

## **Miscellaneous Contract Requirements and Specifications**

### **A. Work Location**

I-55, Southbound Lanes  
St Louis County  
North of Meramec Bottom Rd  
From Near Mile Marker 194.0 to 194.2  
Work Location is shown in Exhibit A of the contract documents

### **B. Summary of Work Required**

Contact McCann Concrete Products to arrange delivery of new replacement soundwall panels.  
Furnish and install traffic control as shown in Exhibit C of the contract documents.  
Remove two existing undamaged soundwall panels and place in holding rack.  
Remove two existing damaged soundwall panels for disposal off of MoDOT right of way.  
Grade site to accommodate replacement panels.  
Install two new soundwall panels furnished by McCann.  
Reinstall two undamaged soundwall panels.  
Apply concrete color stain to the two bare concrete panels.  
Apply graffiti protection to the two replacement panels.  
Dispose of two damaged soundwall panels.  
Backfill and finish grade site.

Payment for Work Performed = 1 Lump Sum

### **C. Work Description**

**1.0** A vehicle crashed into an existing soundwall damaging two of four precast concrete panels in one segment of the soundwall. MoDOT has purchased two precast concrete panels from McCann Concrete Products to replace the damaged panels. The replacement panels will be furnished and delivered by McCann to the site upon notification by the contractor. The contractor shall perform replacement panel installation, concrete panel staining, and all incidental work as required to provide for a complete functional soundwall system that matches the existing wall. All work shall be in accordance with Exhibit A – Location Details, Exhibit B – Contract Requirements and Specifications, Exhibit C – Traffic Control, Exhibit D – Items Provided by Others, Exhibit E – As Built Plan, and Exhibit F – MoDOT Standard Specification Section 616.

**2.0** The contractor shall remove the two undamaged precast concrete soundwall panels from the upper portion of the soundwall to access and remove the two damaged panels from the lower portion of the wall. Upon removal of the four existing panels the contractor shall install the two replacement panels on the lower portion of the wall and then reinstall the two existing undamaged panels into the upper portion of the wall. The contractor shall apply a concrete stain and graffiti protection to the bare concrete replacement panels after installation.

**3.0** The contractor shall exercise reasonable care in the handling of the soundwall panels, new or existing, during removal and reinstallation. Should any of the panels be damaged by the contractor's negligence, it shall be replaced at the contractor's expense. The contractor shall restore those areas disturbed by the work operations.

**4.0** The contractor shall coordinate delivery of the precast soundwall panels from McCann Concrete Products. The contractor shall notify Mark Melvin of McCann Concrete Products at (618) 377-3888 at least two weeks prior to requiring the panels to be delivered. McCann will deliver the panels and provide a holding rack and burke ring clutch lifters for the contractor's use. The rack is large enough to hold the newly delivered replacement panels, as well as temporarily hold the existing undamaged upper panels while the existing damaged lower panels are removed. The contractor will be responsible for removal and proper disposal of the damaged panels from MoDOT right of way.

**5.0** MoDOT has prepaid McCann for the replacement panels and all delivery charges to the site. The contractor will not be responsible for the cost of the panels. MoDOT's payment to McCann for delivery includes up to **4 hours** of standby time by the delivery truck and temporary use of the panel storage rack while the contractor removes and reinstalls the existing undamaged panels. If additional time beyond the prepaid 4 hours is required all extra charges for delivery truck standby time will be the sole responsibility of the contractor.

**6.0** The wall panels shall be installed in accordance with MoDOT as-built plans, the manufacturer's recommendations, and the manufacturer's approved drawings. The contractor shall perform minor grading as required to ensure the bottom soundwall panel is resting on the top of the post footings. After installation the site shall be regraded to match existing terrain and shall be sloped to properly drain. Due to the terrain and close proximity of private residences, the contractor will not be allowed to access the soundwall from the rear.

**7.0** Joints and connections between panels shall be secured in such a manner as to be structurally sound, with no visible openings for sound transmission or light leaks.

**8.0** After installation the contractor shall apply a concrete stain and graffiti protection to both sides of the bare concrete replacement panels. The appearance of the wall shall be of the same color as the adjoining sections. Concrete stain and graffiti protection shall be in accordance with Section F of this document.

#### **D. Traffic Control**

All traffic control shall be furnished and installed by the contractor as shown in Exhibit C of the contract documents. Standard MUTCD compliant signs, channelizers, flashing arrow panels, and other devices shall be used. All work shall be in accordance with Section 616 of MoDOT's Standard Specifications as shown in Exhibit C.

#### **E. Working Hours**

Monday through Friday days allowed, 8:00 AM to 2:30 PM.  
Weekend and holiday work hours require prior approval by the engineer and may not be allowed.

All equipment and materials shall be removed, all traffic control devices removed or set aside, and all lanes open by 2:30 PM. NO EXCEPTIONS ALLOWED.

**F. Specification for Protective Coatings for Concrete Panels**

**1.0 Description.** This work shall consist of the surface preparation and application of protective coatings for coloring, sealing, and protecting the new replacement concrete panels. Application shall be in accordance with the manufacturers recommendations.

**2.0 Surface Preparation.** The contractor shall pressure clean with a minimum of 2100 psi to remove all dirt, dust, grease, oil, loose particles, laitance, foreign material, peeling and defective coatings, chalk, form release agents, moisture curing membranes, etc., and mildew. The surface shall be allowed to dry thoroughly. Commercial detergents may be necessary to remove sealers, release compounds, and other surface contaminants.

**3.0 Water Repellant Vertical Concrete Stain.** This system shall consist of a water repellant concrete stain that matches the existing color of the soundwall in place, as approved by the engineer.

**3.1 Approval of Stain.** Prior to application of the concrete stain, including bulk purchase and delivery of products, the contractor shall prepare a minimum 12 x 12 inch (300 X 300 mm) application sample on the concrete panel for the purpose of demonstrating the appearance of the planned installation. The contractor shall proceed with work only after the engineer's acceptance of the test application for appearance.

**3.2 Coverage.** The contractor shall apply at least two coats to the front and back of the new wall panels.

**4.0 Sacrificial Graffiti Protection System.** This system shall consist of a clear coating that can be removed with a hot water wash. The surface preparation and application shall be in accordance with the manufacturer's recommendations.

**4.1 Physical Properties.** The sacrificial graffiti protection system shall be in accordance with the following physical properties and shall be chemically compatible with any other coatings to be used. The material shall be suitable for application to obtain a wetfilm thickness of 4 to 6 mils (100-150 µm) without runs or sags when applied to a vertical surface.

<b>Sacrificial Graffiti Protection System</b>	
<b>Item</b>	<b>Requirement</b>
Melting Point, F (C), ASTM F 766	165 ±5 (74 ±2.8)
Solids Content, min., percent by weight, ASTM D 2834	26
Volatile Organic Content (VOC), lb/gal (g/L), max, ASTM D 3960	0.58 (70)

**4.2 Manufacturer and Brand Name Qualification.** Prior to approval and use, the manufacturer shall submit a representative one-gallon (3.8 L) sample to the engineer. The manufacturer shall submit documentation stating brand name, manufacturer's name and address and accompanied by the manufacturer's data and application sheets. The manufacturer shall submit certification, including specific test results, that the material complies

with all requirements of this specification. The graffiti protection system listed in Table 4 below has been preapproved by MoDOT:



FS-1059 Table 4  
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**PROTECTIVE COATING MATERIAL  
FIELD SECTION 1059 TABLE 4  
QUALIFIED SACRIFICIAL GRAFFITI PROTECTION SYSTEMS  
(1059PCSGPS)**

**Brand Name**

**Manufacturer**

Sacrificial Graffiti Guard

Textured Coatings of America  
4101 Ravenswood Road – Suite 101A  
Fort Lauderdale, FL 33312

**5.0 Acceptance.** The contractor shall furnish a manufacturer's certification stating that the material supplied is in accordance with all requirements specified and that the material furnished is of the same composition as originally approved. The engineer reserves the right to sample the material at destination if deemed necessary.