



City of Tacoma

Power Generation

ADDENDUM NO. 1

DATE: December 9, 2022

REVISIONS TO:

Request for Bids Specification No. PG22-0290N

Tower Painting Weatherwax Ridge & Peterman Hill

NOTICE TO ALL BIDDERS:

This addendum is issued to clarify, revise, add to or delete from, the original specification documents for the above project. This addendum, as integrated with the original specification documents, shall form the specification documents. The noted revisions shall take precedence over previously issued specification documents and shall become part of this contract.

REVISIONS TO THE SUBMITTAL DEADLINE:

The submittal deadline remains the same.

REVISIONS TO THE TECHNICAL PROVISIONS:

Division 9, Section 09900 – PAINTING THREE COAT MOISTURE-CURE URETHANE MICACEOUS IRON OXIDE revised as follows:

Page 1: Corrected Material Description. Three coat system will include full primer coat, full intermediate coat and semi-gloss topcoat.

Page 3: Topcoat Matte Finish option deleted. Semi-gloss finish only accepted.

Page 4: Deleted MC-Universal 100 Intermediate Coat and MC-Ferrox A 100 STD Topcoat options. MC-Miomastic 100 Intermediate Coat and MC-Luster 100 STD Topcoat only accepted. Included items codes for approved products.

Page 5: Added SSPC QP1 Certification is required

NOTE: Acknowledge receipt of this addendum by initialing the corresponding space as indicated on the Signature Page. Vendors who have already submitted their bid/proposal may contact the Purchasing Division at 253-502-8468 and request return of their bid/proposal for acknowledgment and re-submittal. Or, a letter acknowledging receipt of this addendum may be submitted in an envelope marked Request for Bids Specification No. PG22-0290N Addendum No. 1. The City reserves the right to reject any and all bids, including, in certain circumstances, for failure to appropriately acknowledge this addendum.

cc: Kevin Smith, Power Generation

Addendum 1

DIVISION 9 - FINISHES

SECTION 09900 – PAINTING THREE COAT MOISTURE-CURE URETHANE MICACEOUS IRON OXIDE

PART 1 GENERAL

1.1 SECTION INCLUDES

The work under this section includes:

- A. Cleaning and Surface Preparation: Low-pressure water cleaning in accordance with SSPC-SP12/NACE 5 Water Jetting, supplemented with SSPC-SP1 Solvent Cleaning followed by SSPC-SP2 Hand Tool Cleaning and SSPC-SP3 Power Tool Cleaning on areas of corrosion. Low Pressure Wash cleaning to use minimum of 3000 PSI using rotating nozzle.
- B. Application: All cleaned surfaces, including exposed metal and existing galvanizing shall be painted with a single component, moisture-cure urethane system consisting of a zinc/micaceous iron oxide spot primer on all bare steel where galvanizing is no longer present and full prime coat and a topcoat.

1.2 SUBMITTALS

- A. Submit in accordance with Section 01300 - Submittals and Shop Drawings.
- B. Product data

Submit complete product list

- 1. Arrange in same format as scheduled in this section
- 2. Include manufacturer's publications, performance criteria, recommendations, and limitations.
- 3. Show conformance to specifications.
- C. Samples
 - 1. Color chips: Manufacturer's complete selection
 - 2. Color samples: Size not less than 8-inches x 10-inches on heavy card stock.
- D. Subcontractor's written qualifications: Furnish written qualifications attesting to past satisfactory experience. List last three (3) jobs. Include following information:
 - 1. Start and completion dates
 - 2. Project manager, telephone number

1.3 MATERIAL DESCRIPTION

- A. The coating system for all cleaned surfaces, including exposed metal and existing sound galvanizing, shall incorporate a three coat single-component moisture-cure urethane system consisting of a zinc-rich/micaceous iron oxide-rich ~~spot~~full primer ~~coat-on-all-exposed-bare-steel~~, a micaceous iron oxide-rich full ~~intermediate~~prime coat and a ~~semi-gloss~~matte finish aliphatic topcoat.
- B. All steel coating products furnished for this project shall be manufactured by the same Manufacturer and shall be compatible with one another.

- C. The manufacturer must certify the protective coatings can be applied in relative humidity as high as 99%, in temperature as low as 20° F, and that there is no restriction on the dew point temperature differential if the surface is visibly dry and free from condensate. The surface must be verified to be free of any frozen water products by an approved third party inspector when application is below 33° F. The use of a 20X-power magnifier is recommended.
- D. All paint shall be prepared at the factory ready for application. The addition of thinner or other material to the paint after the paint has been shipped shall not be permitted, except as recommended by the manufacturer and by permission of the Engineer. Contractor shall furnish paint manufacturer's certification that the paint complies with paint system requirements specified.
- E. Tinting - All tinting materials required shall be added to the paint at the time of paint Manufacture. Field tinting shall not be allowed without approval.
- F. All containers shall be labeled showing the exact title of the paint, the manufacturer's name, date of manufacture, the manufacturer's batch number, and the specification number and the lot number if appropriate. Containers shall be packaged in new approved cans.
- G. Precautions concerning the handling and storage of paint shall be shown on the label of paint and solvent containers.

PART 2 PRODUCTS

2.1 PHYSICAL PROPERTIES

Only single-component Moisture-Cure Urethane Coatings shall be allowed:

A. FULL PRIME COAT

Generic Type: Micaceous Iron Oxide (MIO)* / Zinc-rich, single-component, Moisture-cure polyurethane

Vehicle Type: Moisture-cure polyurethane

Volume Solids: 60% minimum

Pigment Type: Minimum 4 lbs/gal MIO and 4 lbs/gal Zinc Dust

Dry film thickness: 3.0 – 5.0 mils DFT

VOC: VOC 0.8 LB/GAL

Weight per Gallon: Minimum 16 lb/gal (2.38 kg/l)

B. INTERMEDIATE COAT

Generic Type: Micaceous Iron Oxide (MIO)* filled, single-component,
Moisture-cure polyurethane
Vehicle Type: Moisture-cure polyurethane
Volume Solids: 60% minimum
Pigment Type: Minimum 4 lbs/gal MIO and 4 lbs/gal Zinc Dust
Color: Grey or red-oxide
Dry film thickness: 3.0 – 5.0 mils DFT
VOC: VOC 0.8 LB/GAL
Weight per Gallon: Minimum 16.0 lb/gal (1.92 kg/l)

C. FULL TOPCOAT

Generic Type: Micaceous Iron Oxide (MIO)* filled, single-component,
Moisture-cure, aliphatic polyurethane
Vehicle Type: Moisture-cure aliphatic polyurethane
Volume Solids: 60% minimum (50% minimum if approved by the Engineer)
Pigment Type: Minimum 3 lbs/gal MIO
Finish: Semi-gloss ~~or Matte~~
Color: Grey
Dry Film Thickness: 2.0 - 4.0 mils DFT
VOC: VOC 0.8 LB/GAL
Weight Per Gallon: Minimum 10.0 lb/gal (1.20 kg/l) @ 62% solids
Or minimum 9.0 lb/gal (1.08 kg/l) @ 52% solids

*All Micaceous Iron Oxide products shall conform to ASTM D5532-94, Type 1, and have a Certificate of Conformance.

2.2 PERFORMANCE PROPERTIES

The system identified in this specification meets or exceeds the following test requirements:

A. CORROSION RESISTANCE, ASTM B117, SALT SPRAY TEST

Must pass 4,000 hours minimum with less than 2mm creep from scribe. Panels must be 1/8 inch cold rolled steel minimum, having SSPC-SP10 Near White Blast with 2-3 mils angular profile.

B. ACCELERATED WEATHERING, ASTM G53

Must pass 400 hours QUV B bulb with no chalking, cracking, or gloss loss greater than 20 percent.

C. FORWARD IMPACT, ASTM D2794

Must pass minimum 150 lb. impact.

D. ABRASION RESISTANCE, ASTM D4060

Less than 90 mg loss on CS-17 wheel, 1000 gram/load, 1000 cycles.

B. MOISTURE RESISTANCE, ASTM D4585

Must pass 1000 hours with no change in appearance.

B. FLEXIBILITY, ASTM D522, CONICAL MANDREL BEND TEST

Must pass 1/2 inch mandrel bend with no cracking.

B. ADHESION, ASTM D4541

Must pass minimum 500 psi on certified pull test.

2.3 PRE-APPROVED PRODUCTS AND MANUFACTURE REPRESENTATIVE

A. Local Representative:

Dan (Spud) Wolfe

Wasser NW Rep & Tech Support

360-870-3513

paintspud@earthlink.net

B. Approved Products:

Full Primer: MC-Miozinc 100 W031.4

Intermediate Coat: MC-Miomastic 100 W131.35 ~~or MC-Universal 100~~

Topcoat: MC-Luster 100 STD Grey W211.64 ~~(Grey SEMI-Gloss) or~~
~~MC-Ferrox A 100 STD (Grey Matte)~~

Accelerator: PURQuik™ W47.0.4

Solvent: MC-Thinner W41.0.1 & MC-Thinner 100 W43.0.1

PART 3 EXECUTION

3.1 SURFACE CLEANING AND PREPARATION

Contractor shall remove all paint as specified below:

- A. Low Pressure Water Washing: Low-pressure water cleaning in accordance with SSPC-SP12/NACE 5 Water Jetting, utilizing equipment capable of a minimum 3000 psi at the nozzle, shall be performed by methods which will remove all dirt, other loose deleterious materials from all the surfaces. SSPC-SP1 Solvent Cleaning, and SSPC-SP2 Hand Tool Cleaning, methods shall be employed as necessary to augment water washing.
- B. Hand/Power Tool Cleaning - Areas of rust which remain following high-pressure water washing, shall be cleaned in accordance with SSPC-SP2, Hand Tool Cleaning, and SSPC SP3, Power Tool Cleaning. The edges of the existing sound galvanizing surrounding the spot-cleaned areas shall be feathered and no loose or abrupt edges shall remain.
- C. Prior to painting, all metal surfaces shall be free of all cleaning residue, supplemented with hand-held brushing and SSPC-SP1 Solvent Wiping, if necessary. Cleaning shall be approved by the engineer prior to painting.
- D. Particular attention shall be given to edges, crevices, nuts, bolts and rivets.

- E. Tight, inaccessible metal-to-metal plates, etc. shall be sealed with a compatible joint sealing compound, as approved by manufacturer.
- F. All bare metal surfaces shall be primed on the same day as cleaning.

3.2 APPLICATION REQUIREMENTS

- A. Dry Film Thickness Schedule:

Full Primer: 3 - 5 mils DFT

Intermediate: 3 - 5 mils DFT

Topcoat: 2 - 4 mils DFT

- B. All painting required under this contract, shall be performed in conformance with the best practices of the trade, with the recommendations of the coating manufacturer, and with applicable portions of the Steel Painting Council Specification SSPC-PA 1; provided that those specifications are not in conflict with these standard specifications. SSPC QP1 Certification is required.
- C. All surfaces cleaned to bare metal shall be coated with the specified prime coat the same working day. Any cleaned surface that rusts before the application of the prime coat shall be re-cleaned.
- D. Paint film thickness measurements will be made during wet film application, utilizing an approved wet film thickness gauge, in conjunction with an approved magnetic or digital dry film gauge, such as an Elcometer 211 or Positest digital gauge, after the application of each subsequent coat. One hundred percent of all thickness measurements shall be within the specified minimum dry film thickness. Where thickness measurements fall below the specified minimum, additional applications of paint shall be made as necessary to meet the thickness required, at no additional cost to project owner.
- E. Sufficient time shall elapse between successive coats to permit them to dry properly for recoating. **Consult specific product data sheets for proper cure times.**
- F. Apply coatings via spray, brush and/or roll methods, utilizing approved equipment that is standard to the industry, and according to the Wasser application instructions.
- G. A primer stripe coat shall be applied to all exposed metal surfaces as described in Section 3.1-D. All bolts shall be brush stripe coated with an additional brush application of a penetrating nature into tight metal to metal areas prior to application of approved joint sealer, compound as prescribed in Section 3.1-E.

3.3 CLEAN UP

- A. At conclusion of project, thoroughly clean paint and splatters from surfaces including adjacent surfaces. Take care not to scratch or otherwise damage surfaces. Verify chemical compatibility of cleaners to be applied to materials to be cleaned.
- B. Leave premises neat and clean; free from debris and residue from work of this section.

END OF SECTION
