

Quadrant: N
Section: 13
Sublot: Surface

Laboratory Diary

General Description of Mix and Materials

Design Method: SMA
 Compactive Effort: 50 gyrations
 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>Design</u> | <u>QC:</u> |
|--------------------|---------------|------------|
| 1": | 100 | 100 |
| 3/4": | 100 | 100 |
| 1/2": | 97 | 95 |
| 3/8" | 67 | 71 |
| No. 4 | 27 | 32 |
| No. 8 | 19 | 21 |
| No. 16 | 16 | 18 |
| No. 30 | 14 | 16 |
| No. 50 | 14 | 15 |
| No. 100 | 13 | 14 |
| No. 200 | 11.0 | 12.1 |
| Asphalt Content | 5.9 | 5.9 |
| Pill Bulk Gravity: | | 2.324 |
| TMD (Rice): | | 2.393 |
| Avg Air Voids | | 2.9 |
| Avg VMA: | | 16 |

Construction Diary

Relevant Conditions for Construction

Completion Date: Tuesday, August 19, 2003
 24 Hour High Temperature (F): 87
 24 Hour Low Temperature (F): 70
 24 Hour Rainfall (in): 0.03
 Lift type: Surface
 Planned Mill / Lift Thickness (in): 1.8

Plant Configuration and Placement Details

| <u>Component:</u> | <u>% Setting:</u> |
|--|-------------------|
| Asphalt Content (Plant Setting) | 5.6 |
| 7M Cayce Granite | 73.0 |
| 89M Cayce Granite | 10.0 |
| Cayce Regular Screenings | 8.0 |
| Boral Flyash | 8.0 |
| Hydrated Lime | 1.0 |
| Approximate Length (ft): | 199 |
| Survey Mill / Lift Thickness (in): | 1.7 |
| Type of Tack Coat Utilized: | PG67-22 |
| Target Tack Application Rate (gal/sy): | 0.07 |
| Avg Temperature In Truck (F): | 353 |
| Avg Section Compaction: | 94.6 |

General Notes:

- 1) Mixes are referenced by quadrant (E=East, N=North, W=West, and S=South), section number (sequential) and sublot;
- 2) Sections are listed in the order they appear on the Track beginning with E2 and continuing counterclockwise to E1;
- 3) The total research thickness of all rutting study sections ranges from 3/4 to 4 inches by design;
- 4) The total HMA thickness of all structural study sections (N1 through N8) ranges from 5 to 9 inches by design;
- 5) ARZ, TRZ, and BRZ refer to gradations intended to pass above, through and below the restricted zone, respectively;
- 6) SMA and OGFC refer to stone matrix asphalt and open-graded friction course, respectively.

Quadrant: N
Section: 13
Sublot: Binder

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: TRZ

Avg. Lab Properties of Plant Produced Mix

| <u>Sieve Size:</u> | <u>Design</u> | <u>QC:</u> |
|--------------------|---------------|------------|
| 1": | 100 | 100 |
| 3/4": | 99 | 100 |
| 1/2": | 76 | 80 |
| 3/8" | 64 | 68 |
| No. 4 | 39 | 42 |
| No. 8 | 25 | 29 |
| No. 16 | 19 | 24 |
| No. 30 | 15 | 20 |
| No. 50 | 9 | 14 |
| No. 100 | 5 | 9 |
| No. 200 | 3.0 | 5.3 |
| Asphalt Content | 4.3 | 4.3 |
| Pill Bulk Gravity: | | 2.424 |
| TMD (Rice): | | 2.501 |
| Avg Air Voids | | 3.1 |
| Avg VMA: | | 11 |

Construction Diary

Relevant Conditions for Construction

Completion Date: Wednesday, August 06, 2003
 24 Hour High Temperature (F): 85
 24 Hour Low Temperature (F): 67
 24 Hour Rainfall (in): 0.05
 Lift type: Binder
 Planned Mill / Lift Thickness (in): 1.8

Plant Configuration and Placement Details

| <u>Component:</u> | <u>% Setting:</u> |
|--|-------------------|
| Asphalt Content (Plant Setting) | 4.2 |
| 6M Liberty Granite | 35.6 |
| 789 Liberty Granite | 44.6 |
| Liberty Manufactured Sand | 10.9 |
| Liberty Regular Screenings | 7.9 |
| Hydrated Lime | 1.0 |
| Approximate Length (ft): | 199 |
| Survey Mill / Lift Thickness (in): | 1.5 |
| Type of Tack Coat Utilized: | PG67-22 |
| Target Tack Application Rate (gal/sy): | 0.07 |
| Avg Temperature In Truck (F): | 325 |
| Avg Section Compaction: | 93.9 |

General Notes:

- 1) Mixes are referenced by quadrant (E=East, N=North, W=West, and S=South), section number (sequential) and sublot;
- 2) Sections are listed in the order they appear on the Track beginning with E2 and continuing counterclockwise to E1;
- 3) The total research thickness of all rutting study sections ranges from 3/4 to 4 inches by design;
- 4) The total HMA thickness of all structural study sections (N1 through N8) ranges from 5 to 9 inches by design;
- 5) ARZ, TRZ, and BRZ refer to gradations intended to pass above, through and below the restricted zone, respectively;
- 6) SMA and OGFC refer to stone matrix asphalt and open-graded friction course, respectively.