

Quadrant: S
Section: 6
Sublot: 1

Laboratory DiaryGeneral Description of Mix and Materials

Design Method: 411-D
 Compactive Effort: 65 gyrations
 Binder Performance Grade: 76-22
 Modifier Type: SBS
 Aggregate Type: Grv/Lms/Snd/RAP
 Design Gradation Type: Dense

Avg. Lab Properties of Plant Produced Mix

<u>Sieve Size</u>	<u>Design</u>	<u>QC</u>
1":	100	100
3/4":	100	100
1/2":	96	96
3/8":	88	88
No. 4:	70	69
No. 8:	49	49
No. 16:	28	36
No. 30:	25	26
No. 50:	12	14
No. 100:	7	9
No. 200:	5.6	7.3
Asphalt Content:	5.8	6.3
Pill Bulk Gravity:	2.282	2.322
TMD (Rice):	2.377	2.374
Avg Air Voids:	4.0	2.2
Avg VMA:	15.0	13.2

Construction DiaryRelevant Conditions for Construction

Completion Date: October 5, 2006
 24 Hour High Temperature (F): 86
 24 Hour Low Temperature (F): 63
 24 Hour Rainfall (in): 0.00
 Planned Mill / Lift Thickness (in): 1.25
 Paving Machine: Roadtec

Plant Configuration and Placement Details

<u>Component</u>	<u>% Setting</u>
Asphalt Content (Plant Setting)	5.8
Memphis D Rock (Gravel)	44.0
Fullen Dock #10 Hard	23.0
Memphis Natural Sand	18.0
I-40 Surface RAP	15.0
Approximate Length (ft):	198
Survey Mill / Lift Thickness (in):	1.1
Type of Tack Coat Utilized:	67-22
Target Tack Application Rate (gal/sy):	0.05
Avg Temperature at Plant (F):	330
Avg Section Compaction:	94.4%

General Notes:

- 1) Mixes are referenced by quadrant (E=East, N=North, W=West, and S=South), section number (sequential) and subplot (top=1);
- 2) The total research thickness of all mix performance sections ranges from 3/4 to 4 inches by design;
- 3) The total HMA thickness of all structural study sections (N1 through N10) ranges from 7 to 14 inches by design;
- 4) ARZ, TRZ and BRZ refer to gradations intended to pass above, through and below the restricted zone, respectively;
- 5) SMA and OGFC refer to stone matrix asphalt and open-graded friction course, respectively; and
- 6) VMA values computed from QC volumetrics are based on design values of Gsb (stockpile gravity testing is ongoing).