

ADDENDUM NO. 2

TRUCKEE RIVER TRAIL RECONSTRUCTION AND RENEWAL PROJECT March 8, 2018

The contract documents for the above-referenced project are hereby modified or explained further as follows:

QUESTIONS:

- 1) Are the existing bollards to be removed? If so, what is the total quantity and where does this work pay?
Yes, existing bollards and concrete bollard footings are to be removed. There are ten (10) existing bollards to be removed. Work to remove the bollards will be paid for under Bid Item No. 3 SITE PREPARATION.

- 2) Who is responsible for developing the storm water pollution prevention plan (SWPPP)? Who is responsible for the associated reporting in SMARTS?
A SWPPP is not required for this Project, please see special provision “SP-15 – SWPPP”. As such, there will not be any reporting on SMARTS. Please note the project is subject to the General Waster Discharge Requirements for Small Construction Project, including Utility, Public Works, and Minor Streambed/Lakebed Alteration Projects. The Contractor shall be responsible for employing adequate environmental protections shown on the construction drawings.

- 3) Is it the intent to use pulverized pathway material comprised of asphalt and underlying material on the AB shoulder or is this imported aggregate base material?
Yes, pulverized material shall be used for the AB shoulder. Attention is directed to Technical Specification 02320, Section 2.2.C, Gradation requirements.

- 4) Does the pathway subgrade beneath the pulverized pathway base material need to be exposed and processed?
Subgrade beneath the vast majority of the trail does not need to be exposed or processed. Only subgrade in sections identified to for Gravel Base (393 LF) needs to be exposed.

- 5) Will you please provide additional detail on which to base our bid for the Striping and Markings?
Bid Item No. 21 STRIPING, shall include a 4-inch wide, yellow, centerline stripe running the entire length of the trail with breaks at driveway crossings and intersections as directed by the Engineer. No additional trail markings are required.

CHANGES TO SPECIFICATIONS:

- 6) **BID PROPOSAL FORM,**
 - a. **Page BID – 6, BID SCHEDULE. The bid schedule has been revised to increase the quantity of Bid Item No.: 20 CONFORM TO PAVERS to 180 LF.**
 - i. **REPLACE the BID SCHEDULE with the attached schedule.**

7) PART VII – SPECIAL PROVISIONS

- a. **REVISE header title from “TAHOE CITY SEWER SYSTEM REHABILITATION, PHASE 2” to “TRUCKEE RIVER TRAIL RECONSTRUCTION AND RENEWAL PROJECT”**

8) TECHNICAL SPECIFICATION

- a. **ADD the attached technical specification, Section 03050 – Concrete.**

The foregoing requirements are in modification of and supplemental to the original contract documents, and in case of conflict, shall govern. All other provisions of the contract documents remain unchanged and shall be in effect.

Bidders shall acknowledge receipt of this Addendum and other Addenda issued in the blanks provided on the Bid Proposal Form. Bidders who fail to acknowledge this Addendum in the manner specified may have bid proposals rejected.

Sincerely,



Jon LeRoy, PE
Planning Engineer

cc: All Planholders

Tahoe City Public Utility District
TRUCKEE RIVER TRAIL RECONSTRUCTION AND RENEWAL PROJECT
BID PROPOSAL FORM
(Continued)

BID SCHEDULE

Item No.	Description	Quantity	Unit	Unit Cost (\$/Unit)	Total Cost (\$) ⁽¹⁾
1	Mobilization/Demobilization	1	LS	\$	\$
2	Temporary Erosion Control / Tree Protection	1	LS	\$	\$
3	Site Preparation	1	LS	\$	\$
4	Asphalt Pulverization	19,763	LF	\$	\$
5	Asphalt Removal	525	LF	\$	\$
6	Conform Grind	4	EA	\$	\$
7	3" AC Pavement	172,699	SF	\$	\$
8	Type A Backfill over Sewer	379	LF	\$	\$
9	Gravel Base	393	LF	\$	\$
10	Vegetation Barrier	3,628	LF	\$	\$
11	AB Shoulder	60,864	SF	\$	\$
12	Rock Slope Protection	3,560	SF	\$	\$
13	Hand Clean Inlet/Outlet	12	EA	\$	\$
14	Rock Protection (Type 1)	45	EA	\$	\$
15	Rock Protection (Type 2)	18	EA	\$	\$
16	18" HDPE Culvert	60	LF	\$	\$
17	Rock Drainage Swale	43	LF	\$	\$
18	Adjust Frame and Cover	23	EA	\$	\$
19	Removable Bollard	10	EA	\$	\$
20	Conform to Pavers	180	LF	\$	\$
21	Striping	1	LS	\$	\$
22	Cut Existing Pipe	3	EA	\$	\$
23	Pre/Post CCTV	1	LS	\$	\$
TOTAL BID ⁽²⁾ (in figures) Items 1 through 23				\$	
TOTAL BID (in writing) Items 1 through 23					

1. In the event that the product of a unit price and an estimated quantity does not equal the extended amount stated, the unit price will govern and the correct product of the unit price and the estimated quantity shall be deemed to be the amount of the bid.
2. In the event that the sum of the Total Cost does not equal the Total Bid amount stated, the actual sum of each Total Cost shall be deemed to be the amount of the bid.

SECTION 03050 – CONCRETE

PART 1 - GENERAL

1.1 SUMMARY

- A. This section covers the furnishing and placing of cast-in-place concrete as indicated and specified for exterior site work. This section includes concrete for:
 - 1. Class A Bedding
 - 2. SSMH frame and cover backfill and bollard foundations.
 - 4. Non-Shrink Grout (conform to pavers)

1.2 Related Sections

- A. Sections:
 - 1. Section 02320 – Aggregate Bases

1.3 REFERENCE SPECIFICATIONS

- A. Caltrans Standard Specifications, State of California, Department of Transportation, Standard Specifications, dated 2015.
- B. ASTM C1107 Standard Specification for Packaged Dry, Hydraulic-Cement Grout.
- C. Referenced sections of the Caltrans Standard Specifications are hereby incorporated into these Specifications in their entirety including any sections referenced there within, except measurement and payment.

1.4 SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Design Mixtures: For each concrete mixture.

1.5 QUALITY ASSURANCE

- A. Manufacturer Qualifications: A firm experienced in manufacturing ready-mixed concrete products and that complies with ASTM C 94/C 94M requirements for production facilities and equipment.
- B. ACI Publications: Comply with the following unless modified by requirements in the Contract Documents:
 - 1. ACI 117, "Specifications for Tolerances for Concrete Construction and Materials."

PART 2 - PRODUCTS

2.1 FORMWORK

- A. Form-Release Agent: Commercially formulated form-release agent that will not bond with, stain, or adversely affect concrete surfaces and will not impair subsequent treatments of concrete surfaces.
- B. Form Ties: Factory-fabricated, removable or snap-off metal or glass-fiber-reinforced plastic form ties designed to resist lateral pressure of fresh concrete on forms and to prevent spalling of concrete on removal.

2.2 CONCRETE MATERIALS

- A. Cementitious Material: Use the following cementitious materials, of the same type, brand, and source, throughout Project:
 - 1. Portland Cement: ASTM C 150, Type II
 - a. Fly Ash: ASTM C 618, Class F.
- B. Normal-Weight Aggregates: ASTM C 33, coarse aggregate or better, graded. Provide aggregates from a single source.
 - 1. Maximum Coarse-Aggregate Size: 3/4 inch nominal.
 - 2. Fine Aggregate: Free of materials with deleterious reactivity to alkali in cement.
- C. Water: ASTM C 94/C 94M.

2.3 ADMIXTURES

- A. Admixtures shall comply with ACI 318, Section 3.6.

2.4 CONCRETE MIXTURES, GENERAL

- A. Prepare design mixtures for each type and strength of concrete, proportioned on the basis of laboratory trial mixture or field test data, or both, according to ACI 301.
 - 1. Use a qualified independent testing agency for preparing and reporting proposed mixture designs based on laboratory trial mixtures.
- B. Limit water-soluble, chloride-ion content in hardened concrete to 0.30 percent by weight of cement.
- C. Admixtures: Use admixtures according to manufacturer's written instructions.

2.5 CONCRETE MIXTURES FOR BUILDING ELEMENTS

A. Class A Bedding: The slurry cement shall comply with Caltrans standard specification 19-3.02D.

1. Minimum Compressive Strength: 2,000 psi at 28 days.
2. The slurry cement backfill shall consist of a fluid, workable mixture of Portland Cement, aggregate, and water.
3. Aggregate shall be commercial quality concrete sand and meet the following requirements:

<u>Sieve Size</u>	<u>Percent Passing</u>
1-1/2 in.	100
1 in.	80-100
3/4 in.	60-100
3/8 in.	50-100
No. 4	40 - 80
No. 100	10 - 40

4. Water shall be free from oils, salts and other impurities which could have an adverse effect on the quality of the final backfill material.
5. Mixing: The Portland Cement, aggregate and water shall be proportioned by weight. Portland Cement shall be 188 pounds (2-sack) minimum for each cubic yard of material produced. The water content shall be sufficient to produce a fluid, workable mix that will flow and can be pumped without segregation of the aggregate while being mixed.
6. Materials for slurry cement backfill material shall be thoroughly machine mixed in a pugmill, rotary drum, or other approved mixer. Mixing shall continue until the cement and water are thoroughly dispersed throughout the material. Slurry cement backfill material shall be placed in the work within one hour after mixing or it shall be rejected.

B. SSMH frame and cover backfill and bollard foundations: Proportion normal-weight concrete mixture as follows:

1. Minimum Compressive Strength: 3,000 psi at 28 days.
2. Maximum Water-Cementitious Materials Ratio: 0.58.
3. Slump Limit: 3 inches plus or minus 1 inch.
4. Air Content: 0 percent, plus or minus 1 percent at point of delivery for 1-1/2-inch nominal maximum aggregate size.

C. Non-Shrink Grout: Proportion normal-weight concrete mixture as follows:

1. Minimum Compressive Strength: 10,000 psi at 28 days.
2. Height change, ASTM C827: + 0.4%

2.6 CONCRETE MIXING

- A. Ready-Mixed Concrete: Measure, batch, mix, and deliver concrete according to ASTM C 94/C 94M and furnish batch ticket information.
 - 1. When air temperature is between 85 and 90 deg F, reduce mixing and delivery time from 1-1/2 hours to 75 minutes; when air temperature is above 90 deg F, reduce mixing and delivery time to 60 minutes.
- B. Non-Shrink Grout: Add the minimum amount of water necessary to produce desired flow characteristics. Do not exceed a flow of 20 seconds per ASTM C939

PART 3 - EXECUTION

3.1 FORMWORK

- A. Design, erect, shore, brace, and maintain formwork, according to ACI 301, to support vertical, lateral, static, and dynamic loads, and construction loads that might be applied, until structure can support such loads.
- B. Construct formwork so concrete members and structures are of size, shape, alignment, elevation, and position indicated, within tolerance limits of ACI 117.
- C. Limit concrete surface irregularities, designated by ACI 347 as abrupt or gradual, as follows:
 - 1. Class A, 1/8 inch for smooth-formed finished surfaces exposed to view.
 - 2. Class C, 1/2 inch for rough-formed finished surfaces for other concrete surfaces.
- D. Construct forms tight enough to prevent loss of concrete mortar.
- E. Retighten forms and bracing before placing concrete, as required, to prevent mortar leaks and maintain proper alignment.

3.2 EMBEDDED ITEMS

- A. Place and secure anchorage devices and other embedded items required for adjoining work that is attached to or supported by cast-in-place concrete. Use setting drawings, templates, diagrams, instructions, and directions furnished with items to be embedded.
 - 1. Install anchor rods, accurately located, to elevations required and complying with tolerances in Section 7.5 of AISC's "Code of Standard Practice for Steel Buildings and Bridges."

3.3 CONCRETE PLACEMENT

- A. Before placing concrete, verify that installation of formwork, reinforcement, and embedded items is complete and that required inspections have been performed.

- B. Deposit concrete continuously in one layer or in horizontal layers of such thickness that no new concrete will be placed on concrete that has hardened enough to cause seams or planes of weakness. If a section cannot be placed continuously, provide construction joints as indicated. Deposit concrete to avoid segregation.
 - 1. Deposit concrete in horizontal layers of depth to not exceed formwork design pressures and in a manner to avoid inclined construction joints.
 - 2. Consolidate placed concrete with mechanical vibrating equipment according to ACI 301.
 - 3. Do not use vibrators to transport concrete inside forms. Insert and withdraw vibrators vertically at uniformly spaced locations to rapidly penetrate placed layer and at least 6 inches into preceding layer. Do not insert vibrators into lower layers of concrete that have begun to lose plasticity. At each insertion, limit duration of vibration to time necessary to consolidate concrete and complete embedment of reinforcement and other embedded items without causing mixture constituents to segregate.

- C. Cold-Weather Placement: Comply with ACI 306.1 and as follows. Protect concrete work from physical damage or reduced strength that could be caused by frost, freezing actions, or low temperatures.
 - 1. When average high and low temperature is expected to fall below 40 deg F for three successive days, maintain delivered concrete mixture temperature within the temperature range required by ACI 301.
 - 2. Do not use frozen materials or materials containing ice or snow. Do not place concrete on frozen subgrade or on subgrade containing frozen materials.
 - 3. Do not use calcium chloride, salt, or other materials containing antifreeze agents or chemical accelerators unless otherwise specified and approved in mixture designs.

- D. Hot-Weather Placement: Comply with ACI 301 and as follows:
 - 1. Maintain concrete temperature below 90 deg F at time of placement. Chilled mixing water or chopped ice may be used to control temperature, provided water equivalent of ice is calculated to total amount of mixing water. Using liquid nitrogen to cool concrete is Contractor's option.
 - 2. Fog-spray forms, steel reinforcement, and subgrade just before placing concrete. Keep subgrade uniformly moist without standing water, soft spots, or dry areas.

3.4 CONCRETE PROTECTING AND CURING

- A. General: Protect freshly placed concrete from premature drying and excessive cold or hot temperatures. Comply with ACI 306.1 for cold-weather protection and ACI 301 for hot-weather protection during curing.

3.5 FIELD QUALITY CONTROL

- A. Testing and Inspecting: Owner will engage a special inspector and qualified testing and inspecting agency to perform field tests and inspections and prepare test reports.
- B. Inspections: Per Chapter 17 of the 2013 CBC as indicated in the Statement of Special Inspections.

- C. Concrete Tests: Testing of composite samples of fresh concrete obtained according to ASTM C 172 shall be performed according to the following requirements:
 - 1. Testing Frequency: Obtain one composite sample for each day's pour of each concrete mixture for each 50 cu yd or fraction thereof of each concrete mix placed each day.
 - 2. Evaluation and acceptance of concrete shall conform with ACI 318, Section 5.6.

3.6 DEFECTIVE WORK

- A. Defective concrete work shall be removed and replaced at Contractor's expense.

END OF SECTION 03050