

Quadrant: N
Section: 8
Sublot: 1

Laboratory Diary

General Description of Mix and Materials

Design Method: Super
 Compactive Effort: 80 gyrations
 Binder Performance Grade: 88-22
 Modifier Type: 7.5% SBS
 Aggregate Type: Grn/Sand/Lms
 Design Gradation Type: Fine

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"):	100	100
9.5 mm (3/8"):	100	100
4.75 mm (#4):	77	79
2.36 mm (#8):	60	59
1.18 mm (#16):	45	46
0.60 mm (#30):	31	36
0.30 mm (#50):	16	19
0.15 mm (#100):	9	12
0.075 mm (#200):	5.7	7.1
Binder Content (Pb):	5.9	5.4
Eff. Binder Content (Pbe):	5.3	4.7
Dust-to-Binder Ratio:	1.1	1.5
Rice Gravity (Gmm):	2.474	2.480
Avg. Bulk Gravity (Gmb):	2.375	2.401
Avg Air Voids (Va):	4.0	3.2
Agg. Bulk Gravity (Gsb):	2.667	2.653
Avg VMA:	16.2	14.4
Avg. VFA:	75	78

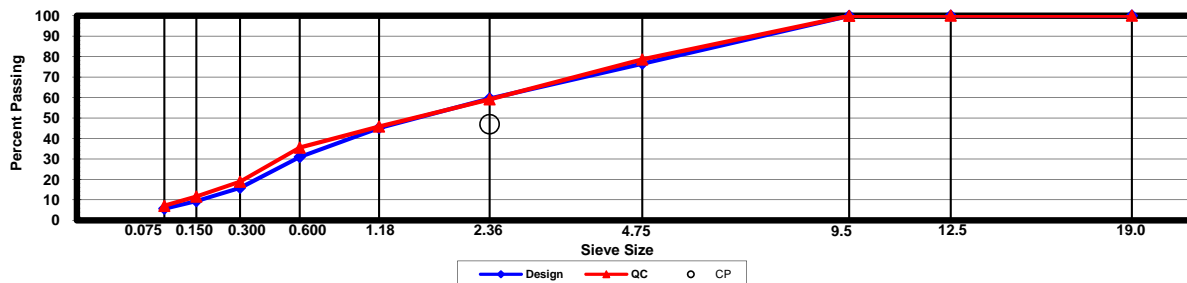
Construction Diary

Relevant Conditions for Construction

Completion Date: August 17, 2010
 24 Hour High Temperature (F): 93
 24 Hour Low Temperature (F): 75
 24 Hour Rainfall (in): 0.00
 Planned Sublot Lift Thickness (in): 1.3
 Paving Machine: Blaw Knox

Plant Configuration and Placement Details

Component	% Setting
Asphalt Content (Plant Setting)	5.9
89 Columbus Granite	36.0
8910 Opelika Limestone Screenings	23.0
M10 Columbus Granite	13.0
Shorter Coarse Sand	28.0
As-Built Sublot Lift Thickness (in):	1.2
Total Thickness of All 2009 Sublots (in):	5.9
Approx. Underlying HMA Thickness (in):	4.3
Type of Tack Coat Utilized:	NTSS-1HM
Target Tack Application Rate (gal/sy):	0.07
Approx. Avg. Temperature at Plant (F):	345
Avg. Measured Mat Compaction:	91.4%



General Notes:

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

Quadrant: N
Section: 8
Sublot: 2

Laboratory Diary

General Description of Mix and Materials

Design Method: Super
 Compactive Effort: 80 gyrations
 Binder Performance Grade: 88-22
 Modifier Type: 7.5% SBS
 Aggregate Type: Lms/Sand/Grn
 Design Gradation Type: Fine

Avg. Lab Properties of Plant Produced Mix

Sieve Size	Design	QC
25 mm (1"):	100	99
19 mm (3/4"):	93	94
12.5 mm (1/2"):	82	85
9.5 mm (3/8"):	71	76
4.75 mm (#4):	52	61
2.36 mm (#8):	45	51
1.18 mm (#16):	35	40
0.60 mm (#30):	24	26
0.30 mm (#50):	12	14
0.15 mm (#100):	7	8
0.075 mm (#200):	3.9	4.6
Binder Content (Pb):	4.6	4.4
Eff. Binder Content (Pbe):	4.2	3.8
Dust-to-Binder Ratio:	0.9	1.2
Rice Gravity (Gmm):	2.570	2.517
Avg. Bulk Gravity (Gmb):	2.467	2.393
Avg Air Voids (Va):	4.0	4.9
Agg. Bulk Gravity (Gsb):	2.737	2.662
Avg VMA:	14.0	14.0
Avg. VFA:	72	65

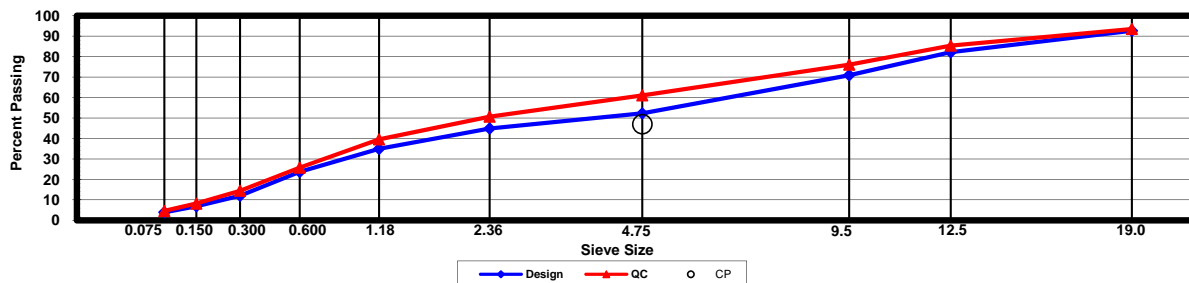
Construction Diary

Relevant Conditions for Construction

Completion Date: August 17, 2010
 24 Hour High Temperature (F): 93
 24 Hour Low Temperature (F): 75
 24 Hour Rainfall (in): 0.00
 Planned Sublot Lift Thickness (in): 3.3
 Paving Machine: Blaw Knox

Plant Configuration and Placement Details

Component	% Setting
Asphalt Content (Plant Setting)	4.8
78 Opelika Limestone	30.0
57 Opelika Limestone	13.0
M10 Columbus Granite	25.0
Shorter Coarse Sand	32.0
As-Built Sublot Lift Thickness (in):	3.4
Total Thickness of All 2009 Sublots (in):	5.9
Approx. Underlying HMA Thickness (in):	4.3
Type of Tack Coat Utilized:	NTSS-1HM
Target Tack Application Rate (gal/sy):	0.07
Approx. Avg. Temperature at Plant (F):	340
Avg. Measured Mat Compaction:	94.2%



General Notes:

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

Quadrant: N
Section: 8
Sublot: 3

Laboratory Diary

General Description of Mix and Materials

Design Method: Super
 Compactive Effort: 80 gyrations
 Binder Performance Grade: 88-22
 Modifier Type: 7.5% SBS
 Aggregate Type: Grn/Sand/Lms
 Design Gradation Type: Fine

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"):	100	100
9.5 mm (3/8"):	100	100
4.75 mm (#4):	77	81
2.36 mm (#8):	60	60
1.18 mm (#16):	45	45
0.60 mm (#30):	31	30
0.30 mm (#50):	16	18
0.15 mm (#100):	9	12
0.075 mm (#200):	5.7	7.0
Binder Content (Pb):	5.9	6.1
Eff. Binder Content (Pbe):	5.3	5.4
Dust-to-Binder Ratio:	1.1	1.3
Rice Gravity (Gmm):	2.474	2.464
Avg. Bulk Gravity (Gmb):	2.375	2.412
Avg Air Voids (Va):	4.0	2.1
Agg. Bulk Gravity (Gsb):	2.667	2.664
Avg VMA:	16.2	15.0
Avg. VFA:	75	86

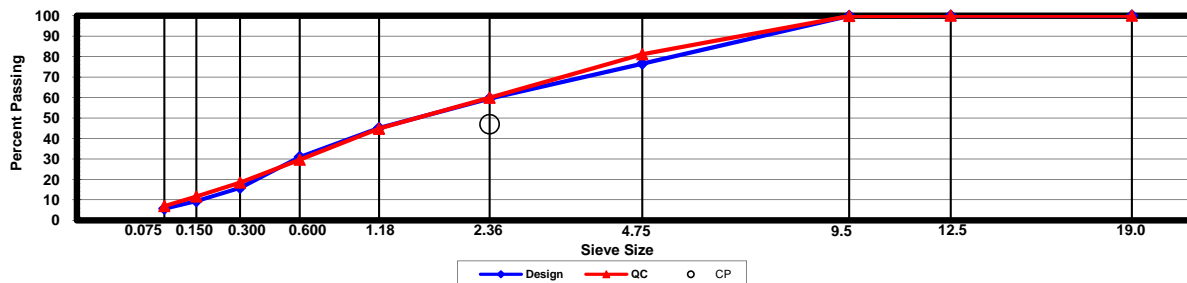
Construction Diary

Relevant Conditions for Construction

Completion Date: August 16, 2010
 24 Hour High Temperature (F): 93
 24 Hour Low Temperature (F): 75
 24 Hour Rainfall (in): 0.00
 Planned Sublot Lift Thickness (in): 1.3
 Paving Machine: Blaw Knox

Plant Configuration and Placement Details

Component	% Setting
Asphalt Content (Plant Setting)	6.1
89 Columbus Granite	36.0
8910 Opelika Limestone Screenings	23.0
M10 Columbus Granite	13.0
Shorter Coarse Sand	28.0
As-Built Sublot Lift Thickness (in):	1.3
Total Thickness of All 2009 Sublots (in):	5.9
Approx. Underlying HMA Thickness (in):	4.3
Type of Tack Coat Utilized:	NTSS-1HM
Target Tack Application Rate (gal/sy):	0.07
Approx. Avg. Temperature at Plant (F):	345
Avg. Measured Mat Compaction:	94.3%



General Notes:

- 1) Mixes are referenced by quadrant (E=East, N=North, W=West, and S=South), section # (sequential) and subplot (top=1);
- 2) 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 supported 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 antistripping additive at a rate of 0.5 percent