

Section S4 (Lower Layer)

Laboratory Diary

General Description of Mix and Materials

Design Method:	Superpave
Compactive Effort:	125 gyrations
Binder Performance Grade:	76-22
Modifier Type:	SBS
Aggregate Type:	Lms/RAP
Gradation Type:	ARZ

Avg. Lab Properties of Plant Produced Mix

<u>Sieve Size:</u>	<u>% Passing:</u>
1"	100
3/4"	99
1/2"	88
3/8"	69
No. 4	48
No. 8	38
No. 16	30
No. 30	24
No. 50	15
No. 100	9
No. 200	6.5

Asphalt Binder Content:	4.1%
Compacted Pill Bulk Gravity:	2.466
Theoretical Maximum Gravity:	2.567
Computed Air Voids:	3.9%

Construction Diary

Relevant Conditions for Construction

Completion Date:	Wednesday, July 05, 2000
24 Hour High Temperature (F):	96
24 Hour Low Temperature (F):	71
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	4.3%
Limestone 6	30.0%
Limestone 78	25.0%
Sand Manufactured	20.0%
Sand Natural	15.0%
Recycle RAP	10.0%

Approximate Length (ft):	198
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):	322
Average Section Compaction:	93.6%

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 S4 (Upper Layer)

Laboratory Diary

General Description of Mix and Materials

Design Method:	Superpave
Compactive Effort:	125 gyrations
Binder Performance Grade:	76-22
Modifier Type:	SBS
Aggregate Type:	Limestone
Gradation Type:	ARZ

Avg. Lab Properties of Plant Produced Mix

<u>Sieve Size:</u>	<u>% Passing:</u>
1"	100
3/4"	100
1/2"	98
3/8"	88
No. 4	63
No. 8	46
No. 16	33
No. 30	23
No. 50	13
No. 100	9
No. 200	7.8

Asphalt Binder Content:	5.3%
Compacted Pill Bulk Gravity:	2.394
Theoretical Maximum Gravity:	2.449
Computed Air Voids:	2.2%

Construction Diary

Relevant Conditions for Construction

Completion Date:	Thursday, July 06, 2000
24 Hour High Temperature (F):	98
24 Hour Low Temperature (F):	78
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	5.3%
Limestone 10's (Hard)	15.0%
Limestone 10's (Soft)	10.0%
Limestone 5/8 D Rock	45.0%
Sand Manufactured	15.0%
Sand Natural	15.0%

Approximate Length (ft):	198
Surveyed Thickness of Section (in):	4.0
Std Dev of Section Thickness (in):	0.1
Type of Tack Coat Utilized:	CQS-1h
Target Tack Application Rate:	0.03 gal / sy
Avg Mat Temperature Behind Paver (F):	322
Average Section Compaction:	94.3%

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.