

Section E1

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:	Quartzite
Gradation Type:	ARZ

Avg. Lab Properties of Plant Produced Mix

<u>Sieve Size:</u>	<u>% Passing:</u>
1"	100
3/4"	100
1/2"	99
3/8"	92
No. 4	73
No. 8	54
No. 16	38
No. 30	25
No. 50	14
No. 100	9
No. 200	7.4

Asphalt Binder Content:	5.3%
Compacted Pill Bulk Gravity:	2.363
Theoretical Maximum Gravity:	2.444
Computed Air Voids:	3.3%

Construction Diary

Relevant Conditions for Construction

Completion Date:	Friday, July 14, 2000
24 Hour High Temperature (F):	100
24 Hour Low Temperature (F):	80
24 Hour Rainfall (in):	0.00
Lift Type:	dual
Design Thickness of Test Mix (in):	4.0

Plant Configuration and Placement Details

<u>Component:</u>	<u>% Setting:</u>
Liquid Binder Setting	5.3%
Gravel 1/2" Crushed Gravel	36.0%
Gravel 3/8" Crushed Gravel	18.0%
Limestone Manufactured Sand	30.0%
Sand Natural	13.0%
Filler Fly Ash	3.0%

Approximate Length (ft):	199
Surveyed Thickness of Section (in):	4.1
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):	303
Average Section Compaction:	94.0%

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.