

Quadrant: E
Section: 7A
Sublot: 1

Laboratory Diary

General Description of Mix and Materials

Design Method: Super
 Compactive Effort: 100 gyrations
 Binder Performance Grade: 76-22
 Modifier Type: SBS
 Aggregate Type: Granite/Sand/RAP
 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"):	97	98
9.5 mm (3/8"):	85	90
4.75 mm (#4):	56	54
2.36 mm (#8):	42	40
1.18 mm (#16):	33	33
0.60 mm (#30):	21	24
0.30 mm (#50):	11	13
0.15 mm (#100):	7	7
0.075 mm (#200):	4.5	4.1
Binder Content (Pb):	5.2	4.8
Eff. Binder Content (Pbe):	4.6	4.2
Dust-to-Eff. Binder Ratio:	1.0	1.0
RAP Binder Replacement (%):	20.9	20.0
RAS Binder Replacement (%):	0.0	0.0
Total Binder Replacement (%):	20.9	20.0
Rice Gravity (Gmm):	2.483	2.491
Bulk Gravity (Gmb):	2.384	2.384
Air Voids (Va):	4.0	4.3
Agg. Bulk Gravity (Gsb):	2.647	2.64
VMA:	14.6	14
VFA:	73	69

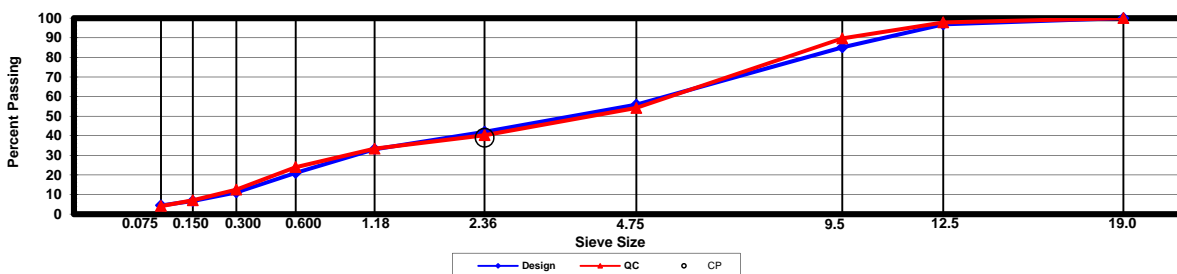
Construction Diary

Relevant Conditions for Construction

Completion Date: July 15, 2016
 24 Hour High Temperature (F): 95
 24 Hour Low Temperature (F): 71
 24 Hour Rainfall (in): 0.00
 Planned Sublot Lift Thickness (in): 1.5
 Paving Machine: Roadtec

Plant Configuration and Placement Details

Component	% Setting
Binder Content (Plant Setting)	5.0
89 Granite	22.0
78 Granite	29.0
Coarse Sand	29.0
EAP -1/2 RAP	20.0
Evotherm P15	0.5
As-Built Sublot Lift Thickness (in):	1.8
Total Thickness of All New Sublots (in):	1.8
Approx. Underlying HMA Thickness (in):	22.2
Type of Tack Coat Utilized:	NTSS-1HM
Undiluted Target Tack Rate (gal/sy):	0.08
Approx. Avg. Temperature at Plant (F):	340
Avg. Measured Mat Compaction:	93.9%



General Notes:

- References are by quadrant (E=East, N=North, W=West, S=South, L=Lee Rd 159, U=US-280), section #, and sublot (top=1).
- DGA, SMA, & OGFC refer to dense graded asphalt, stone matrix asphalt, & open-graded friction course, respectively.
- Production Gsb estimated using the actual production Gse and the difference between Gse and Gsb in the mix design.

Section and/or Sublot Specific Notes:

E7A-1, E7B-1, and E8A-1 made in a continuous plant run, wasting transition tonnage to ensure uniform mix, and running the paver hopper down in between sections on the Track. This method optimizes quality at the plant and on the Track by eliminating transverse joints.

Quadrant: E
Section: 7B
Sublot: 1

Laboratory Diary

General Description of Mix and Materials

Design Method: Super
 Compactive Effort: 100 gyrations
 Binder Performance Grade: 76-22
 Modifier Type: SBS
 Aggregate Type: Granite/Sand/RAP
 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"):	97	98
9.5 mm (3/8"):	86	92
4.75 mm (#4):	58	58
2.36 mm (#8):	45	44
1.18 mm (#16):	35	36
0.60 mm (#30):	23	25
0.30 mm (#50):	12	13
0.15 mm (#100):	7	7
0.075 mm (#200):	4.9	4.3
Binder Content (Pb):	5.2	5.0
Eff. Binder Content (Pbe):	4.5	4.4
Dust-to-Eff. Binder Ratio:	1.1	1.0
RAP Binder Replacement (%):	26.4	23.9
RAS Binder Replacement (%):	0.0	0.0
Total Binder Replacement (%):	26.4	23.9
Rice Gravity (Gmm):	2.488	2.503
Bulk Gravity (Gmb):	2.388	2.404
Air Voids (Va):	4.0	4.0
Agg. Bulk Gravity (Gsb):	2.649	2.66
VMA:	14.5	14
VFA:	72	72

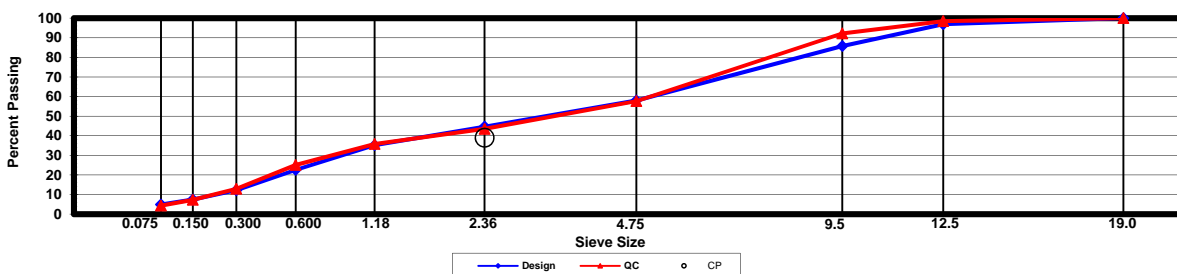
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78 Granite	27.0
Coarse Sand	29.0
EAP -1/2 RAP	25.0
Evotherm P15	0.5
As-Built Sublot Lift Thickness (in):	1.9
Total Thickness of All New Sublots (in):	1.9
Approx. Underlying HMA Thickness (in):	22.2
Type of Tack Coat Utilized:	NTSS-1HM
Undiluted Target Tack Rate (gal/sy):	0.08
Approx. Avg. Temperature at Plant (F):	340
Avg. Measured Mat Compaction:	91.6%



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