NOTE TO CONSULTANTS: Edit with Track Changes turned on, any text in this section that appears in bold and italics then turn off the bold and italics for the final approved version. (Remove this Note).

PART 1 - GENERAL

1.01 Description: The Work shall include the preparation of metal surfaces and the application of finishes as specified. Applications shall include but not be limited to the painting of ***metal handrails and guardrails, chain link and ornamental fencing and backstops, pavement stripping*** and other applications as needed. A finish schedule shall be submitted to the Engineer before any work may commence. Protect all existing work from damage and perform complete cleanup of residue of the operations of this Section.

1.02 Related Sections:

Section 05 52 00 - Handrails & Guardrails
Section 13 34 19 - Pre-engineered Metal Structures
Section 32 31 13 - Chain link Fencing & Gates
Section 32 31 13.33 - Chain link Backstops & Gates

1.03 Reference Standards:

A. Conform to requirements of the following Reference Standards or as modified and supplemented herein:

1. International Building Code (IBC)
2. City of Seattle Building Codes and Regulations (SBC)
3. ANSI/ASTM D16 - Definitions of Terms in Relation to Paint, Varnish, Lacquer, and Related Products.
4. Master Painters Institute Architectural Painting Specification Manual (MPI)
5. Structural Steel Painting Council, Surface Preparations Specifications (SSPC)
6. The City of Seattle Standard Specifications for Road, Bridge and Municipal Construction (most recent edition).

1.04 Quality Assurance:

A. Product Manufacturer: Company specializing in manufacturing quality paints and finish products with five years experience.

B. Applicator: Shall be a company specializing in commercial painting and finishing with five years of documented experience.

1.05 Definitions: Refer to and conform to ANSI/ASTM D16 for interpretation of terms used in this Section.

1.06 Submittals:

A. Documentation: Prior to preparation, delivery of product, or shop application, submit complete documentation of materials to be used including manufacturers commercial literature and MSDS. Provide color charts or samples of available colors where no color is specified.

B. Samples: Submit to the Engineer for approval, two samples 12” x 12” in size illustrating each of the colors specified or selected for the work.

1.07 Field Samples: Provide field samples as directed by the Engineer.

1.08 Delivery, Storage and Handling Procedures:

A. Deliver, store and protect products following manufacturer’s directions. Deliver products to the site in sealed and labeled containers, then inspect to verify. Store in a safe location, out of pedestrian and vehicular traffic and protected from weather and extremes of temperature. Repair or replace any damaged components before installation.

B. Container labeling to include manufacturer’s name, type of paint, brand name, brand code, coverage, surface preparation, drying time, cleanup, color designation, and instructions for mixing and reducing.

C. Take precautionary measures to prevent fire hazards and spontaneous combustion.

D. Provide Material Safety Data Sheet (MSDS) for all products used on site.

1.09 Environmental Requirements:

A. Provide continuous ventilation and heating facilities to maintain surface and ambient temperatures above 45 degrees F for 24 hours before, during and 48 hours after application of finishes, unless required otherwise by manufacturer’s instructions.

B. Do not apply exterior coatings during rain or snow, or when relative humidity is above 50 percent, unless required otherwise by manufacturer’s instructions.

1.10 Extra Stock:

A. Provide the Engineer with a written list of paint manufacturer, product name, color, number, sheen, and the area in which the paint was used.

B. At the Close Out of the Project provide the following:

1. Unopened one gallon can of every component (paints, urethanes, and catalyzed coatings), color (latex, alkyd enamel) and sheens.
2. Product information, including MSDS per Operation and Maintenance Manual.

C. Label each container with color, texture, and project locations, and date, in addition to the manufacturer's label.

PART 2 - PRODUCTS

2.01 Acceptable Suppliers of Paint and Other Coating Products include: Parker, Kelly-Moore/Preservative Paints, Sherwin Williams, Miller or Daly's, or approved equal. Use only Professional quality paint systems.

2.02 Materials:

A. All materials shall be lead free.

B. Coatings shall be ready mixed, except field-catalyzed coatings. Process pigments to a soft paste consistency, capable of being readily and uniformly dispersed to a homogeneous coating.

C. Coatings shall have good flow and brushing properties, capable of drying or curing free of streaks or sags.

D. Accessory Materials shall include: Linseed oil, shellac, turpentine, paint thinners and other materials not specifically indicated but required to achieve the finishes specified or commercial quality.

2.03 Finishes:

A. Pavement Markings: Per Section 8-22 PAVEMENT MARKING, WSDOT/APWA. Thermoplastic marking for parking striping.

B. Black Metal:

1. Touch up rust proofing.
2. One coat primer.
3. Two coats alkyd enamel, finish to match existing.

B. Galvanized Metal:

1. Touch up galvanizing or rust proofing.
2. One coat zinc chromate primer.
3. Two coats alkyd enamel, finish to match existing.

2.04 Products:

A. Primer: Tnemec Primer 10-99, or approved equal.

B. Paint: Kelly Moore 6700-100 Plasti-Namel Alkyd Rust Inhibitive Enamel.

C. Or, approved equal.

PART 3- EXECUTION

3.01 Preparation:

A. Remove cover plates, hardware, trim and fittings prior to preparing surfaces for finishing.

B. Correct minor defects then clean surfaces, which affect work of this Section.

C. Shellac and seal marks which may bleed through surface finishes.

D. Impervious Surfaces: Remove mildew by scrubbing with solution of tri-sodium phosphate TSP substitute and bleach. Rinse with clean water and allow surface to dry.

E. Asphalt, Creosote or Bituminous Surfaces scheduled for paint finish: Remove foreign particles to permit adhesion of finishing materials. Apply compatible sealer or primer.

F. Uncoated Steel and Iron Surfaces: Remove grease, scale, dirt and rust. Where heavy coatings of scale are evident, remove them by wire brushing or sandblasting; then clean them by washing with solvent. Apply a treatment of phosphoric acid solution, ensuring weld joints, bolts, and nuts are similarly cleaned. Spot prime paint after repairs.

G. Shop Primed Steel Surfaces: Sand and scrape to remove loose primer and rust. Feather edges to make touch-up patches inconspicuous. Clean surfaces with solvent. Prime bare steel surfaces 3 mils dry. Prime metal items including shop primed items.

3.02 Protection:

A. Protect elements that surround the work of this Section from damage or disfiguration.

B. Repair damage to other surfaces caused by work of this Section.

C. Furnish drop cloths, shields and protective methods to prevent spray or droppings from disfiguring other surfaces.

D. Remove empty paint containers from site.

3.03 Shop Applied Primer:

A. Surface Preparation: All metal surfaces receiving painted finishes shall be prepared to Structural Steel Painting Council Specifications (SSPC-SP3-82 Surface Preparation - Power Tool), and where appropriate or necessary, components of (SSPC-SP6-85 Surface Preparation Compressed Air, Centrifugal Wheel).

B. Primer Application: Following complete preparation of the piece or assembly, apply a 2.0 mil to 3.5 mil film thickness (dry) using commercial electrostatic, airless, or pressurized air-delivery system. Coat all surfaces.

3.04 Paint Finish:

A. All exposed surfaces of each piece of the assembly of the metal structures or components shall receive two coats of Alkyd Enamel Paint totaling 6 to 8 mils dry film thickness.

B. At the Contractors option, the finish system may applied in either of two sequences;

1. Field application of both coats.
2. Shop application of the first coat, field application of the final coat following completion of assembly of the metal structures or components.
3. The Contractor may not apply both coats in the shop, unless a third, final coat is applied in the field following completion of the assembly.

C. Apply finishes using commercial electrostatic, airless, or pressurized air-delivery system. Fully coat all exposed surfaces.

3.05 Application:

A. Apply products in accordance with manufacturer's instructions.

B. Do not apply finishes to surfaces that are not dry.

C. Apply each coat to uniform finish.

D. Apply each coat of paint slightly darker than preceding coat unless otherwise approved.

E. Sand lightly between coats to achieve required finish.

F. Allow applied coat to dry before next coat is applied.

3.06 Cleaning:

A. As work proceeds, promptly remove paint where spilled, splashed or spattered.

B. During progress of work, maintain premises free of unnecessary accumulation of tools, equipment, surplus materials, and debris.

C. Collect cotton waste, cloths and material, which may constitute a fire hazard, place in closed metal containers and remove daily from site.

3.07 Schedule - Exterior Surfaces:

A. Pavement Markings:

1. Two coats of lead free pavement latex paint.

B. Steel - Shop Primed:

1. Touch-up with primer.
2. Two coats alkyd enamel, gloss.

C. Galvanized Steel - Shop Primed:

1. Touch-up with zinc rich primer.
2. Two coats alkyd enamel, semi-gloss.

3.08 Inspections:

A. Verify that surfaces are ready to receive work as instructed by the product manufacturer.

B. Examine surfaces scheduled to be finished prior to commencement of work. Report any condition that may potentially affect proper application.

C. Beginning of application means approval of substrate.

3.09 Cleanup: Remove the over-spray from all surfaces not scheduled to receive paint, using methods appropriate to the material. Completely remove all masking materials, including adhesive residues. Dispose of all materials and containers in an approved manner.

END OF SECTION