

Quadrant: U
Section: 36
Sublot: 1

Laboratory Diary

General Description of Mix and Materials

Design Method: Super
 Compactive Effort: 75 gyrations
 Binder Performance Grade: 67-22
 Modifier Type: Neat
 Aggregate Type: Lms/Sand/F-RAP/RAS
 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	100
9.5 mm (3/8"):	100	100
4.75 mm (#4):	99	95
2.36 mm (#8):	76	68
1.18 mm (#16):	53	50
0.60 mm (#30):	36	35
0.30 mm (#50):	23	21
0.15 mm (#100):	15	14
0.075 mm (#200):	11.5	11.2
Binder Content (Pb):	6.1	5.7
Eff. Binder Content (Pbe):	5.6	5.2
Dust-to-Eff. Binder Ratio:	2.0	2.1
RAP Binder Replacement (%):	11.4	12.2
RAS Binder Replacement (%):	8.6	9.2
Total Binder Replacement (%):	20.0	21.4
Rice Gravity (Gmm):	2.441	2.480
Bulk Gravity (Gmb):	2.343	2.426
Air Voids (Va):	4.0	2.2
Agg. Bulk Gravity (Gsb):	2.647	2.68
VMA:	16.9	15
VFA:	76	85

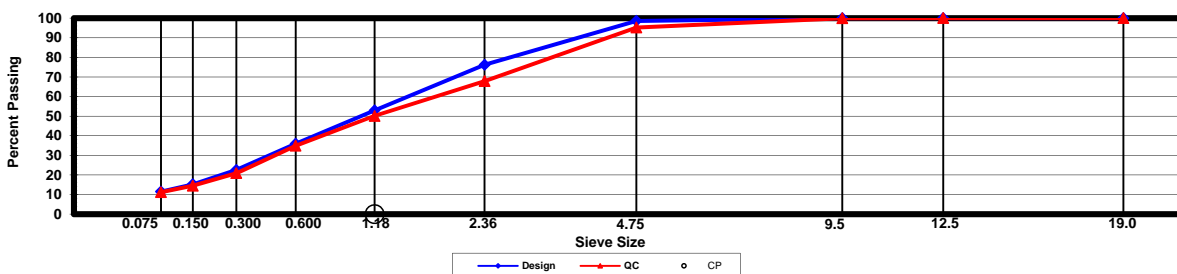
Construction Diary

Relevant Conditions for Construction

Completion Date: September 3, 2015
 24 Hour High Temperature (F): 93
 24 Hour Low Temperature (F): 71
 24 Hour Rainfall (in): 0.00
 Planned Sublot Lift Thickness (in): 0.8
 Paving Machine: Roadtec

Plant Configuration and Placement Details

Component	% Setting
Binder Content (Plant Setting)	5.6
Calera Limestone Screenings	60.0
Coarse Sand	26.0
EAP Fine RAP	11.0
EAP Post Consumer RAS	3.0
Evotherm P15	0.5
Hydrated Lime	1.0
As-Built Sublot Lift Thickness (in):	0.8
Total Thickness of All New Sublots (in):	1.1
Approx. Underlying HMA Thickness (in):	Pending
Type of Tack Coat Utilized:	NTSS-1HM
Undiluted Target Tack Rate (gal/sy):	0.05
Approx. Avg. Temperature at Plant (F):	335
Avg. Measured Mat Compaction:	91.8%



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:

NA

Lift 1	
Location:	US 280
Section:	36
Pavement Preservation Treatment:	FiberMat Chip Seal (89s)
Section Information:	
Placement Date:	8/27/2015
Emulsion/Tack Material:	UNKNOWN
Target Emulsion Rate (gal/SY):	0.4
Calibrated Emulsion Rate (gal/SY):	N.M.
Average Verified Emulsion Rate (gal/SY):	0.419*
Aggregate Type:	Columbus Granite, 89s
Target Chip Rate (lb/SY):	16
Verified Chip Rates (lb/SY):	Found Below
Milled Depth:	1 1/4"
Left-Wheel Path:	
Placement Date:	8/27/2015
Emulsion/Tack Material:	UNKNOWN
Target Emulsion Rate (gal/SY):	0.4
Calibrated Emulsion Rate (gal/SY):	N.M.
Verified Emulsion Rate (gal/SY):	0.404
Aggregate Type:	Columbus Granite, 89s
Target Chip Rate (lb/SY):	16
Verified Chip Rate (lb/SY):	11*
Between-Wheel Paths:	
Placement Date:	8/27/2015
Emulsion/Tack Material:	UNKNOWN
Target Emulsion Rate (gal/SY):	0.4
Calibrated Emulsion Rate (gal/SY):	N.M.
Verified Emulsion Rate (gal/SY):	0.436
Aggregate Type:	Columbus Granite, 89s
Target Chip Rate (lb/SY):	N/A
Verified Chip Rate (lb/SY):	N/A
Right-Wheel Path:	
Placement Date:	8/27/2015
Emulsion/Tack Material:	UNKNOWN
Target Emulsion Rate (gal/SY):	0.4
Calibrated Emulsion Rate (gal/SY):	N.M.
Verified Emulsion Rate (gal/SY):	0.418
Aggregate Type:	Columbus Granite, 89s
Target Chip Rate (lb/SY):	16
Verified Chip Rate (lb/SY):	11*
Microsurface Information:	
Placement Date:	8/27/2015
Target Microsurface Rate (lb/SY):	N/A
Verified Microsurface Rate (lb/SY):	N/A
General Notes:	

Lift 2	
Location:	US 280
Section:	36
Pavement Preservation Treatment:	ABR Thinlay
Section Information:	
Placement Date:	9/3/2015
Emulsion/Tack Material:	NTSS-1HM
Target Emulsion Rate (gal/SY):	0.05
Calibrated Emulsion Rate (gal/SY):	0.061
Average Verified Emulsion Rate (gal/SY):	N/A
Aggregate Type:	LMS + Sand
Target Chip Rate (lb/SY):	N/A
Verified Chip Rates (lb/SY):	Found Below
Milled Depth:	N/A
Left-Wheel Path:	
Placement Date:	9/3/2015
Emulsion/Tack Material:	NTSS-1HM
Target Emulsion Rate (gal/SY):	0.05
Calibrated Emulsion Rate (gal/SY):	0.061
Verified Emulsion Rate (gal/SY):	N/A
Aggregate Type:	LMS + Sand
Target Chip Rate (lb/SY):	N/A
Verified Chip Rate (lb/SY):	N/A
Between-Wheel Paths:	
Placement Date:	9/3/2015
Emulsion/Tack Material:	NTSS-1HM
Target Emulsion Rate (gal/SY):	0.05
Calibrated Emulsion Rate (gal/SY):	0.061
Verified Emulsion Rate (gal/SY):	N/A
Aggregate Type:	LMS + Sand
Target Chip Rate (lb/SY):	N/A
Verified Chip Rate (lb/SY):	N/A
Right-Wheel Path:	
Placement Date:	9/3/2015
Emulsion/Tack Material:	NTSS-1HM
Target Emulsion Rate (gal/SY):	0.05
Calibrated Emulsion Rate (gal/SY):	0.061
Verified Emulsion Rate (gal/SY):	N/A
Aggregate Type:	LMS + Sand
Target Chip Rate (lb/SY):	N/A
Verified Chip Rate (lb/SY):	N/A
Microsurface Information:	
Placement Date:	9/3/2015
Target Microsurface Rate (lb/SY):	N/A
Verified Microsurface Rate (lb/SY):	N/A
General Notes:	