**SPECIAL NOTE FOR BRIDGE DECK WATERPROOFING**

**MEMBRANE AND ASPHALT OVERLAY ON BRIDGES**

**I. DESCRIPTION**

Except as specified herein, perform all work in accordance with the Department's Standard and Supplemental Specifications and Standard and Sepia Drawings, current editions. Article references are to the Standard Specifications. Furnish all materials, labor, equipment, and incidentals necessary to complete the One Step Bridge Deck Waterproofing Membrane.

**II. MATERIALS**

**A. Maintain and Control Traffic.** See Traffic Control Plan

**B. One Step Membrane.** See Section 808.

**C. Asphalt Overlay.** Use the same class and type of asphalt surface mixture that is being placed on the adjacent roadway.

**III. CONSTRUCTION METHODS**

**A. Maintain and Control Traffic.** See Traffic Control Plan

**B. Remove Asphalt Overlay.** When the bridge deck has an existing asphalt overlay, totally remove the overlay by milling and texturing, scarification, or other approved methods. Dispose of material off the right of way at sites obtained by the Contractor at no additional cost to the Department (See Special Note for Waste and Borrow).

**C. Surface Preparation.** After removal of the asphalt overlay, thoroughly clean the entire surface area of the bridge deck prior to paving by either air blasting or water blasting. If water blasting is used, thoroughly dry the area prior to placing the primer and membrane. Do not allow traffic on the cleaned bridge deck prior to applying the primer.

**D. Prime Coating.** Apply primer material to the bridge deck according to the Manufacturer's recommendations. Do not allow traffic on the primed bridge deck prior to placing the membrane.

**E. One Step Membrane.** Apply the membrane to the entire surface of the bridge deck. Overlap the membrane a minimum of 1 foot onto the adjacent roadway approaches. Extend the membrane up the face of the curbs a minimum of 1½ inches or the thickness of the asphalt overlay, whichever is greater. Overlap membrane as necessary to achieve 100% coverage of the bridge deck. Install as recommended by the manufacturer, straight and wrinkle free, with no curled or uplifted edges. Do not allow traffic on the membrane prior to placing the asphalt surface.

**F. Asphalt Surface.** Place the asphalt surface immediately after the membrane is in place. For crowned bridge decks, place the asphalt overlay so that it is 1” thicker than the nominal thickness specified in the Contract at the bridge centerline and taper to the specified nominal thickness at the gutter line. The intent is to increase the crown to accelerate water runoff from the bridge deck. For superelevated bridge decks, place the asphalt overlay at the nominal thickness specified in the Contract.

**IV. METHOD OF MEASUREMENT**

**A. Maintain and Control Traffic.** See Traffic Control Plan

**B. Remove Asphalt Overlay**. Regardless of the method of removal, the Department will measure removal of the existing asphalt overlay according to Section 408.04.01. If the Contract or the Engineer requires removal to be accomplished by milling and texturing, the Department will measure Mobilization for Asphalt Milling and Texturing according to Section 408.04.02.

**C. One Step Membrane.** The Department will measure the One Step Menbrane in square yards. The Engineer will calculate the area of one step membrane (A) from the length of the bridge (L) plus 1 foot on each approach multiplied by the curb to curb width of the bridge (W):

Formula 1

The Engineer will not measure surface preparation, primer, laps, cutoffs and waste for payment.

**V. METHOD OF PAYMENT**

**A. Maintain and Control Traffic.** See Traffic Control Plan

**B. Remove Asphalt Overlay.** Regardless of the method of removal, the Department will pay for removal of the existing asphalt overlay according to Section 408.05.01.

**C. One Step Membrane.** Payment at the contract unit price per square yard shall be full compensation for all labor, equipment, materials and incidentals for surface preparation and furnishing and placing the surface primer and the one step membrane according to the Manufacturer's recommendations and these notes.

1-3108 Waterproof Membrane by Contractor

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