

SECTION 00744 - ASPHALT CONCRETE PAVEMENT

(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 Section 00744 of the Standard Specifications modified as follows:

00744.10(a) New Coarse and Fine Aggregates - Replace the paragraph that begins "Testing of Aggregates ..." with the following paragraph:

Testing of Aggregates for soundness, durability, and harmful substances is at the discretion and expense of the Agency.

00744.10(a)(1) Soundness - Replace the paragraph that begins "Provide Coarse ..." with the following paragraph:

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.

00744.10(a)(2) Durability - Replace the paragraph that begins "Provide Aggregate ..." with the following paragraph:

Furnish Aggregate not exceeding the following maximum values:

00744.10(a)(3) Fractured Faces - Replace the paragraph that begins "Provide crushed Aggregate ..." with the following paragraph:

Furnish crushed Aggregate with not less than the minimum number of fractured faces as determined by AASHTO T 335 as follows:

00744.10(b) Reclaimed Asphalt Pavement - Replace this subsection, except for the subsection number and title, with the following:

RAP Material used in the production of new ACP is optional. No more than 30 percent RAP Material is allowed in the new ACP Pavement. Use RAP Aggregates in the ACP that are no larger than the specified maximum allowable Aggregate size before entering the cold feed. Blend the RAP Material with new Aggregate to provide a mixture according to the JMF within the tolerances specified.

00744.10(c)(5) Establishing Mix Design Inputs - Replace the paragraph that begins "Blend the RAS ..." with the following paragraph:

Blend the RAS or RAM with new Aggregate to provide a mixture according to the JMF within the tolerances specified.

00744.11(a) Asphalt Cement - Replace this subsection, except for the subsection number and title, with the following:

Furnish asphalt cement according to ODOT's publication *Standard Specifications for Asphalt Materials*. The applicable Specifications are those contained in the current publication on the date the Project is advertised. Use the grade of asphalt that is specified in the Special Provisions.

(Fill in the blank with the required grade of asphalt used on the project.)

Provide _____ grade asphalt cement for this Project.

00744.13 Job Mix Formula Requirements - Replace the paragraph that begins "Develop the JMF ..." with the following paragraph:

Develop the JMF according to the ODOT *Contractor Mix Design Guidelines for Asphalt Concrete*; or verify according to the ODOT mix design verification process. Submit the proposed JMF and supporting data to the Engineer for review and approval at least 10 Calendar Days before anticipated use. Perform a new TSR if the source of the asphalt cement changes.

00744.14 Tolerances and Limits - Replace the paragraph that begins "Develop the JMF ..." with the following paragraph:

When a JMF tolerance applies to a constituent, full tolerance is given even if it exceeds the control points established in 00744.12(b). Full tolerance is given for RAP, RAS, or RAM content even if it exceeds the limits established in 00744.10.

(Use the following subsection .16 on projects that are bid and awarded by ODOT. The following subsection is not intended for use on projects that are not bid and awarded by ODOT.)

00744.16 Sampling and Testing - Replace this subsection, except for the subsection number and title, with the following:

For each 1,000 Tons of placement, have a CAT I perform a minimum of one of each of the following test methods as modified in the MFTP:

- Asphalt Content - AASHTO T 308 with ODOT TM 323 determined Calibration Factor
- Gradation - AASHTO T 30
- Mix Moisture - AASHTO T 329
- Maximum Specific Gravity - AASHTO T 209

- Field Compacted Gyratory Specimens - ODOT TM 326

When less than 1,000 Tons of mix is placed in a Day, perform a minimum of one series of tests per Day. Provide test results to the Engineer by the middle of the following work shift. The Engineer may waive the requirement for any of AASHTO T 308, AASHTO T 30, AASHTO T 329, and ODOT TM 326 on a daily basis. The Engineer may waive the requirement for AASHTO T 209 when less than 500 Tons of ACP is placed in a single work shift.

Provide samples or split samples to the Engineer when requested.

(Use the following subsection .17 on projects that are bid and awarded by ODOT. The following subsection is not intended for use on projects that are not bid and awarded by ODOT.)

00744.17 Acceptance - Replace this subsection, except for the subsection number and title, with the following:

If the test result for each mix gradation constituent, asphalt content, and density measurement is within the Specification limits, the Material is accepted. If the asphalt content, one or more gradation constituents, or the density measurement are not within the specification limits, the Material that is not within the Specification limits is accepted according to 00150.25.

(Use the following subsection .41 on projects that are bid and awarded by ODOT. The following subsection is not intended for use on projects that are not bid and awarded by ODOT.)

00744.41 Mixing Temperature - Replace the table with the following:

Type	Temperature, °F	
	Maximum at Mixer	Minimum Behind Paver
HMAC	350	240
WMAC	350	215

00744.23 Pavers - Replace the bullet that begins "Self-contained, self-propelled ..." with the following bullet:

- Self-contained, self-propelled, supported on tracks or wheels, that does not contact the mixture being placed.

Replace the bullet that begins "Equipped with augers ..." with the following bullet:

- Equipped with augers and a screed or strike-off assembly, heated if necessary, that:

Replace the bullet that begins "Equipped with a paver ..." with the following bullet:

- Equipped with a paver control system that:

00744.41 Mixing Temperatures- Replace the paragraph that begins "Establish the allowable ..." with the following paragraph:

Establish the allowable mixing and placement temperature ranges by the JMF. Measure the mixture temperature at the discharge of the mixer. Measure the placement temperature behind the paver. The allowable production temperatures may be adjusted based on the asphalt cement Supplier's recommendation if approved by the Engineer. The maximum mixture temperature and the minimum placement temperature is as follows:

00744.42 Tack Coat - Replace the paragraph that begins "Treat all paved surfaces ..." with the following paragraph:

Treat all paved surfaces on and against where ACP is to be placed with an asphalt tack coat according to Section 00730. Before applying the tack coat, clean and dry the surface to be tacked.

Replace the paragraph that begins "Treat all waterproofing membranes ..." with the following paragraph:

Treat all waterproofing membranes on and against where ACP is to be placed with an asphalt tack coat meeting the requirements of 00744.11(a) or as recommended by the membrane manufacturer.

00744.43(a) Hauling - Replace the paragraph that begins "ACP will be ..." with the following paragraph:

ACP is rejected before placing if one or more of the following occurs:

00744.44 Longitudinal Joints - Replace the paragraph that begins "At longitudinal joints ..." with the following paragraph:

At longitudinal joints, bond, compact and finish the new ACP equal to the ACP against where it is placed.

00744.44(a) Location - Replace the paragraph that begins "Place the ACP ..." with the following paragraph:

Place the ACP in Panel widths that hold the number of longitudinal joints to a minimum. Offset the longitudinal joints in one Panel by at least 6 inches from the longitudinal joints in the Panel immediately below.

00744.44(b) Drop-Offs - Replace the bullet that begins "Construct, maintain, remove ..." with the following bullet:

- Construct, maintain, remove, and dispose of the temporary wedge at no additional cost to the Agency. ACP for the temporary wedge is paid for at the Contract unit price.

00744.45(a)(1) Temporary End Panel - Replace the bullet that begins "For wedges that will be under traffic for less ..." with the following bullet:

- For wedges that are under traffic for less than 24 hours, construct an 8-foot-long wedge (1V:50H taper rate).

Replace the bullet that begins "For wedges that will be under traffic for 24 ..." with the following bullet:

- For wedges that are under traffic for 24 hours or longer, construct a 25-foot-long wedge (1V:160H taper rate).

Replace the bullet that begins "Construct, maintain, remove ..." with the following bullet:

- Construct, maintain, remove, and dispose of the temporary wedge at no additional cost to the Agency. ACP for the temporary wedge is paid for at the Contract unit price.

00744.45(a)(3) Excess Asphalt Concrete Pavement - Replace this subsection, except for the subsection number and title, with the following:

After completing a temporary end Panel as specified, dispose of unused, remaining ACP as directed. Payment is made for the entire load of ACP, but is limited to only one load for each joint of each Panel.

00744.45(a)(5) Joint Requirements - Replace this subsection, except for the subsection number and title, with the following:

Compact both sides of the joint to the specified density. Test the joint surface according to 00744.70 with a straightedge placed across the joint.

(Use the following subsection .49 on projects that are bid and awarded by ODOT. The following subsection is not intended for use on projects that are not bid and awarded by ODOT.)

00744.49 Compaction - Replace the paragraph that begins "Determine compliance with..." with the following paragraph:

Determine compliance with density Specifications by random testing of the compacted surface with calibrated nuclear gauges. Determine the density by averaging QC tests performed by a CDT with the nuclear gauge operated in the backscatter mode according to AASHTO T 335 at one random location for each 100 Tons of asphalt concrete placed, but take no less than three tests each shift. Do not locate the center of a density test less than 1 foot from the Panel edge. Calculate MAMD according to ODOT TM 305. The Engineer may waive compaction testing requirements when less than 500 Tons of ACP is placed in a single work shift.

Replace the bullet that begins "**Thin Pavements** - Leveling ..." with the following bullet:

- **Thin Pavements** - Leveling, patches, or where the nominal compacted thickness of a Course of ACP is less than 2 inches.

(Use the following lead-in paragraph and one of the following two options when traffic restrictions are required. Obtain information from the pavement designer. Delete the option that does not apply.)

Add the following subsection:

[Option 1 - Use this .51 when paving through the top base course is required.]

00744.51 Opening Sections to Traffic - Schedule work so that, during the same shift, the surfaces being paved are paved full width and length through the top Base Course before opening to traffic. Traffic will be allowed on the top Base Course up to ____ Calendar Days.

Before beginning wearing Course paving operations, make repairs to the existing surface as directed. Payment for the repairs will be made according to 00195.20.

[Option 2 - Use this .51 when paving through the wearing course is required.]

00744.51 Opening Sections to Traffic - Schedule work so that, during the same shift, the surfaces being paved are paved full width and length through the wearing Course before opening to traffic.

00744.70 Pavement Smoothness - Replace this subsection, except for the subsection number and title, with the following:

Provide a 12-foot straightedge. Test with a 12-foot straightedge parallel to and perpendicular to the centerline, as directed. Do not vary the Pavement surface by more than 1/4 inch. Mark areas not meeting the surface tolerance.

00744.90 Payment - Replace this subsection, except for the subsection number and title, with the following:

The accepted quantities of ACP incorporated into the Project, whether or not recycled Materials are used, will be paid for at the Contract unit price, per Ton, for the item "Level ____, ____ ACP Mixture ____".

The following is inserted in the blanks:

- The level of ACP "1", "2", "3" is inserted in the first blank.
- The type of ACP "3/4 inch", "1/2 inch", "3/8 inch", is inserted in the second blank.
- The words "in Leveling", "in Temporary", or "in Leveling and Temporary" is inserted in the third blank when applicable.

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.

No separate or additional payment will be made for:

- Asphalt cement, mineral filler, lime, and anti-stripping or other additives
- Sawing, cleaning, and filling joints on bridge deck overlays