

# SPECIAL PROVISIONS FOR PAINTS AND COATINGS

Johnson County STP-U-5557(618)--70-52

Effective Date February 20, 2018

THE STANDARD SPECIFICATIONS, SERIES 2015, ARE AMENDED BY THE FOLLOWING MODIFICATIONS AND ADDITIONS. THESE ARE SPECIAL PROVISIONS AND THEY SHALL PREVAIL OVER THOSE PUBLISHED IN THE STANDARD SPECIFICATIONS.

### **PART 1 GENERAL**

### 1.01 SECTION INCLUDES

Extent of painting work is shown on plans and schedules, with general criteria as herein specified in the finish classifications, and in accordance with the following:

- A. A penetrating stain shall be applied to cast-in-place concrete, and formliner textured concrete as indicated on the plans.
- B. Paint as used herein means coating systems materials, including stains and other applied materials whether used as prime, intermediate, or finish coats.

### 1.02 SUBMITTALS

- A. Immediately following the award of contract, submit the name of paint manufacturer. In addition, provide such catalogs, color cards and other data required to select concrete stain colors as a part of preparing the color schedule.
- B. If use of other manufacturer's products is desired, submit for review a complete substitution list, including a side-by-side listing of specified products and technical name of the proposed product. Each product proposed shall be accompanied by manufacturer's specification sheets for evaluation.

# 1.03 DELIVERY, STORAGE AND HANDLING

- A. Deliver products in manufacturer's original containers with labels intact and seals unbroken. Identify containers by manufacturer's name of product or specification number and color number or identification.
- B. Store materials in a well ventilated location assigned specifically for this purpose. Receiving,

- opening, and mixing of materials shall be done in this location.
- C. Keep storage space clean and neat. Remove solvent or paint saturated rags and clothes after each day's work.

#### 1.04 PROJECT/SITE CONDITIONS

- A. Exterior work shall not be performed until the ambient temperature is at least 50°F and shall not be done during periods of damp, dewy, foggy, rainy, frosty weather or when the relative humidity exceeds 85% unless otherwise permitted by paint manufacturer's printed instructions. Do not paint surfaces while exposed to hot sunlight.
- B. Painting may be continued during inclement weather only if the areas and surfaces to be painted or stained are enclosed and air is conditioned within the temperature and relative humidity limits specified by the paint manufacturer for application and drying periods.
- C. Protect surfaces which are in close proximity of the area being painted or finished. Provide and place drop cloths or other suitable protective coverings as required for protection of surfaces. Clean, repair, and restore damaged and defaced surfaces to their original condition.
- D. Examine the specifications for the various other trades and be familiar with the provisions pertaining to this work.
- E. Review painting specifications thoroughly so as to have full knowledge and understanding of the products and materials specified, number of coats, and the surface to which the materials are to be applied. Employ techniques, tools, skilled mechanics, and accessories which will produce the intended results.

### 1.05 MEASUREMENT AND PAYMENT

The work identified in this special provision will not be measured or paid, as it is incidental to the following items: Cherry Street Lighted Bridge Panels, Elevated Sidewalk, Elevated Trail.

### **PART 2 PRODUCTS**

## 2.01 MANUFACTURERS

- A. Materials shall be products of the following manufacturers or approved equivalent:
  - 1. Sherwin-Williams Co.
  - 2. ICI Dulux/Devoe
  - 3. TK Products
- B. Materials selected for coating systems for each type surface shall be the product of a single manufacturer.

# 2.02 MATERIALS

- A. Provide materials as, or equivalent to those, listed hereinafter in the Schedule of Materials.
- B. Provide products having a fire hazard classification rating not to exceed 25 for flame spread,
   15 for fuel contributed, and 30 for smoke developed when tested in accordance with ASTM E
   84. Certification attesting to this requirement will be required on each product or material used on this project.
- C. All paint materials and equipment shall be compatible in use: Finish coats shall be compatible with prime coats; prime coats shall be compatible with the surface to be coated; all tools and equipment shall be compatible with the coating to be applied.

- D. Thinners, when used, shall be only those thinners recommended for that purpose by the Manufacturer of the material to be thinned.
- E. The penetrating concrete stain shall be a color finish designed for exterior applications on concrete with field evidence of resistance to freeze/thaw, moisture alkali, acid and mildew, mold and fungus, discoloration and degradation. The coloring agent shall be breathable, allowing moisture and vapor transmission. The product shall not alter surface texture and shall conform to ASTM standards. The supplier shall furnish evidence, to the satisfaction of the Engineer, that the proposed product has been successfully used in a similar application.

#### 2.03 COLOR SELECTIONS

Selection of colors and glosses, except as specified, shall be by the Engineer.

# 2.04 PAINT FINISH SCHEDULE

Painting required under this section is as called for on the plans.

#### **PART 3 EXECUTION**

# 3.01 INSPECTION

- A. Examine surfaces scheduled to receive paint and finishes for conditions that will adversely affect execution, permanence, or quality of work and which cannot be put into an acceptable condition through preparatory work as included in Article 3.02.
- B. Notify Engineer of such conditions.
- C. Do not proceed with surface preparation or coating application until conditions are suitable.
- D. Commencement of work will constitute acceptance of suitability of Project conditions.

# 3.02 PREPARATION OF SURFACES

#### A. Protection

Prior to all surface preparation and paint operations, completely mask, remove, or otherwise adequately protect all surfaces not scheduled to receive paint.

# B. Concrete Surfaces

- All concrete surfaces that are to be coated shall be cleaned by water blasting with 3000 psi to ensure that the surface is free of laitance, dirt, dust, grease, efflorescence, and any foreign material in order to accept the coating material according to product requirements. Sand blasting will not be permitted. The Contractor shall correct, at their own expense, any surface problems resulting from the surface preparation methods.
- Priming of concrete surfaces: Concrete surfaces with open voids or honeycombing shall be given a rubbed finish. The cement mix used to rub the surface shall contain one of the following acrylic bonding admixtures mixed and applied as given by the manufacturer, or approved equal.

Acrylic Bonding Admixture: TK-225 by TK Products

In lieu of the above cement mix, the following products may be mixed with one of the given acrylic bonding admixtures for use in rubbing the concrete surface.

Pre-blended, Packaged Type II Cement: Tri-Mix by TK Products

### 3.03 APPLICATION

# A. General Requirements

- 1. Do not apply initial coating until moisture content of surface is within limitations recommended by paint manufacturer.
- 2. Number of coats

Provide complete coverage and hide. When color, stain, dirt, or undercoats show through final coat of paint, provide additional coats, at no additional cost, until the paint film is of uniform finish, color, appearance, and coverage.

- 3. Inspection
  - a. Do not apply additional coats until completed coat has been inspected.
  - b. Only inspected coats of paint will be considered in determining number of coats applied.

## B. Application to Architectural Surface Treatment

- 1. This finish shall accurately duplicate weathered limestone coloration.
- 2. Apply multiple stain colors as per manufacturer's specification so that stone units demonstrate individual color variations and character.
- Application of the concrete stain base coat on the individual stones shall be by air or airless sprayer. Highlighting coloration shall be by staining or other suitable antiquing method.
- 4. Joints between stones shall be left unstained. Overspray of stain in joints shall be touched up with a stain to match the color of the plain concrete.
- 5. A sample panel shall be poured and colored for the approval of the Engineer and Contracting Authority. The sample panel shall be 4 foot by 4 foot and placed in an area for removal after the surface treatment and finish have been approved.
- All cast-in-place concrete surfaces shall be finished in the field by one contractor in order to maintain consistency in the colorations and overall appearance.
- Do not stain surfaces of walls that will ultimately be more than 6 inches below finished grade. Contractor shall mark final grade on walls.

# 3.04 SCHEDULE OF MATERIALS (BASED ON ici dulux/devoe AND TK PRODUCTS coatings)

## A. Exterior Use

	Dry Film Thickness Per Coat
Cast-In-Place Concrete (Architectural Surface	
Treatment)	
<ul> <li>1st: Base Coat = Tri-Sheen Acrylic Stain</li> </ul>	N/A
TK-5272, Color Number S1	
<ul> <li>2nd: Hand Applied Highlight Colors, Sea</li> </ul>	N/A
Sponge or Light Spray Applied, Tri-Sheen	
Acrylic Stain TK-5272 Color Numbers S2	
Through SS6 (Tans, Browns and Greys).	
<ul> <li>3rd: Grout Lines Brushed Between Stones</li> </ul>	N/A
To Replicate Natural Stone Grout, Tri-	
Sheen Concrete Surfacer TK-5319, Color	
Number S7.	

## B. Color Chart

 The following colors are for color numbers S1 through S10 for the concrete stains. Color numbers are Sherwin Williams standard colors, and shall be matched by TK Products. Color choices to be demonstrated on mock-up panel for final approval.

Color I.D.	Color Name and S.W. Number
S1	S.W. 6127 (Iviore)
S2, S8	S.W. 6060 (Moroccan Brown)
S3, S9	S.W. 6074 (Spalding Grey)
S4	S.W. 6100 (Practical Beige)
S5	S.W. 6106 (Kiln Beige)
S6, S10	S.W. 6128 (Blonde)
S7	S.W. 6002 (Essential Grey)

2. All other colors not listed shall be approved by Contracting Authority.

# 3.05 CLEANING

- A. Touch up and restore finish where damaged.
- B. Remove spilled, splashed, or splattered paint from all surfaces.
- C. Do not mar surface finish of item being cleaned.
- D. Remove from premises rubbish and accumulated materials of whatever nature not caused by others and leave work in clean, orderly, and acceptable condition.