

SECTION 00715 - MULTIPLE APPLICATION EMULSIFIED ASPHALT SURFACE TREATMENT

(Follow all instructions and make all edits with "Track Changes" turned on. If there are no instructions [purple text] above a subsection, paragraph, sentence, or bullet, then include it in the project. Delete all purple text before preparing the final document. All other modifications to this Section will require ODOT Technical Resource and State Specifications Engineer approval.)

Comply with to Section 00715 of the Standard Specifications modified as follows:

~~(Use the following subsection .00 when surface treatment is NOT designated on the plans. Delete those that do not apply. Remove "(s)" or parentheses as appropriate.)~~

00715.00 Scope - Replace the paragraph that begins "The surface treatment ..." with the following paragraph:

The surface treatment design is designated on the Plans or in the Special Provisions.

~~(Use the following subsection .00 paragraphs when surface treatment is NOT designated on the plans. Delete those that do not apply. Remove "(s)" or parentheses as appropriate.)~~

Add the following to the end of this subsection:

Provide the following surface treatment(s) on this Project:

Fine Double Chip Seal
Medium Double Chip Seal
Type E-9 Oil Mat
Type E-11 Oil Mat

00715.10(a) Fractured Faces - Replace this subsection, except for the subsection number and title, with the following:

Furnish Aggregates consisting of broken stone, crushed Gravel, or a combination of both. Crush Aggregate such that at least 90 percent by weight of the total Aggregate retained on the No. 8 and larger sieves is fractured on two faces, as determined according to AASHTO T 335.

00715.10(c) Unit Weight of Aggregate - Replace this subsection, except for the subsection number and title, with the following:

Furnish Aggregate with a minimum unit weight of 90 pounds per cubic foot according to AASHTO T 19.

00715.10(d) Soundness - Replace this subsection, except for the subsection number and title, with the following:

Furnish Coarse and Fine Aggregate with a weighted loss not exceeding 12 percent when subjected to five cycles of the soundness test using sodium sulfate solution according to AASHTO T 104.

00715.10(e) Durability - Replace the paragraph that begins "Provide Aggregates ..." with the following paragraph:

Furnish Aggregates meeting the following durability requirements:

00715.10(f) Harmful Substances - Replace the paragraph that begins "Provide Aggregates ..." with the following paragraph:

Furnish Aggregates meeting the following harmful substances requirements:

00715.10(g) Taking Aggregates from Agency Stockpiles - Replace this subsection, except for the subsection number and title, with the following:

When it is specified that Aggregates are to be taken from Agency-controlled stockpiles, take the material in an orderly manner. Do not contaminate the materials. Salvage all material possible from the area that the material is taken. Shape unused portions of a stockpile to Neat Lines. The Contractor will be charged for materials wasted through negligence or used without authority.

00715.10(h) Stockpiling Contractor Furnished Aggregates on Agency Property - Replace this subsection, except for the subsection number and title, with the following:

Aggregates may be temporarily stockpiled at approved sites on Agency property provided the areas used are as small as practicable. Restore the site to its original condition after the materials have been removed. Any contamination during storage or from reloading operations is cause for rejection.

00715.11 Emulsified Asphalt - Add the following paragraph to this subsection:

(Choose the correct Polymer-Modified or Non-Polymer-Modified emulsified asphalt. It will be specified in the pavement design report. Delete the one that does not apply. Remove the parentheses.)

Provide (Polymer-Modified)(Non-Polymer-Modified) Emulsified Asphalt for this Project.

00715.11(c) Acceptance of Emulsified Asphalt - Replace this subsection, except for the subsection number and title, with the following:

Provide Emulsified Asphalt according to the requirement of ODOT's publication *Standard Specifications for Asphalt Materials*. Copies of the publication are available from the ODOT Pavement Services Engineer. The applicable Specifications are those contained in the

current publication on the date the Project is advertised. The materials may be conditionally accepted at the source or point of loading for transport to the Project.

Excessive delay in the use of the Emulsified Asphalt or excessive pumping of the Emulsified Asphalt may significantly reduce the viscosity and may make the material unsuitable for surface treatment use. For this reason, limit pumping between the bulk storage tank, hauling transportation, field storage tanks and distributor to an absolute minimum to maintain proper viscosity. Final acceptance of Emulsified Asphalt is at the point of application.

Obtain Emulsified Asphalt samples according to AASHTO R 66 and Section 00165. Samples are tested at the ODOT Materials Laboratory, or other laboratory as designated by the Agency. Non-polymer-modified Emulsified Asphalt is tested within 30 Calendar Days from the date it is sampled. Polymer-modified Emulsified Asphalt is tested within 14 Calendar Days from the date it is sampled.

00715.15(a)(3) Preproduced Aggregate - Replace this subsection, except for the subsection number and title, with the following:

Compliance of Aggregates produced and stockpiled before the Award of this Contract is determined by Section 00165

00715.16 Acceptance of Aggregate - Replace this subsection, except for the subsection number and title, with the following:

The Contractor's quality control tests are used for acceptance of Aggregates if verified by the Quality Assurance Program. The Agency will perform Aggregate production quality assurance according to the following:

(a) ODOT Administered Projects - Quality assurance testing on ODOT administered projects is performed according to Section 00165.

(b) Projects Administered by Other Agencies - The quantity of quality assurance testing on projects administered by other Agencies is at the discretion of the Agency or as designated in the Special Provisions.

00715.21 Asphalt Distributor - Replace this subsection, except for the subsection number and title, with the following:

Provide an asphalt distributor designed, equipped, maintained and operated so the Emulsified Asphalt Material is applied uniformly at even heat. Provide a distributor capable of applying the asphalt on variable surface widths up to 16 feet, at readily determined and controlled rates from 0.05 - 2.0 gallons per square yard, and with uniform pressure. Do not vary any specified rate by more than 0.02 gallons per square yard. Provide distributor Equipment that includes a tachometer, pressure gauges, accurate volume measuring devices and a thermometer for measuring temperature of tank contents. Provide distributors equipped with a positive power unit for the asphalt pump, and full circulation spray bars adjustable both laterally and vertically. Set the bar height for triple lap coverage.

00715.23(a) Pneumatic-tired Rollers - Replace this subsection, except for the subsection number and title, with the following:

Provide self-propelled, tandem or multiple axle, multiple wheel type pneumatic-tired rollers with smooth-tread pneumatic tires of equal size. Stagger the tires on the axles at such spacings and overlaps that will provide uniform compacting pressure for the full compacting width of the roller. The minimum load per tire is 2,800 pounds, with tire inflation pressures of 45 psi to 90 psi.

00715.40 Season and Weather Limitations - Replace the title of this subsection with "Weather Limitations".

(Use the following sentence to change hours. Check with the Project Manager for the number of hours that emulsified asphalt and aggregate can be placed before sunset. It may range from 2 - 4 hours, depending on elevation, work in shaded areas, and other conditions.)

In the sentence that begins "Complete the application of...", replace the words "3 hours" with the words "_____ hours".

(Use the following sentence for Region 3 Projects. Use the previous subsection number and title if above hours are not changed.)

In the sentence that begins "The placing of multiple...", replace "July 1" with "June 15".

(Use the following sentence for Region 4 and 5 Projects. Use the previous subsection number and title if above hours are not changed.)

In the sentence that begins "The placing of multiple...", replace "July 1" with "June 1".

~~*(Use the following subsections .42(a) and .43 to change hours. Check with the Project Manager for the number of hours that courses can be squared up before sunset. It may range from 2 - 4 hours, depending on elevation, work in shaded areas, and other conditions.)*~~

00715.42(a) Type E-9 and E-11 Oil Mats - Replace the bullet that begins "Complete first and second ..." with the following bullet:

- Complete first and second Course (and third Course for Type E-11) of the oil mat throughout the entire section (including the dry key) that the oil mat is to be applied. Square up these Courses 3 hours prior to sunset each Day.

~~*(Use the following subsections .42(a) and .43 sentence to change hours. Check with the Project Manager for the number of hours that courses can be squared up before sunset. It may range from 2 - 4 hours, depending on elevation, work in shaded areas, and other conditions.)*~~

Throughout this subsection, replace the words "3 hours" -with the words "_____ hours".

(Use the following subsection .43 to change hours. Check with the Project Manager for the number of hours that courses can be squared up before sunset. It may range from 2 - 4 hours, depending on elevation, work in shaded areas, and other conditions.)

00715.43 Applying Emulsified Asphalt - In the third bullet, replace the words "3 hours" with the words " _____ hours".

00715.44 Hauling and Spreading Aggregates - Replace the paragraph that begins "Aggregates shall ..." with the following paragraph:

Furnish surface damp Aggregates at the time of application. Excess free water (water not adhering to the Aggregate surface) on the Aggregate is not allowed.

Replace the paragraph that begins "Do not operate the ..." with the following paragraph:

Do not operate the chip spreader at speeds that cause the chips to roll over after striking the emulsion covered surface.

00715.45 Shaping and Compacting - Replace the paragraph that begins "Compact the surface with ..." with the following paragraph:

Compact the surface with a minimum of four complete Coverages immediately behind the chip spreader. Perform additional Coverages as directed by the Engineer until the Material is interlocked, firm, and partially bound with the underlying Emulsified Asphalt. The sequence of rollers is as directed by the Engineer.

00715.60 Establishment - Replace the paragraph that begins "Perform the above operations ..." with the following paragraph:

Perform the above operations under traffic and at frequencies that the Engineer determines as being necessary to develop and establish the Course to uniform firmness and stability throughout.

00715.70 Surface Tolerance - Provide a finished surface, after brooming, that does not vary by more than 1/2 inch either transverse or perpendicular to centerline when tested with a 12-foot straightedge. Provide and operate the straightedge under the observation of the Engineer.

00715.90 Payment - Replace the paragraph that begins "Payment will be payment ..." with the following paragraph:

Payment will be payment in full for furnishing and placing all Materials, and for providing all Equipment, labor, and Incidentals necessary to complete the Work as specified.