HMA Materials Training

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Annual Materials Training
Longitudinal Joint Construction
GENERAL NOTES

IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION W302.3 FOR WEDGED NOTCHED JOINTS AND GENERAL JOINT CONSTRUCTION REQUIREMENTS.

FOR ALL LONGITUDINAL JOINTS, ENSURE THE PAVEMENT OVERLAPS THE PREVIOUSLY PLACED MATERIAL BY 1/4 IN. AND THE HOT SIDE OF THE JOINT REMAINS HIGHER THAN THE COLD SIDE BY APPROXIMATELY 1/4 IN. AFTER FINAL COMPACTION.

ONLY POUR THE LONGITUDINAL NOTCHED WEDGE JOINT FOR HMA MATERIAL OR AS DIRECTED BY THE ENGINEER TO ADDRESS SPECIFIC LENGTHS OF JOINT DAMAGED BY TRAFFIC. WHEN MELTING RACE OR REPAIRING ANY LONGITUDINAL JOINT, LEAVE THE MATERIAL INTACT TO 2 IN. FROM THE TOP NOTCH OR FROM THE VERTICAL JOINT EDGE ON THE COLD SIDE OF THE JOINT.

USE LONGITUDINAL MOLDED JOINT AS PLANS SHOWN OR AS DIRECTED BY THE ENGINEER DIRECTS.
2018 Longitudinal Joint Density SPV Project Results
2019 Longitudinal Joint Density SPV Projects

11 projects – **2 LT, 6 MT and 3 HT**

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Tack Coat
Tracking
No. 6 (4.75-mm) HMA via ASP-6
Interlayer STSP
Bending Beam Fatigue
The polymer network becomes fully interconnected
CMM 8-15 Nuclear Density Testing
1 Lot (Single Day’s Paving)

12 ft driving lane (typical)

Sublot 1
(1500 ln ft)

Sublot 2
(1500 ln ft)

Sublot 3
(1500 ln ft)

Increasing Stationing

Offset Range 1
Offset Range 2
Offset Range 3

Offset Width: Divide lane into equal widths according to Table 1.

Note: 12 ft driving lane (typical). Required QC or QV tests determined by specification.

1 Sublot (1100 Lane Feet)

12 ft driving lane (typical)

Segment 1
(367 ln ft)

Segment 2
(367 ln ft)

Segment 3
(366 ln ft)

Increasing Stationing

(QC=solid lines, QV=dashed)

Reference Line

Divide lane into equal segments according to Table 2.

Note: May be necessary to move tests relative to tapered edge. Required QC or QV tests determined by specification.
1 Sublot (420 Centerline Feet)

Divide total lane length into equal segments according to Table 2.

Note: 12 ft driving lane (typical), required QC or QV tests determined by specification.

(QC=solid lines, QV=dashed)
Balanced Mixture Design

Cracking Potential

Rutting Potential
Cracking Potential
Rutting Potential
Improved Resistance to Cracking

Too Soft

Sweet Spot

Too Brittle

Improved Resistance to Rutting
Balance Mix Design
find the mix that is Just Right!
CMM 8-36 QMP - HMA

• \( G_{mm}, G_{mb}, \) and Compaction testing procedures updated to WisDOT-Modified AASHTO

• Ignition Oven:
  ▪ WisDOT will use Ignition Oven for AC% testing unless otherwise stated
  ▪ Individually-packaged samples required for all ignition oven correction factors
  ▪ New requirement for correction factor sample labeling
    • Now includes reason for submittal (new design, annual reverification, other)
END