

Quadrant: N
Section: 13
Sublot: 1

Laboratory Diary

General Description of Mix and Materials

Design Method: Super
 Compactive Effort: 65 gyrations
 Binder Performance Grade: 64-22
 Modifier Type: NA
 Aggregate Type: Granite
 Design Gradation Type: DGA

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"):	100	99
9.5 mm (3/8"):	95	95
4.75 mm (#4):	64	64
2.36 mm (#8):	44	42
1.18 mm (#16):	34	32
0.60 mm (#30):	25	24
0.30 mm (#50):	16	17
0.15 mm (#100):	10	10
0.075 mm (#200):	5.9	6.3
Binder Content (Pb):	5.6	5.7
Eff. Binder Content (Pbe):	4.9	5.0
Dust-to-Binder Ratio:	1.2	1.3
Rice Gravity (Gmm):	2.483	2.486
Avg. Bulk Gravity (Gmb):	2.382	2.437
Avg Air Voids (Va):	4.1	2.0
Agg. Bulk Gravity (Gsb):	2.657	2.666
Avg VMA:	15.4	13.8
Avg. VFA:	76	86

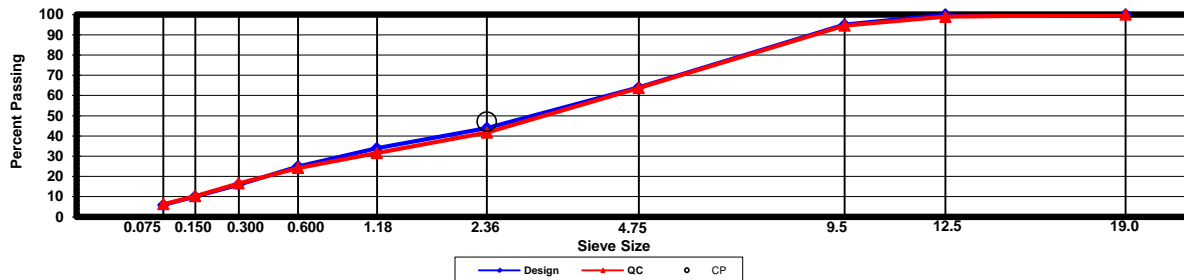
Construction Diary

Relevant Conditions for Construction

Completion Date: August 21, 2012
 24 Hour High Temperature (F): 90
 24 Hour Low Temperature (F): 70
 24 Hour Rainfall (in): 0.00
 Planned Subot Lift Thickness (in): 1.5
 Paving Machine: Roadtec

Plant Configuration and Placement Details

Component	% Setting
Binder Content (Plant Setting)	5.5
89 Columbus Granite	31.0
7 Columbus Granite	10.0
W10 Columbus Granite	24.0
810 Columbus Granite	34.0
Hyd Lime	1.0
As-Built Sublot Lift Thickness (in):	1.1
Total Thickness of All 2012 Sublots (in):	2.2
Approx. Underlying HMA Thickness (in):	21.8
Type of Tack Coat Utilized:	67-22
Undiluted Target Tack Rate (gal/sy):	0.04
Approx. Avg. Temperature at Plant (F):	305
Avg. Measured Mat Compaction:	93.9%



General Notes:

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

Quadrant: N
Section: 13
Sublot: 2

Laboratory Diary

General Description of Mix and Materials

Design Method: OGI
 Compactive Effort: 50 blow
 Binder Performance Grade: 67-22
 Modifier Type: NA
 Aggregate Type: Granite
 Design Gradation Type: GAP

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"):	96	92
9.5 mm (3/8"):	59	52
4.75 mm (#4):	14	13
2.36 mm (#8):	8	8
1.18 mm (#16):	6	7
0.60 mm (#30):	5	6
0.30 mm (#50):	4	5
0.15 mm (#100):	3	4
0.075 mm (#200):	2.0	2.9
Binder Content (Pb):	4.5	4.6
Eff. Binder Content (Pbe):	3.9	4.0
Dust-to-Binder Ratio:	0.5	0.7
Rice Gravity (Gmm):	2.528	2.544
Avg. Bulk Gravity (Gmb):	1.967	1.862
Avg Air Voids (Va):	22.2	26.8
Agg. Bulk Gravity (Gsb):	2.672	2.695
Avg VMA:	29.7	34.1
Avg. VFA:	25	21

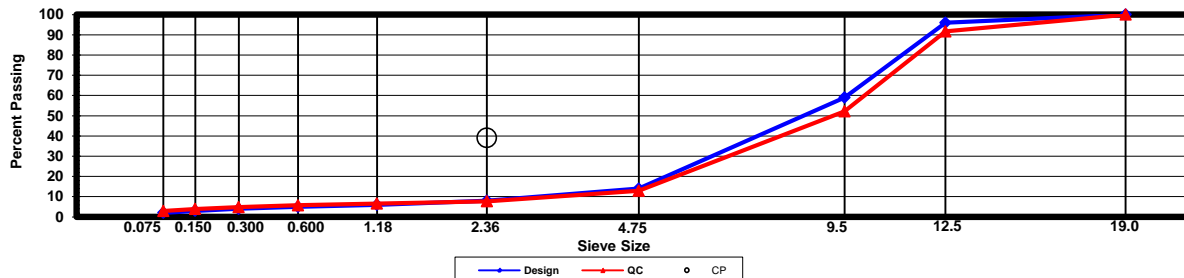
Construction Diary

Relevant Conditions for Construction

Completion Date: August 20, 2012
 24 Hour High Temperature (F): 84
 24 Hour Low Temperature (F): 71
 24 Hour Rainfall (in): 0.01
 Planned Subot Lift Thickness (in): 1.1
 Paving Machine: Roadtec

Plant Configuration and Placement Details

Component	% Setting
Binder Content (Plant Setting)	4.5
7 Columbus Granite	91.1
89 Columbus Granite	7.9
Hyd Lime	1.0
As-Built Sublot Lift Thickness (in):	1.2
Total Thickness of All 2012 Sublots (in):	2.2
Approx. Underlying HMA Thickness (in):	21.8
Type of Tack Coat Utilized:	67-22
Undiluted Target Tack Rate (gal/sy):	0.04
Approx. Avg. Temperature at Plant (F):	280
Avg. Measured Mat Compaction:	78.5%



General Notes:

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- SMA and OGFC refer to stone matrix asphalt and open-graded friction course, respectively; and
- Mixes not containing hydrated lime were run with either Gripper X antistriper or Evotherm Q1 warm mix additive at a 0.5% rate