

Quadrant: N
Section: 12
Sublot: 1

Laboratory DiaryGeneral Description of Mix and Materials

| | |
|---------------------------|---------|
| Design Method: | PEM |
| Compactive Effort: | 50 blow |
| Binder Performance Grade: | 76-22 |
| Modifier Type: | SBS |
| Aggregate Type: | Granite |
| Design Gradation Type: | PEM |

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": | 94 | 95 |
| 3/8": | 57 | 61 |
| No. 4: | 12 | 16 |
| No. 8: | 7 | 10 |
| No. 16: | 6 | 8 |
| No. 30: | 5 | 7 |
| No. 50: | 4 | 5 |
| No. 100: | 3 | 4 |
| No. 200: | 2.7 | 3.1 |
| Asphalt Content: | 6.0 | 5.4 |
| Pill Bulk Gravity: | 1.949 | 1.999 |
| TMD (Rice): | 2.466 | 2.495 |
| Avg Air Voids: | 21.0 | 19.9 |
| Avg VMA: | 32.3 | 29.5 |

Construction DiaryRelevant Conditions for Construction

| | |
|-------------------------------------|--------------------|
| Completion Date: | September 29, 2006 |
| 24 Hour High Temperature (F): | 73 |
| 24 Hour Low Temperature (F): | 48 |
| 24 Hour Rainfall (in): | 0.00 |
| Planned Mill / Lift Thickness (in): | 1.25 |
| Paving Machine: | Roadtec |

Plant Configuration and Placement Details

| <u>Component</u> | <u>% Setting</u> |
|--|------------------|
| Asphalt Content (Plant Setting) | 6.0 |
| 7 Columbus Granite | 99.0 |
| Hyd Lime | 1.0 |
| Cellulose | 0.3 |
| Approximate Length (ft): | 201 |
| Survey Mill / Lift Thickness (in): | 1.2 |
| Type of Tack Coat Utilized: | 67-22 |
| Target Tack Application Rate (gal/sy): | 0.05 |
| Avg Temperature at Plant (F): | 350 |
| Avg Section Compaction: | 75.7% |

General Notes:

- 1) Mixes are referenced by quadrant (E=East, N=North, W=West, and S=South), section number (sequential) and subplot (top=1);
- 2) The total research thickness of all mix performance sections ranges from 3/4 to 4 inches by design;
- 3) The total HMA thickness of all structural study sections (N1 through N10) ranges from 7 to 14 inches by design;
- 4) ARZ, TRZ and BRZ refer to gradations intended to pass above, through and below the restricted zone, respectively;
- 5) SMA and OGFC refer to stone matrix asphalt and open-graded friction course, respectively; and
- 6) VMA values computed from QC volumetrics are based on design values of Gsb (stockpile gravity testing is ongoing).

Quadrant: N
Section: 12
Sublot: 2

Laboratory DiaryGeneral Description of Mix and Materials

| | |
|---------------------------|--------------|
| Design Method: | Super |
| Compactive Effort: | 65 gyrations |
| Binder Performance Grade: | 76-22 |
| Modifier Type: | SBS |
| Aggregate Type: | Granite |
| Design Gradation Type: | Dense |

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": | 99 | 98 |
| 3/8": | 88 | 88 |
| No. 4: | 58 | 58 |
| No. 8: | 42 | 41 |
| No. 16: | 31 | 32 |
| No. 30: | 22 | 24 |
| No. 50: | 14 | 16 |
| No. 100: | 8 | 10 |
| No. 200: | 4.9 | 5.7 |
| Asphalt Content: | 5.3 | 5.1 |
| Pill Bulk Gravity: | 2.370 | 2.393 |
| TMD (Rice): | 2.469 | 2.498 |
| Avg Air Voids: | 4.0 | 4.2 |
| Avg VMA: | 16.1 | 15.0 |

Construction DiaryRelevant Conditions for Construction

| | |
|-------------------------------------|--------------------|
| Completion Date: | September 28, 2006 |
| 24 Hour High Temperature (F): | 84 |
| 24 Hour Low Temperature (F): | 63 |
| 24 Hour Rainfall (in): | 0.02 |
| Planned Mill / Lift Thickness (in): | 1.50 |
| Paving Machine: | Roadtec |

Plant Configuration and Placement Details

| <u>Component</u> | <u>% Setting</u> |
|--|------------------|
| Asphalt Content (Plant Setting) | 5.3 |
| 7 Columbus Granite | 24.0 |
| 89 Columbus Granite | 19.0 |
| 810 Columbus Granite | 29.0 |
| W10 Columbus Granite | 27.0 |
| Hyd Lime | 1.0 |
| Approximate Length (ft): | 201 |
| Survey Mill / Lift Thickness (in): | 1.5 |
| Type of Tack Coat Utilized: | 67-22 |
| Target Tack Application Rate (gal/sy): | 0.05 |
| Avg Temperature at Plant (F): | 330 |
| Avg Section Compaction: | 95.9% |

General Notes:

- 1) Mixes are referenced by quadrant (E=East, N=North, W=West, and S=South), section number (sequential) and subplot (top=1);
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- 3) The total HMA thickness of all structural study sections (N1 through N10) ranges from 7 to 14 inches by design;
- 4) ARZ, TRZ and BRZ refer to gradations intended to pass above, through and below the restricted zone, respectively;
- 5) SMA and OGFC refer to stone matrix asphalt and open-graded friction course, respectively; and
- 6) VMA values computed from QC volumetrics are based on design values of Gsb (stockpile gravity testing is ongoing).