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June 7, 2018

TO: PLANHOLDERS

SUBJECT: PARCEL 77 AUTO IMPORT TERMINAL
PROJECT NO. 101247.01
CONTRACT NO. 070770

ADDENDUM NUMBER 04

This addendum is issued to amend the following:

DIVISION 00 - PROCUREMENT & CONTRACTING REQUIREMENTS

A. SECTION 00 01 10 – Table of Contents

1. **DELETE AND REPLACE** the issued SECTION 00 01 10 – Table of Contents with the attached SECTION 00 01 10 – Table of Contents (Attachment A).

B. SECTION 00 41 00 – Bid Form

1. **DELETE AND REPLACE** the issued SECTION 00 41 00 – Bid Form with the attached SECTION 00 41 00 – Bid Form (Attachment B).

DIVISION 01 – GENERAL REQUIREMENTS

A. SECTION 01 21 00 – Price and Payment Procedures

1. **DELETE AND REPLACE** the issued SECTION 01 20 00 - Price and Payment Procedures with the attached SECTION 01 20 00 - Price and Payment Procedures (Attachment C).

SECTION 31 - EARTHWORK

A. SECTION 31 00 00 - EARTHWORK

1. **REVISE** the first sentence in paragraph 1.02.B.1 to read as follows:

1. The compaction control density shall be the maximum density at optimum moisture content as determined by ASTM D 1557, Standard Methods for Moisture Density Relationships of Soil and Soil Aggregates, Methods B, C or D, as applicable.

1. **REVISE** the first sentence in paragraph 3.07.A to read as follows:

   A. The compaction control density shall be the maximum density at optimum moisture content as determined by ASTM D 1557, Standard Methods for Moisture Density Relationships of Soil and Soil Aggregates, Methods B, C or D, as applicable.

B. SECTION 31 23 33 - TRENCHING AND BACKFILLING

1. **ADD** the following to the table in paragraph 2.04.B:

Utility	Tape Color
Sanitary Sewer	Green
Water	Blue
Natural Gas	Yellow

SECTION 32 - EXTERIOR IMPROVEMENTS

A. SECTION 32 11 23 - CRUSHED SURFACING

1. **REVISE** the Paragraph 1.02.F.2.a to read as follows:

   a. Import Material Screening Criteria as indicated in Table 32 11 23 - 1, Import Material Screening Criteria.

Table 32 11 23 - 1, Import Material Screening Criteria

Chemical/Metal Name	Gravel/Rock Criteria (mg/kg)
Arsenic	13.8
Cadmium	2.0
Chromium (total)	113
Chromium (VI)	-
Copper	36
Lead	250
Mercury	0.14
Nickel	61
Zinc	100

SECTION 33 - UTILITIES

A. SECTION 33 10 00 - WATER UTILITIES

1. **ADD** Paragraph 1.03.C to read as follows:

   C. Test Results from testing as described in Paragraph 3.09 of this Section.

2. **DELETE** "or C153" from the first sentence of Paragraph 2.01.4.

B. SECTION 33 30 00 - SANITARY SEWAGE UTILITIES

1. **ADD** Paragraph 1.03.C to read as follows:

   C. Test Results:

      1. Pressure test results and television inspection video files for inspection of existing sanitary sewer services serving the site on Taylor Way and Alexander Avenue.

      2. Pressure test results for all new sanitary sewers.

      3. Television inspection files as described in Paragraph 3.06 of this Section.

2. **ADD** Paragraph 1.05 to read as follows:

   1.05 CONNECTION TO EXISTING SANITARY SEWER SERVICES

      A. Prior to connection to existing sanitary sewer services indicated on the Drawings at Taylor Way and Alexander Avenue, Contractor shall obtain Side Sewer Connection Permits from the City of Tacoma.

      B. As a condition of the side sewer connection permit issuance, Contractor shall be required to locate the existing side sewer pipes, clean the existing sewer manhole and side sewer pipes, perform a television inspection in the presence of the Engineer and the City of Tacoma Inspector, and perform a hydrostatic pressure test of the existing pipes from the proposed connection point onsite to the existing point of connection to the public sewer mains in Taylor Way and Alexander Avenue.

      C. In the event that utility locating, cleaning, pressure testing or television inspection identifies deficiencies in the condition of the existing side sewers requiring repair or replacement, Contractor shall notify the Engineer.

      D. Contractor shall conduct all locating, cleaning and testing of side sewers within 30 days of Notice to Proceed.

3. **ADD** Paragraph 2.05 to read as follows:

2.05 SEWER HOLDING TANK

A. Sewer holding tank shall be single wall or double wall fiberglass reinforced plastic (FRP) tank of the size and capacity indicated on the Drawings. Tank materials shall conform to the requirements of ANSI/AWWA D120-02 Thermosetting Fiberglass-Reinforced Plastic Tanks. Tank manufacturer shall be listed by NSF under NSF/ANSI Standard 61.

B. Materials: Tank shall be manufactured with 100% premium resin (Terephthalic polyester or highly cross-linked Isophthalic polyester resins), and chopped glass. No fillers or extenders will be used. No General, Orthophthalic, or odd lot resin will be used. All associated internal mounting hardware shall be rustproof.

C. Tank shall have lifting lug(s) that are capable of withstanding weight of tank with a safety factor of at least 2:1.

D. Tank shall be anchored with deadman and anchor straps supplied by the tank manufacturer specifically for use with the model of tank supplied.

E. Loading conditions:

1. Internal Load – All tanks shall be designed to withstand a 5-psig air-pressure test with 5:1 safety factor. Maximum test pressure is 5 psig.

2. Surface Loads – Water tank shall withstand surface H-20 and HS-20 axle loads when properly installed according to manufacturer’s guidelines.

3. External Hydrostatic Pressure and Burial Depth – tank shall be capable of being buried in ground with 7' of overburden over the top of the tank, the hole fully flooded, and maintain a safety factor of 5:1 against general buckling.

4. Tank shall support accessory equipment – such as such as access openings, risers, internal pump platform, drop/fill tubes, submersible pumps, manways, manway extensions, collar/ risers, FRP or PVC inlet/outlet piping, and ladders when installed according to tank manufacturers current installation guidelines.

5. Buried tanks shall be manufactured with integral trapezoidal ribs for structural integrity.

C. Storage:

1. Tank shall be capable of handling liquids with specific gravity up to 1.1.
2. Tank shall be vented to atmospheric pressure.

D. Manway and Access Openings:

1. Tank shall have a minimum of two manways.

2. Manways shall be constructed of FRP and shall have a minimum diameter of 24 inches.
3. Manway lids shall be ductile iron castings mounted in cast-in-place concrete slabs. Manway lids shall be watertight, capable of supporting HS-25 axle loads.

E. Piping and Fittings:

1. All PVC piping shall be a minimum of SCH40.
2. All threaded fittings shall be constructed of FRP, carbon steel or 304 Stainless Steel

C. SECTION 33 32 13 - SEWAGE LIFT STATION

1. **REVISE** the Paragraph 2.06.A to read as follows:

A. Fiberglass construction. The tank shall be a wetwell design consisting of a single wall, laminated fiberglass construction. The resin used shall be of a commercial grade suitable for the environment. The reinforcing material shall be a commercial grade of glass fiber capable of bonding with the selected resin. The inner surface shall have a smooth finish and be free of cracks and crazing. The exterior tank surface shall be relatively smooth with no exposed fiber or sharp projections present.

The tank wall and bottom shall be of sufficient thickness and construction to withstand the imposed loading due to saturated soil at the specified burial depth for each available tank height. All station components must function normally when exposed to the external soil and hydrostatic pressures developed at the specified burial depth. The tank bottom shall be reinforced with a fiberglass plate extending beyond the tank walls to support concrete anchoring to prevent flotation.

Concrete anchoring shall be provided in accordance with the manufacturers recommendations based on an anticipated groundwater level of +16.50 MLLW.

Depth and diameter pump tank shall be as indicated on the Drawings.

2. **REVISE** the Paragraph 2.06.B to read as follows:

B. The Fiberglass tank shall have a stainless-steel discharge bulkhead which terminates outside the tank wall with a 1-1/4" female pipe thread. The discharge bulkhead shall be factory installed and warranted by the manufacturer to be watertight. The tank shall be furnished with a field installed EPDM grommet to accept a 4.50" OD (4" DWV or SCH 40) inlet pipe.

The power and control cable shall connect to the pump by means of the provided NEMA 6P Electrical Quick Disconnect (EQD) and shall enter the tank through a field installed watertight strain relief connector supplied by the manufacturer. An electrical junction box shall not be permitted in the tank. Installation of the inlet grommet and cable strain relief shall require field penetration of the tank wall by the installing party. The tank shall also be vented to prevent sewage gases from accumulating inside the tank by means of a factory-provided, field-installed mushroom vent. The station cover

shall be factory drilled to accept the mushroom vent. The tank and stainless-steel discharge bulkhead shall be factory-tested to be watertight.

3. **REVISE** the Paragraph 2.06.C to read as follows:

   C. The tank shall have a hinged aluminum lockable lid with integral mushroom vent.

D. SECTION 33 40 00 - STORM DRAINAGE UTILITIES

1. **ADD** Paragraph 1.03.A.7 to read as follows:

   7. Temporary discharge to the existing storm water pond at the northeast corner of the site:

      a. Temporary pumping and piping plan including pump sizes and configurations, pipe and hose layouts, and discharge locations.

      b. Calculations for pumping capacity including the anticipated area of storm water collection, anticipated flows, and pump storage volumes.

2. **ADD** Paragraph 1.03.A.8 to read as follows:

   7. Testing results as described in Paragraph 3.07 of this Section.

3. **DELETE** Paragraph 2.05 and **REPLACE** with Paragraph 2.05 to read as follows:

   2.05 TRENCH DRAINS

      A. Trench drain shall be manufactured from polyester polymer concrete with a compressive strength of 14,000 psi and flexural strength of 4.000 psi. Trench drain shall have an internal width of 12 inches. Trench drain grates shall be ductile wrong conforming to ASTM 536-84, Grade 65-54-12, rather for DIN 19580 Load Class E.

4. **DELETE** Paragraph 2.06 and **REPLACE** with Paragraph 2.06 to read as follows:

   2.06 CATCH BASIN, MANHOLE, AND TREATMENT VAULT BLOCKOUTS

      A. Precast compression gasket connections or flexible boot connection shall be fabricated for all catch basin, manhole, and treatment vault blockouts with pipe material and diameter noted on plan, and shall include corrugated pipe adaptors where necessary.

      B. Precast compression gasket connection shall be supplied for all Type 1 or Type 1L catch basin connections with CPEP pipe 15 inches or smaller. Compression gasket shall be PVC and size per outside diameter of pipe noted on plan. Catch basin adapter shall include a sanded collar at reduced diameter side.

      C. Compression gasket or flexible boot installation shall require a water tight seal.

      D. Grouted connections shall not be allowed unless otherwise noted.

E. SECTION 33 40 19 - BIORETENTION SYSTEMS

1. **REVISE** Paragraph 2.03.A to read as follows:

   A. All plants shall conform to the requirements of Section 32 90 00 - Planting, and the current edition of American Standards for Nursery Stock, as approved by the American Standards Institute, Inc.

2. **ADD** Paragraph 3.03 to read as follows:

   3.03 PLANTING

      A. Planting shall be as specified in Section 32 90 00 - Planting.

      B. Plant Establishment: Care for all bioretention area planting through substantial completion of the Contract to ensure continued growth of the planted material. Plant establishment shall include but not be limited to labor and materials necessary for removal of foreign, dead, or rejected plant material, maintaining a weed free condition, temporary irrigation, and the replacement of all unsatisfactory plant material placed under the Contract.

         During the plant establishment period, the Contractor shall meet monthly with the Engineer for a joint inspection of the bioretention areas. The Contractor shall correct all conditions unsatisfactory to the Engineer within a 10-day period following the inspection. During the plant establishment period, plants that do not show normal growth shall be replaced.

3. **ADD** Paragraph 3.04 to read as follows:

   3.04 TEMPORARY IRRIGATION

      A. Provide temporary irrigation of planting within bioretention areas until substantial completion of the Contract. Payment for water used to water plants and ground covers in bioretention areas shall be the responsibility of the Contractor until substantial completion of the Contract.

F. SECTION 33 44 19 - STORM WATER TREATMENT

1. **REVISE** Paragraph 2.01.B.2 to read as follows:

   2. Perforated pipe shall be corrugated high density polyethylene with a filtration sock. Perforations shall be circular conforming to AASHTO M252/M294 Class 2, sock shall meet the requirements of ASTM D6707.

2. **ADD** Paragraph 2.01.C to read as follows:

   C. Fiberglass Reinforced Plastic (FRP) Grating:

1. Manufacture: Grating shall be of a one-piece molded construction with tops and bottoms of bearing bars and cross bars in the same plane. Grating shall have a square mesh pattern providing bidirectional strength. Grating shall be reinforced with continuous rovings of equal number of layers in each direction. The top layer of reinforcement shall be no more than 1/8" below the top surface of the grating so as to provide maximum stiffness and prevent resin chipping of unreinforced surfaces. Percentage of glass (by weight) shall not exceed 35% so as to achieve maximum corrosion resistance, and as required to maintain the structural requirements of the Contract.

2. After molding, no dry glass fibers shall be visible on any surface of bearing bars or cross bars. All bars shall be smooth and uniform with no evidence of fiber orientation irregularities, interlaminar voids, porosity, resin rich or resin starved areas.

3. Grating bar intersections are to be filleted to a minimum radius of 1/16” to eliminate local stress concentrations and the possibility of resin cracking at these locations.

4. Fire rating: Grating shall be fire retardant with a tested flame spread rating of 25 or less when tested in accordance with ASTM E 84. Data performed only on the resin shall not be acceptable.

5. Resin system: Manufacturer may be required to submit corrosion data from tests performed on actual grating products in standard chemical environments. Corrosion resistance data of the base resin from the manufacturer is not a true indicator of grating product corrosion resistance and shall not be accepted.

6. Color: Gray

7. Depth: 1-1/2“ with a tolerance of plus or minus 1/16".

8. Mesh Configuration: 2” x 1” with a tolerance of plus or minus 1/16" mesh centerline to centerline

9. Grating shall be designed for a uniform load of 100 psf or concentrated load of 300 lb. Deflection is not to exceed 1/4” or L/D = 180, whichever is less.

10. The manufacturer shall certify that the stiffness of all panels manufactured are never more than 2.5% below the published load-deflection values.

11. Substitutions: Other products of equal strength, stiffness, corrosion resistance and overall quality may be submitted with the proper supporting data to the engineer for approval.

3. **REVISE** Paragraph 2.03.A to read as follows:

   A. Filtration media mix shall consist of a blend of pea gravel, oyster shells and biochar. Components of the mix shall be combined in the following ratio:

Component	Portion of Mixture (by weight)
Pea Gravel	30%
Oyster shells	35%
Biochar	35%

4. **ADD** Paragraph 2.04.D to read as follows:

   D. VCP Screen material shall be commercial-grade PVC vinyl coated polyester mesh with 20% opening area. VCP screen shall be polypropylene edge bound with stainless steel grommets at 24 inches on center along all four edges. VCP screen shall be cut and bound to fit within the media cages without excess material, shall be pulled taught across the top of the FMM, and tied to the media cages at 24" on center using heavy duty cable ties rated for at least 120 pounds.

PLANS

A. P77 Auto Terminal Bid Set

1. **DELETE AND REPLACE** the issued Plans C1.8, C1.13, C1.14 and C1.17 with the attached Plans C1.8, C1.13, C1.14 and C1.17 (Attachment D).
2. **DELETE AND REPLACE** the issued Plans C2.0, C2.1, C2.2, C2.3, C2.4, C2.5, C2.21, C2.22, C2.30, C2.31, and C2.33 with the attached Plans C2.0, C2.1, C2.2, C2.3, C2.4, C2.5, C2.21, C2.22, C2.30, C2.31, and C2.33 (Attachment E).
3. **DELETE AND REPLACE** the issued Plans E1.1, E1.13, E1.16, E1.17, and E1.22 with the attached Plans E1.1, E1.13, E1.16, E1.17, and E1.22 (Attachment F).
4. **DELETE AND REPLACE** the issued Plans U1.1, U1.2, U1.4, U1.6, U1.8, U1.16, U1.20. and U1.24 with the attached Plans U1.1, U1.2, U1.4, U1.6, U1.8, U1.16, U1.20. and U1.24 (Attachment G).

APPENDIX

1. **INSERT APPENDICES:** E-1 – Critical Areas Permit, E-2 - Hydraulic Project Approval, and E-3 - Shoreline Conditional Use (Attachment H).

Attachments:

Attachment A – SECTION 00 01 10 – Table of Contents

Attachment B - SECTION 00 41 00 – Bid Form

Attachment C - SECTION 01 20 00 - Price and Payment Procedures

Attachment D – Plans C1.8, C1.13, C1.14 and C1.17

Attachment E - Plans C2.0, C2.1, C2.2, C2.3, C2.4, C2.5, C2.21, C2.22, C2.30, C2.31, and C2.33

Attachment F – Plans E1.1, E1.13, E1.16, E1.17, and E1.22

Attachment G – Plans U1.1, U1.2, U1.4, U1.6, U1.8, U1.16, U1.20. and U1.24

Attachment H – Appendices E-1, E-2, and E-3

Receipt for this addendum shall be indicated in the space provided in Section 00 41 00, Bid Form.

END OF SECTION