

Quadrant: S
Section: 1
Sublot: 1

Laboratory Diary

General Description of Mix and Materials

Design Method: PFC
 Compactive Effort: 50 gyrations
 Binder Performance Grade: ARB-VDOT
 Modifier Type: GTR
 Aggregate Type: PFC 12.5 RAP
 Design Gradation Type: PFC

Avg. Lab Properties of Plant Produced Mix

Sieve Size	Target	QC
25 mm (1"):	100	100
19 mm (3/4"):	100	100
12.5 mm (1/2"):	95	95
9.5 mm (3/8"):	73	72
4.75 mm (#4):	21	22
2.36 mm (#8):	9	11
1.18 mm (#16):	NA	9
0.60 mm (#30):	NA	7
0.30 mm (#50):	NA	6
0.15 mm (#100):	NA	5
0.075 mm (#200):	2.5	3.7
Binder Content (Pb):	5.8	5.9
Eff. Binder Content (Pbe):	5.8	5.9
Dust-to-Binder Ratio:	0.4	0.6
Rice Gravity (Gmm):	2.693	2.645
Avg. Bulk Gravity (Gmb):	2.136	2.259
Avg Air Voids (Va):	20.7	14.6
Agg. Bulk Gravity (Gsb):	2.990	2.937
Avg VMA:	32.7	27.7
Avg. VFA:	37	47

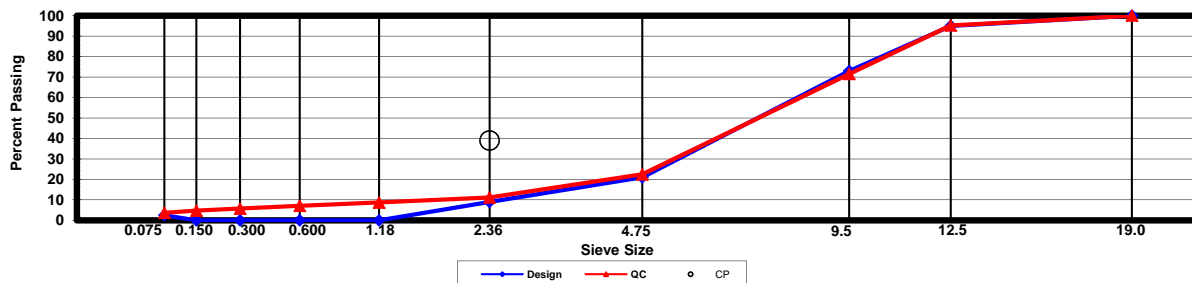
Construction Diary

Relevant Conditions for Construction

Completion Date: August 24, 2012
 24 Hour High Temperature (F): 91
 24 Hour Low Temperature (F): 67
 24 Hour Rainfall (in): 0.00
 Planned Sublot Lift Thickness (in): 2.0
 Paving Machine: Roadtec

Plant Configuration and Placement Details

Component	% Setting
Binder Content (Plant Setting)	6.4
Virginia 78	60.0
Virginia 8	30.0
Virginia RAP	10.0
Liquid Antistrip	0.5
Cellulose	0.3
As-Built Sublot Lift Thickness (in):	1.9
Total Thickness of All 2012 Sublots (in):	3.8
Approx. Underlying HMA Thickness (in):	20.2
Type of Tack Coat Utilized:	NTSS-1HM
Undiluted Target Tack Rate (gal/sy):	0.05
Approx. Avg. Temperature at Plant (F):	325
Avg. Measured Mat Compaction:	82.8%



General Notes:

- 1) Mixes are referenced by quadrant (E=East, N=North, W=West, S=South, L=Lee Rd 159), section number, and sublot (top=1);
- 2) SMA and OGFC refer to stone matrix asphalt and open-graded friction course, respectively; and
- 3) Mixes not containing hydrated lime were run with either Gripper X antistrip or Evotherm Q1 warm mix additive at a 0.5% rate

Quadrant: S
Section: 1
Sublot: 2

Laboratory Diary

General Description of Mix and Materials

Design Method: Super
 Compactive Effort: 65 gyrations
 Binder Performance Grade: 67-22
 Modifier Type: NA
 Aggregate Type: Im-19.0D w/Rap 30
 Design Gradation Type: DGA

Avg. Lab Properties of Plant Produced Mix

Sieve Size	Target	QC
25 mm (1"):	100	100
19 mm (3/4"):	97	98
12.5 mm (1/2"):	87	90
9.5 mm (3/8"):	NA	77
4.75 mm (#4):	NA	50
2.36 mm (#8):	35	37
1.18 mm (#16):	NA	29
0.60 mm (#30):	NA	21
0.30 mm (#50):	NA	13
0.15 mm (#100):	NA	9
0.075 mm (#200):	6.0	6.3
Binder Content (Pb):	4.7	4.6
Eff. Binder Content (Pbe):	4.5	4.5
Dust-to-Binder Ratio:	1.3	1.4
Rice Gravity (Gmm):	2.517	2.526
Avg. Bulk Gravity (Gmb):	2.416	2.434
Avg Air Voids (Va):	4.0	3.6
Agg. Bulk Gravity (Gsb):	2.697	2.706
Avg VMA:	14.6	14.2
Avg. VFA:	73	74

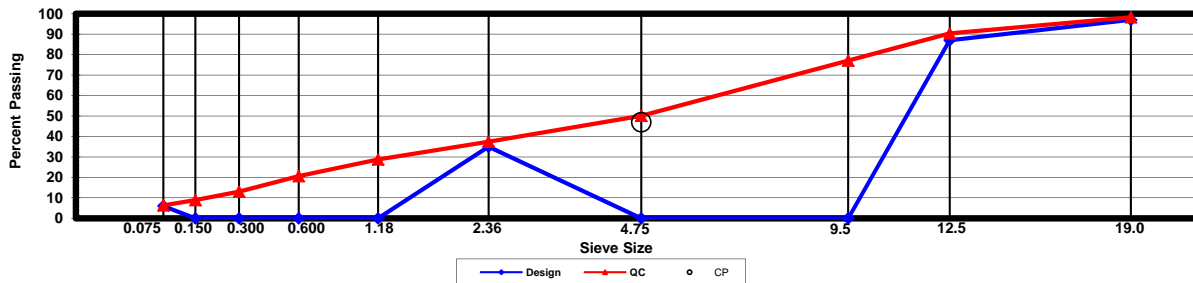
Construction Diary

Relevant Conditions for Construction

Completion Date: August 15, 2012
 24 Hour High Temperature (F): 92
 24 Hour Low Temperature (F): 69
 24 Hour Rainfall (in): 0.00
 Planned Subot Lift Thickness (in): 2.0
 Paving Machine: Roadtec

Plant Configuration and Placement Details

Component	% Setting
Binder Content (Plant Setting)	4.3
Virginia 68	44.0
Virginia 26	16.0
Virginia Natural Sand	10.0
Virginia RAP	30.0
Liquid Antistrip	0.5
As-Built Sublot Lift Thickness (in):	1.8
Total Thickness of All 2012 Sublots (in):	3.8
Approx. Underlying HMA Thickness (in):	20.2
Type of Tack Coat Utilized:	NTSS-1HM
Undiluted Target Tack Rate (gal/sy):	0.06
Approx. Avg. Temperature at Plant (F):	330
Avg. Measured Mat Compaction:	94.1%



General Notes:

- 1) Mixes are referenced by quadrant (E=East, N=North, W=West, S=South, L=Lee Rd 159), section number, and subplot (top=1);
- 2) SMA and OGFC refer to stone matrix asphalt and open-graded friction course, respectively; and
- 3) Mixes not containing hydrated lime were run with either Gripper X antistrip or Evotherm Q1 warm mix additive at a 0.5% rate