MICHIGAN

DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION

FOR

**PUMP STATION SPECIAL COATINGS**

DET:MS 1 of 3 APPR:NJM:SCK:07-21-21

**a. Description.** This work consists of preparing all substrate surfaces, conducting a visual inspection, and applying coating systems per manufacturer’s recommendations. Metal surfaces are to be coated per the coating application schedule in this special provision at the pump station locations shown on the plans and/or as directed by the Engineer. Use MDOT’s existing color code system for final color selection unless otherwise directed by the Engineer.

**b. Materials.** Furnish the coating systems for the substrates indicated. Select coating system products from the list of products provided below. Do not mix colors or products from more than one manufacturer or source.

1. Interior Ferrous Metal. Zinc/Epoxy/Epoxy Coating. Provide one finish coat over intermediate coat and primer with total DFT not less than 9.0 mils not to exceed 15.0 mils.

Primer: DFT of 3.0 to 5.0 mils.

Tnemec: Tneme-Zinc Series 90-97 or approved equal

Devoe: Interzinc 52 or approved equal

Intermediate Coat: DFT 3.0 to 5.0 mils.

Tnemec: Series N69 Hi-Build Epoxoline II or approved equal

Devoe: Devran 224V or approved equal

Finish Coat: DFT 3.0 to 5.0 mils.

Tnemec: Series N69 Hi-Build Epoxoline II or approved equal

Devoe: Devran 224V or approved equal

2. Exterior Ferrous Metal. Zinc/Epoxy/Polyurethane Coating. Provide one finish coat over intermediate coat and primer with total DFT 9.0 to 16.0 mils.

Primer: DFT 3.0 to 5.0 mils.

Tnemec: Tneme-Zinc Series 90-97 or approved equal

Devoe: Interzinc 52 or approved equal

Intermediate Coat: DFT 4.0 to 6.0 mils.

Tnemec: Series N69 Hi-Build Epoxoline II or approved equal

Devoe: Devran 224V or approved equal

Finish Coat: DFT 2.0 to 5.0 mils.

Tnemec: Series 1075 Endura-Shield II or approved equal

Devoe: Devthane 379 or approved equal

3. Submerged or Intermittently Submerged Ferrous Metal. Epoxy/Epoxy Coating. Provide one finish coat over primer with total DFT not less than 8.0 mils not to exceed 12.0 mils.

Primer: DFT 4.0 to 6.0 mils.

Tnemec: Series N69 Hi-Build Epoxoline II or approved equal

Devoe: Bar-Rust 236 or approved equal

Finish Coat: DFT 4.0 to 6.0 mils.

Tnemec: Series N69 Hi-Build Epoxoline II or approved equal

Devoe: Bar-Rust 236 or approved equal

**c. Construction.**

1. Surface Preparation. Clean and prepare surfaces to be coated in accordance with section 715 of the Standard Specifications for Construction and the manufacturer’s instructions for each particular substrate condition, except provide a uniform blast profile from 1.0 mil to 2.0 mils.

2. Material Preparation. Carefully mix and prepare materials in accordance with the coating manufacturer’s directions.

3. Coating Application Schedule.

A. Interior Ferrous Metal:

All new and existing, non-galvanized surfaces within the pump station pump access room and electrical service building.

Manhole frames and covers are not to be coated.

B. Exterior Ferrous Metal:

All new and existing, non-galvanized exterior surfaces of the pump station and electrical service building.

Manhole frames and covers are not to be coated.

C. Submerged or Intermittently Submerged Ferrous Metal:

All new and existing, non-galvanized surfaces within the pump station and discharge chamber, excluding the pump access room.

Manhole frames and covers are not to be coated.

4. Submittals. Submit shop drawings and product data for all coating system products in PDF. Do not use these materials in the work until approved by the Engineer. Allow 15 working days for submittal review. Submit the following information:

A. Catalog cuts and/or product/technical data sheets and color samples to the Engineer for review and approval. Provide catalog cuts for standard manufactured items. Ensure each sheet identifies the exact item for which it is intended. Include all pertinent information such as manufacturer’s product literature and installation instructions.

B. Schedule of surface preparation, by surface to be coated, for the project. Cross-reference surface preparation to coating system and locations of application areas. Use the same designations indicated on the drawings and schedules.

The approval of submittals does not relieve the Contractor from the responsibility to correct errors or omissions or to provide adequate field measurements as may be required. It is the Contractor’s responsibility to call attention to all deviations from the plans, specifications, and details. If deviations have not been clearly identified, they will not be considered as part of the submittal approval.

**d. Measurement and Payment.** The completed work, as described, will be measured as a lump sum and paid for at the contract price using the following pay item:

**Pay Item Pay Unit**

Pump Station Spec Coatings (Structure Identification) Lump Sum

**Pump Station Spec Coatings (Structure Identification)** includes preparing the substrate surfaces, conducting the visual inspection, and applying the coating systems.