10/5/2009

Quadrant: S
Section: 6
Sublot: 1

Laboratory Diary

General Desccription of Mix and Materials

Design Method:	Super
Compactive Effort:	100 gyrations
Binder Performance Grade:	76-22
Modifier Type:	SBS
Aggregate Type:	Limestone/Porph
Design Gradation Type:	Coarse

Avg. Lab Properties of Plant Produced Mix

Sieve Size	Design	QC
25 mm (1"):	100	100
19 mm (3/4"):	100	100
12.5 mm (1/2"):	96	96
9.5 mm (3/8"):	85	86
4.75 mm (#4):	52	55
2.36 mm (#8):	33	34
1.18 mm (#16):	20	21
0.60 mm (#30):	12	13
0.30 mm (#50):	8	9
0.15 mm (#100):	6	7
0.075 mm (#200):	4.9	5.4
Binder Content (Pb):	5.6	5.4
Eff. Binder Content (Pbe):	4.7	4.5
Dust-to-Binder Ratio:	1.0	1.2
Rice Gravity (Gmm):	2.464	2.467
Avg. Bulk Gravity (Gmb):	2.365	2.356
Avg Air Voids (Va):	4.0	4.5
Agg. Bulk Gravity (Gsb):	2.620	2.616
Avg VMA:	14.8	14.8
Avg. VFA:	73	70

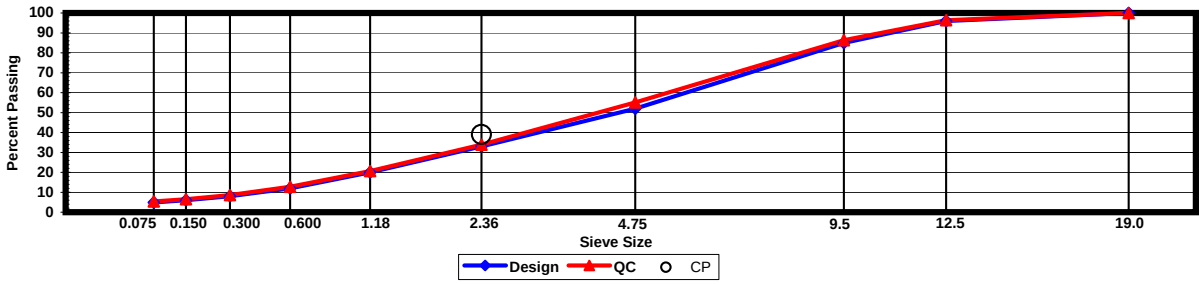
Construction Diary

Relevant Conditions for Construction

Completion Date:	July 30, 2009
24 Hour High Temperature (F):	90
24 Hour Low Temperature (F):	74
24 Hour Rainfall (in):	0.04
Planned Subot Lift Thickness (in):	1.8
Paving Machine:	Roadtec

Plant Configuration and Placement Details

Component	% Setting
Asphalt Content (Plant Setting)	5.9
Maryland Heights, MO 1/2"	22.0
Maryland Heights, MO 3/8"	30.0
Maryland Heights, MO Man Sand	28.0
Iron Mountain, MO Porphyry Man Sand	18.0
Hyd Lime	2.0
As-Built Sublot Lift Thickness (in):	1.9
Total Thickness of All 2009 Sublots (in):	1.9
Approx. Underlying HMA Thickness (in):	26.8
Type of Tack Coat Utilized:	PG67-22
Target Tack Application Rate (gal/sy):	0.03
Approx. Avg. Temperature at Plant (F):	345
Avg. Measured Mat Compaction:	93.1%



General Notes:

1) Mixes are referenced by quadrant (E=East, N=North, W=West, and S=South), section # (sequential) and sublot (top=1);
3) The total HMA thickness of all structural study sections (N1-N11 and S8-S12) ranges from 5-3/4 to 14 inches by design;
3) All non-structural sections are supprted by a uniform perpetual foundation in order to study surface mix performance;
4) SMA and OGFC refer to stone matrix asphalt and open-graded friction course, respectively; and
5) All liquid asphalt purchased for use in Track reconstruction contained LOF 6500 antistrip additive at a rate of 0.5 percent