

## Section N12 (Lower Layer)

### Laboratory Diary

#### General Description of Mix and Materials

Design Method:	Superpave
Compactive Effort:	100 gyrations
Binder Performance Grade	67-22
Modifier Type:	NA
Aggregate Type:	Granite
Gradation Type:	BRZ

#### Avg. Lab Properties of Plant Produced Mix

<u>Sieve Size:</u>	<u>% Passing:</u>
1"	100
3/4"	99
1/2"	83
3/8"	72
No. 4	49
No. 8	36
No. 16	28
No. 30	22
No. 50	16
No. 100	10
No. 200	6.5

Asphalt Binder Content:	4.2%
Compacted Pill Bulk Gravity:	2.445
Theoretical Maximum Gravity:	2.535
Computed Air Voids:	3.5%

### Construction Diary

#### Relevant Conditions for Construction

Completion Date	Tuesday, June 06, 2000
24 Hour High Temperature (F):	85
24 Hour Low Temperature (F):	68
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%
Granite 6	27.0%
Granite 7	17.0%
Granite 89	20.0%
Granite M10	24.0%
Granite W10	11.0%
Antistrip Hydrated Lime	1.0%

Approximate Length (ft):	201
Surveyed Thickness of Section (in):	NA
Std Dev of Section Thickness (in):	NA
Type of Tack Coat Utilized:	PG 67-22
Target Tack Application Rate:	0.03 gal / sy
Avg Mat Temperature Behind Paver (F):	293
Average Section Compaction:	92.4%

### **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 N12 (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:	Granite
Gradation Type:	SMA

#### Avg. Lab Properties of Plant Produced Mix

<u>Sieve Size:</u>	<u>% Passing:</u>
1"	100
3/4"	100
1/2"	96
3/8"	73
No. 4	32
No. 8	23
No. 16	21
No. 30	19
No. 50	17
No. 100	14
No. 200	11.8

Asphalt Binder Content:	6.2%
Compacted Pill Bulk Gravity:	2.335
Theoretical Maximum Gravity:	2.401
Computed Air Voids:	2.7%

### 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	6.1%
Granite 7	60.0%
Granite 89	22.0%
Granite M10	10.0%
Stabilizer Mineral Fiber	0.4%
Filler Fly Ash	7.0%
Antistrip Hydrated Lime	1.0%

Approximate Length (ft):	201
Surveyed Thickness of Section (in):	3.9
Std Dev of Section Thickness (in):	0.2
Type of Tack Coat Utilized:	PG 67-22
Target Tack Application Rate:	0.03 gal / sy
Avg Mat Temperature Behind Paver (F):	343
Average Section Compaction:	94.6%

### **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.