoing criteria, the contractor shall remove and re-install the manhole/vault. The surrounding area shall be repaved in accordance with the forgoing criteria and the paving specifications, all at no additional cost to the Port of Tacoma. Raising the manhole/vaults top section and blocking with brick and/or grout will not be accepted. The contractor shall perform the above at no additional cost to the owner. See Civil/Structural drawings and specifications for all wheel load requirements for electrical, control, and communications manholes/vaults.
- HG. All manholes/vault lids over frames shall be field stamped with drawing ID.

## 2.06 ACCESSORIES

- A. Duct Supports shall be rigid PVC spacers selected to provide minimum NEC 2014 duct spacings. All horizontal spacers shall be staggered a minimum of 12 inches.