

Section N13 (Lower Layer)

Laboratory Diary

General Description of Mix and Materials

Design Method:	Superpave
Compactive Effort:	100 gyrations
Binder Performance Grade:	76-22
Modifier Type:	SBS
Aggregate Type:	Gravel
Gradation Type:	BRZ

Avg. Lab Properties of Plant Produced Mix

<u>Sieve Size:</u>	<u>% Passing:</u>
1"	100
3/4"	100
1/2"	88
3/8"	73
No. 4	51
No. 8	33
No. 16	25
No. 30	20
No. 50	13
No. 100	8
No. 200	6.3

Asphalt Binder Content:	5.0%
Compacted Pill Bulk Gravity:	2.310
Theoretical Maximum Gravity:	2.384
Computed Air Voids:	3.1%

Construction Diary

Relevant Conditions for Construction

Completion Date:	Wednesday, June 07, 2000
24 Hour High Temperature (F):	84
24 Hour Low Temperature (F):	60
24 Hour Rainfall (in):	0.00
Lift Type:	lower
Design Thickness of Test Mix (in):	2.5

Plant Configuration and Placement Details

<u>Component:</u>	<u>% Setting:</u>
Liquid Binder Setting	4.9%
Gravel 3/4" Crushed	38.0%
Gravel 3/8" Crushed	43.0%
Limestone Modified 8910	8.0%
Gravel Coarse Sand	10.0%
Antistrip Hydrated Lime	1.0%

Approximate Length (ft):	199
Surveyed Thickness of Section (in):	NA
Std Dev of Section Thickness (in):	NA
Type of Tack Coat Utilized:	CQS-1h
Target Tack Application Rate:	0.03 gal / sy
Avg Mat Temperature Behind Paver (F):	318
Average Section Compaction:	92.5%

General Notes:

- 1) Mixes are listed chronologically in order of completion date (i.e., construction began with E2 and ended with E1).
- 2) Sections are referenced by quadrant and sequence number, where "E2" refers to section 2 of the east quadrant.
- 3) "dual " lift type indicates that the lower and upper lifts were constructed with the same experimental mix.
- 4) The total thickness of all experimental sections is 4 inches by design, with the exception of S8, S9, S10, S11.
- 5) ARZ, TRZ, and BRZ refer to gradations intended to pass above, through, and below the restricted zone.
- 6) SMA and OGFC refer to stone matrix asphalt and open-graded friction course, respectively.

Section N13 (Upper Layer)

Laboratory Diary

General Description of Mix and Materials

Design Method:	SMA
Compactive Effort:	50 blows
Binder Performance Grade:	76-22
Modifier Type:	SBS
Aggregate Type:	Gravel
Gradation Type:	SMA

Avg. Lab Properties of Plant Produced Mix

<u>Sieve Size:</u>	<u>% Passing:</u>
1"	100
3/4"	100
1/2"	99
3/8"	74
No. 4	30
No. 8	25
No. 16	23
No. 30	21
No. 50	17
No. 100	13
No. 200	11.5

Asphalt Binder Content:	6.8%
Compacted Pill Bulk Gravity:	2.175
Theoretical Maximum Gravity:	2.266
Computed Air Voids:	4.0%

Construction Diary

Relevant Conditions for Construction

Completion Date:	Monday, June 12, 2000
24 Hour High Temperature (F):	93
24 Hour Low Temperature (F):	67
24 Hour Rainfall (in):	0.00
Lift Type:	upper
Design Thickness of Test Mix (in):	4.0

Plant Configuration and Placement Details

<u>Component:</u>	<u>% Setting:</u>
Liquid Binder Setting	6.7%
Gravel 1/2" Crushed	72.5%
Gravel 3/8" Crushed	10.0%
Gravel Coarse Sand	9.5%
Stabilizer Mineral Fiber	0.5%
Filler Fly Ash	8.0%

Approximate Length (ft):	199
Surveyed Thickness of Section (in):	4.0
Std Dev of Section Thickness (in):	0.2
Type of Tack Coat Utilized:	CQS-1h
Target Tack Application Rate:	0.03 gal / sy
Avg Mat Temperature Behind Paver (F):	325
Average Section Compaction:	92.0%

General Notes:

- 1) Mixes are listed chronologically in order of completion date (i.e., construction began with E2 and ended with E1).
- 2) Sections are referenced by quadrant and sequence number, where "E2" refers to section 2 of the east quadrant.
- 3) "dual " lift type indicates that the lower and upper lifts were constructed with the same experimental mix.
- 4) The total thickness of all experimental sections is 4 inches by design, with the exception of S8, S9, S10, S11.
- 5) ARZ, TRZ, and BRZ refer to gradations intended to pass above, through, and below the restricted zone.
- 6) SMA and OGFC refer to stone matrix asphalt and open-graded friction course, respectively.