

# City of Gold Bar

EST. 1910



107 – 5<sup>th</sup> Street, Gold Bar, WA 98251

## PAINTING SPECIFICATION NORTH RESERVOIRS AUGUST 16, 2012

### PART 1 - GENERAL

- A. This specification covers preparation of surfaces, performance and completion of painting of all exterior and interior surfaces as required by the drawings and as specified herein.
- B. All materials delivered to the job site shall be in original sealed and labeled containers of the paint manufacturer.
- C. Coatings shall be applied during good painting weather. Air and surface temperatures shall be within limits prescribed by the manufacturer for the coating being applied and work areas shall be reasonably free of airborne dust at the time of application and while coating is drying.
- D. The term "Owner" refers to the City of Gold Bar and the Owner is represented by the Public Works Director, John L Light.

### 1.02 REFERENCES

Standards, Specifications, Recommended Practices, and listed herein are part of this Section to extent referenced.

- A. American Water Works Association
  - 1. AWWA D102-11 Coating Steel Water Storage Tanks
- B. American Society for Testing and Materials:
  - 1. ASTM D16 Terminology Relating to Paint, Varnish, Lacquer, and Related Products
  - 2. ASTM D3359 Test Method for Measuring Adhesion by Tape Test
  - 3. ASTM D4263 Test Method for Indicating Moisture in Concrete by the Plastic Sheet Method.
  - 4. ASTM D4541 Test Method for Pull Off Strength of Coatings Using Portable Adhesion-Testers
  - 5. ASTM D1005 Test for determining dry film thickness
  - 6. ASTM D4417 Test for determining surface profile

- D. The Society for Protective Coatings:
1. SSPC-SP1 Specification for Solvent Cleaning
  2. SSPC-SP2 Specification for Hand Tool Cleaning
  3. SSPC-SP3 Specification for Power Tool Cleaning
  4. SSPC-SP5 Specification for White Metal Blast Cleaning
  5. SSPC-SP6 Specification for Commercial Blast Cleaning
  6. SSPC-SP7 Specification for Brush-Off Blast Cleaning
  7. SSPC-SP10 Specification for Near White Metal Blast Cleaning
  8. SSPC-SP11 Specification for Power Tool Cleaning to Bare Metal
  9. SSPC-SP 15 Specification for Commercial Power Tool Cleaning
  10. SSPC-PA1 Painting Application Specification
  11. SSPC-PA2 Measurement of Dry Paint Thickness with Magnetic Gages
  12. SSPC-SP12 Water Jetting

## PART 2 - MATERIALS

- 2.01 Paint materials shall be as manufactured by Tnemec Company or Sherwin Williams. Paint application shall be in strict accordance with manufacturer's printed instructions except that coating thickness specified in paint schedule herein shall govern.

## PART 3 - APPLICATION

- A. Materials shall be mixed, thinned and applied according to the manufacturer's printed instructions.
- B. Prepare surface and touch up bare steel with specified primer before applying field coats.
- C. Finish coats shall be uniform in color and sheen without streaks, laps, runs, sags or missed areas.

### 3.01 SURFACE PREPARATION

- A. Exterior Metal Surfaces

All surfaces shall be pressure washed with a 3,500 psi pressure washer. All rusted areas shall be cleaned to SSPC-SP11 to remove corrosion.

## 3.02 COATING SYSTEMS

### A. Exterior

#### Tnemec System

1. Spot prime all cleaned and bare steel with Tnemec Series 27 Epoxy at 3-5 mils dry film thickness.
2. Intermediate coat all surfaces with one coat Tnemec Series 27 Epoxy at 3 - 5 mils dry film thickness.
3. Finish coat all surfaces with one coat Tnemec Series 73 Endurashield at 3 - 5 mils dry film thickness. Color to match current color as much as possible.

Total dry film thickness shall be 10 mils minimum.

-OR-

#### Sherwin-Williams System

1. Spot prime all cleaned and bare steel with Macropoxy 646 at 3-5 mils dry film thickness.
2. Intermediate coat all surfaces with one coat Acrolon 218 at 4 - 5 mils dry film thickness.
3. Finish coat all surfaces with one coat Acrolon 218 at 4 - 5 mils dry film thickness. Color to match current color as much as possible.

Total dry film thickness shall be 10 mils minimum.

## PART 4 - APPLICATION AND WORKMANSHIP

1. Paint shall be applied in accordance with the manufacturer's specifications and instructions, the Standard Specifications referenced herein, and the following conditions and their implied intent or as approved by the Owner.
2. The paint shall be applied by brush, roller, conventional or airless spray equipment according to manufacturer's suggestions and only good suitable quality, properly operating equipment shall be used. In the case of spray equipment, the air pressure used shall be within the ranges recommended by both the paint and spray equipment manufacturers. Spray paint shall be conducted only under rigidly monitored wind conditions, and the Contractor shall be fully responsible for any damage occurring from over-spray.

3. Allow each coat to dry thoroughly before applying next coat. Provide adequate ventilation for tank interior to carry off solvents during drying phase. Each coat shall be applied to obtain a uniform and even finish. Work shall be free from "runs", "bridges", "shiners", or other imperfections due to faulty intervals. Particular care shall be taken to obtain a uniform, unbroken coating over all bolts, threads, nuts, welds, edges, and corners. Finish coats shall be uniform in color and sheen without streaks, laps, runs, sags, or missed areas.
4. No paint shall be applied in extreme heat nor in dust or smoke-laden air nor in damp or humid weather or any other condition which in the judgment of the Owner is detrimental or is not recommended by the paint manufacturer. Temperatures shall be at least 40°F, relative humidity 85% maximum.
5. Where thinning is necessary, only the products of the manufacturer furnishing the paint and for the particular purpose shall be allowed. All paint shall be thoroughly mixed before being applied. Materials shall be mixed, thinned, and applied according to the manufacturer's printed instructions.
6. Application rates by s.f./gal and/or number of coats is merely a guide; deficiencies in film thickness or continuity shall be corrected by the application of additional coats of paint to attain the dry film thickness specified.
7. No paint, primer, or other coating shall be applied to any surface until the Owner has approved the condition of such surface.

#### PART 5 - CAULKING

1. Caulk the bottom ring of both reservoirs where it meets the concrete foundation with Sika Flex 1A. All caulking will be pinhole free. Painting of the caulking is not required.

#### PART 6 - INSPECTION, TESTING, AND GUARANTEE

The Owner will provide normal and customary inspection. Contractor shall provide or assist the Owner's representative with access to all surfaces to be coated.

##### Inspection

All work performed under this specification shall be subject to, but not limited to, inspection in the following manner.

1. The Owner shall approve all surface preparation prior to application of any coating.
2. Each coat shall be inspected prior to application of the next coat. Areas found to contain runs, oversprays, roughness, or other signs of improper application shall be repaired or recoated.

3. The manufacturer's representative shall have the right to inspect and to check all phases of surface preparation and application of his product and make suggestions to the Engineer for correction if application does not conform to the manufacturer's instruction or to the above specifications.
4. The completed coating shall produce a minimum dry film thickness as specified herein. The thickness of the dry film will be determined with Elcometer Magnetic Thickness Gauge, G.E. Film Thickness Gauge, or Mikrotest Film Thickness Gauge, or comparable instrument furnished by the Contractor. In areas where the thickness is not developed, sufficient additional coats shall be applied to produce the thickness specified.
5. The Contractor is hereby notified that the Owner will inspect the project prior to the expiration of the warranty period and all defects in workmanship and material shall be repaired by the Contractor.

#### PART 7 – SCOPE OF WORK AND BIDDING

1. Painting specifications are covered in Parts 1 – 5.
2. Two reservoirs shall have their exteriors painted. They are both on the same site. Bidding Contractors are required to visit the reservoir site before submitting their bid. There is limited access to the reservoirs and some rough road conditions. Contact John Light at City Hall at 360-793-1101 to make arrangements to visit the site.
3. Reservoir # 1 is 27 feet in diameter and 32 feet tall. Clean and paint the entire tank exterior. Pressure washing includes the tank shell, top and concrete foundation.
4. Reservoir # 2 is 48 feet in diameter and 24 feet tall. Clean and touch up paint rusted spots on the tank exterior only. Pressure washing includes the tank shell, top and concrete foundation.
5. A Performance Guarantee for the project improvements in the amount of 125% of the bid cost shall be submitted to the City prior to the commencement of any work. Upon final acceptance of the required work by the City, the Performance Guarantee shall be released.
6. A Warranty Guarantee will be required at the time of final acceptance of the project improvements. The guarantee amount will be 25% of the bid cost of the improvements. The Warranty Guarantee is required prior to the release of the Performance Guarantee. Methods of posting the Warranty Guarantee shall be the same as for Performance Guarantee and shall be valid for the period of one calendar year.
7. A Bid Bond is not required.
8. The project is a prevailing wage project located within Snohomish County.

9. Bidding shall be a lump sum cost, fixed bid. Mobilization shall not exceed 15% of the total bid cost, excluding sales tax. Washington State Sales Tax of 8.6% will be collected by the Contractor. The bid shall be itemized as:

|                |          |
|----------------|----------|
| Mobilization   | \$ _____ |
| Reservoir # 1  | \$ _____ |
| Reservoir # 2  | \$ _____ |
| WA Sales Tax   | \$ _____ |
| Total Lump Sum | \$ _____ |

10. The Contractor must obtain a City of Gold Bar Business License through the Washington State Business Licensing Service.
11. The Owner reserves the right to reject all bids.
12. Payment shall be made upon the final completion and acceptance by the City. This will be a lump sum payment. Payment release requires City Council approval at a Regular Meeting which meetings occur on the first and third Tuesdays of each month.

#### PART 8 – TERMS AND CONDITIONS

1. The Contractor Agreement attached is part of the contract.