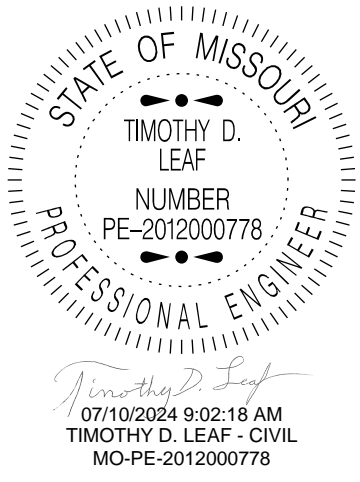


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 <p>STATE OF MISSOURI TIMOTHY D. LEAF NUMBER PE-2012000778 PROFESSIONAL ENGINEER</p> <p><i>Timothy D. Leaf</i> 07/10/2024 9:02:18 AM TIMOTHY D. LEAF - CIVIL MO-PE-2012000778</p>	<p>MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION 105 W. CAPITOL AVE. JEFFERSON CITY, MO 65101 Phone (888) 275-6636</p>
	<p>If a seal is present on this sheet, JSP's has been electronically sealed and dated.</p>
	<p>JOB NO. JKU0018 Jackson County, MO Date Prepared: 7/10/2024</p>
<p>Only the following items of the Job Special Provisions (Bridge) are authenticated by this seal: All</p>	

JOB SPECIAL PROVISIONS (BRIDGE)

A. CONSTRUCTION REQUIREMENTS

1.0 Description. This provision contains general construction requirements for this project.

2.0 Construction Requirements. The plans and the asbestos and lead inspection report for the existing structure(s) are included in the contract in the bridge electronic deliverables zip file for informational purposes only.

2.1 In order to assure the least traffic interference, the work shall be scheduled so that a lane closure is for the absolute minimum amount of time required to complete the work. A lane shall not be closed until material is available for continuous construction and the contractor is prepared to diligently pursue the work until the closed lane is opened to traffic.

2.2 Bridge work by contractor forces, including erection, rehabilitation or demolition, shall not be allowed over traffic unless a bridge platform protection system is installed below the work area except for work performed above a deck that is intact. The protection system shall be capable of catching all falling objects such as tools, overhang brackets or materials. Lifting of objects that are heavier than the capacity of the bridge protection system shall not be permitted.

2.3 Provisions shall be made to prevent any debris and material from falling onto the roadway. If determined necessary by the engineer, any debris and material that falls below the bridge outside the previously specified limits shall be removed as approved by the engineer at the contractor's expense. Traffic under the bridge shall be maintained in accordance with the contract documents.

2.4 Any damage sustained to the remaining structure as a result of the contractor's operations shall be repaired or the material replaced as approved by the engineer at the contractor's expense.

2.5 Provisions shall be made to prevent damage to any existing utilities. Any damage sustained to the utilities as a result of the contractor's operations shall be the responsibility of the contractor. All costs of repair and disruption of service shall be as determined by the utility owners and as approved by the engineer.

3.0 Method of Measurement. No measurement will be made.

4.0 Basis of Payment. Payment for the above described work will be considered completely covered by the contract unit price for other items included in the contract.

B. WATERPROOFING MEMBRANE

1.0 Description. This work consists of furnishing and placing an approved waterproofing membrane and protective covering over a prepared concrete bridge deck surface.

2.0 Materials.

2.1 Waterproofing Membrane. The waterproofing membrane shall consist of a single component, hot applied, elastomeric membrane and primer if required. The hot applied, elastomeric membrane shall be capable of being sprayed or spread to a uniform thickness at the application temperature as recommended by the manufacturer. After cooling, the waterproofing membrane shall form a tough resilient membrane, well bonded to the concrete

JOB SPECIAL PROVISIONS (BRIDGE)

surface and shall be in accordance with the requirements of ASTM D 6690, Type II, except that blocks for the bond test shall be as described in ASTM D 5329. The waterproofing membrane shall be from a PAL approved source for "Concrete Joint Sealer, Hot-Poured Elastic Joint Material" in which the manufacturer recommends the material for bridge deck waterproofing.

2.2 Protective Covering. The protective covering shall be composed of one or more layers of felt thoroughly bonded together and saturated with asphalt. Both exposed sides shall be asphalt coated. The surfaces shall be coated with suitable mineral matter to prevent the material from sticking to itself. The covering may be furnished either in rolls or sheets and shall be free of visible external defects, such as holes, ragged or untrue edges, breaks, cracks, tears, protuberances and indentations. The covering furnished in rolls shall not crack nor be so sticky as to cause material damage upon being unrolled at atmospheric temperatures as low as 50°F (10°C). The covering shall be in accordance with the requirements in the table below. The protective covering may be conditionally accepted in the field based on visual inspection for appearance, workmanship, weight (mass) of a representative specimen and certifications for the felt and asphalt materials used to make the protective covering.

Physical Property	Requirement
Width, inches (m)	35.5 – 60.5 (0.9 – 1.54)
Pliability at 77°F (25°C)	No cracking when bent 90° over a rounded corner of 0.5 in (13 mm)
Behavior on Heating to 176°F (80°C)	Max. 1.5 percent volatile loss. No flowing, sagging or blistering.
Min. Weight, lb/ft ² (Mass, kg/m ²)	0.5 (2.4)
Net Weight, lb/gal (Net Mass, kg/l)	> 8.58 (> 1.03)
Specific Gravity	> 1.03

3.0 Construction Requirements.

3.1 Concrete Deck Preparation. The entire deck and the sides of the curbs for a height of 2 inches (50 mm) above the plan thickness of the alternate asphaltic concrete wearing surface shall be free of all foreign material such as dirt, grease, old pavement and primer. All surfaces to receive the waterproofing membrane shall be sand blasted or shot blasted. Immediately prior to the application of primer or membrane, all dust and loose material shall be removed. The engineer will approve the deck condition before application of the membrane.

3.2 Weather and Moisture Limitations . Application of primer or membrane shall not be done during inclement weather conditions or when deck and ambient air temperatures are below 50°F (10°C). The deck surface shall be dry at the time of application of primer and membrane.

3.3 Waterproofing Membrane Application. Hot applied membrane shall be applied to the prepared deck surface at a uniform rate as recommended by the manufacturer. During the application, the thickness will be measured by the engineer. Lack of uniform application will be cause for termination of the work until remedial measures have been taken. Primer, if required, and the membrane shall be placed up the curb faces for a height of 2 inches (50 mm) above the plan thickness of the alternate asphaltic concrete wearing surface.

3.4 Protective Covering Application. As soon as practical, but in all cases the same day as membrane application, the protective covering shall be placed from roadway face of curb to roadway face of curb as allowed by stage construction. Protective covering shall be laid parallel

to the centerline of the bridge. The protective covering shall be butted together at longitudinal and transverse joints. Overlapping will not be permitted. The maximum allowable space between adjoining sections of the protective covering shall be one inch (25 mm). Following the placement of the protective covering, a bead of compatible mastic or hot applied membrane shall be applied where the covering contacts the curbs and in cracks between adjoining sections that are apart by more than 3/8 inch (10 mm). The bead shall fill the void preventing water from entering at this point.

3.5 Inspection. Upon completion of the membrane and protective covering, the engineer will inspect the membrane system and give approval in writing before application of the alternate asphaltic concrete wearing surface. The contractor shall be responsible for maintaining the condition of the membrane system until covered with alternate asphaltic concrete wearing surface to the thickness required by the contract.

4.0 Method of Measurement. Waterproofing membrane will be measured to the nearest square yard based on measurements longitudinally from end of slab to end of slab and transversely from roadway face of curb to roadway face of curb. Material placed on curb faces will not be measured. Final measurement of waterproofing membrane will not be made except for authorized changes during construction or where appreciable errors are found in the contract quantity. The revision or correction will be computed and added to or deducted from the contract quantity.

5.0 Basis of Payment. Payment for the above described work, including all material, equipment, labor and any other incidental work necessary to complete this item, will be considered completely covered by the contract unit price for "Waterproofing Membrane".