SECTION 407 - TACK COAT

407.01 Description. This section describes furnishing and applying tack coat on an existing asphalt or concrete surface, or both.

407.02 Materials.

Emulsified Asphalt (Type SS-1, SS-1h, CSS-1 or CSS-1h) 702.04

Water 712.01

Dilute emulsified asphalt with water at rate of one part emulsified asphalt to one part water by volume.

Submit certificate of compliance for emulsified asphalt, accompanied by certified test data in accordance with AASHTO M 140 (Type SS-1 or SS-1h) or AASHTO M 208 (Type CSS-1 or CSS-1h), as modified by Subsection 702.04 - Emulsified Asphalt.

407.03 Construction.

(A) Weather Limitations. Application of tack coat will not be allowed under the following conditions:

(1) On wet surfaces as determined by the Engineer.

(2) When air temperature is below 60 degrees F and falling. Tack coat may be applied when air temperature is above 50 degrees F and rising. Air temperature will be measured in shade and away from artificial heat.

(3) When weather conditions prevent proper method of construction.

(B) Equipment. Provide equipment, including distributor and heater capable of applying asphaltic material as follows:

1) At constant heat on variable surface widths of up to 15 feet.

2) At readily determined and controlled rates from 0.05 to 2.0 gallons per square yard.

3) With uniform pressure.

4) With allowable variation from specified rate, not to exceed 0.02 gallon per square yard.
Equip distributor with tachometer, pressure gages, accurate volume measuring devices or calibrated tank, thermometer for measuring temperature of tank contents, power unit for pump, and full circulation spray bars adjustable laterally and vertically, with covers to prevent overspraying. Provide hose and nozzle attachment for spotting skipped areas and areas inaccessible to distributor.

(C) Preparation of Surface. If surface conditions described in Subsection 310.03 - Construction are applicable, clean surface in accordance with Section 310 - Brooming Off immediately before applying tack coat.

(D) Application of Tack Coat. Protect structures including guardrails, guardrail post, and other appurtenances from tack coat splatter.

Apply tack coat on existing asphalt or concrete surface, or both, to be overlayed by HMA course. Once water has evaporated from asphalt emulsion, tack coat is said to have set. Place HMA overlay after tack coat has set and within four hours of application. For multiple lift construction, tack coat application may be waived when upper lift is placed within 12 hours of placing lower lift.

Before placing HMA course, apply tack coat to contact surfaces of curbs, gutters, manholes, other structures, vertical faces of existing pavements, and exposed transverse and longitudinal edges of each course.

Apply tack coat uniformly at rate of 0.12 - 0.18 gallon per square yard. At transverse and longitudinal application joints, ensure that specified tack coat application rate is not exceeded. Squeegee excess tack coat from surface. Use hand sprays to cover areas inaccessible to distributor and to correct deficient areas.

(E) Protection of Tack Coat. Except for construction equipment directly connected with paving operations, keep traffic off tack coat.

Protect tack coat from damage until HMA layer is placed. Repair tack coat damage at no increase in contract price or contract time.

407.04 Measurement. The Engineer will not measure tack coat for payment.

407.05 Payment. The Engineer will not pay for tack coat separately and will consider the cost for tack coat as included in the contract prices for the various HMA and portland cement concrete pavement contract pay items. The cost is for the work prescribed in this section and the contract documents.

END OF SECTION 407