

Quadrant: S
Section: 11
Sublot: 1

Laboratory DiaryGeneral Description of Mix and Materials

Design Method: Super
 Compactive Effort: 60 gyrations
 Binder Performance Grade: 76-22
 Modifier Type: SBS
 Aggregate Type: Grm/Lms/Snd
 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":	100	100
3/8":	99	100
No. 4:	83	86
No. 8:	62	67
No. 16:	47	52
No. 30:	34	37
No. 50:	19	21
No. 100:	11	13
No. 200:	5.4	8.6
Asphalt Content:	6.3	6.9
Pill Bulk Gravity:	2.375	2.380
TMD (Rice):	2.474	2.464
Avg Air Voids:	4.0	3.4
Avg VMA:	18.1	18.0

Construction DiaryRelevant Conditions for Construction

Completion Date: October 13, 2006
 24 Hour High Temperature (F): 66
 24 Hour Low Temperature (F): 48
 24 Hour Rainfall (in): 0.00
 Planned Mill / Lift Thickness (in): 1.00
 Paving Machine: Roadtec

Plant Configuration and Placement Details

<u>Component</u>	<u>% Setting</u>
Asphalt Content (Plant Setting)	6.2
89 Columbus Granite	24.0
8910 Opelika Limestone Screenings	27.0
M10 Columbus Granite	30.0
Shorter Coarse Sand	19.0
Approximate Length (ft):	202
Survey Mill / Lift Thickness (in):	1.0
Type of Tack Coat Utilized:	67-22
Target Tack Application Rate (gal/sy):	0.05
Avg Temperature at Plant (F):	340
Avg Section Compaction:	93.2%

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: S
Section: 11
Sublot: 2

Laboratory DiaryGeneral Description of Mix and Materials

Design Method: Super
 Compactive Effort: 60 gyrations
 Binder Performance Grade: 76-22
 Modifier Type: SBS
 Aggregate Type: Lms/Grn/Snd
 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":	94	97
1/2":	84	89
3/8":	72	79
No. 4:	53	60
No. 8:	45	49
No. 16:	36	39
No. 30:	28	27
No. 50:	15	15
No. 100:	8	9
No. 200:	5.0	5.7
Asphalt Content:	4.5	5.4
Pill Bulk Gravity:	2.468	2.441
TMD (Rice):	2.571	2.558
Avg Air Voids:	4.0	4.6
Avg VMA:	14.2	15.6

Construction DiaryRelevant Conditions for Construction

Completion Date: October 12, 2006
 24 Hour High Temperature (F): 75
 24 Hour Low Temperature (F): 54
 24 Hour Rainfall (in): 0.00
 Planned Mill / Lift Thickness (in): 2.00
 Paving Machine: Roadtec

Plant Configuration and Placement Details

<u>Component</u>	<u>% Setting</u>
Asphalt Content (Plant Setting)	4.8
78 Opelika Limestone	33.0
57 Opelika Limestone	20.0
M10 Columbus Granite	25.0
Shorter Coarse Sand	22.0
Approximate Length (ft):	202
Survey Mill / Lift Thickness (in):	2.1
Type of Tack Coat Utilized:	67-22
Target Tack Application Rate (gal/sy):	0.05
Avg Temperature at Plant (F):	350
Avg Section Compaction:	94.2%

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: S
Section: 11
Sublot: 3

Laboratory DiaryGeneral Description of Mix and Materials

Design Method: Super
 Compactive Effort: 60 gyrations
 Binder Performance Grade: 67-22
 Modifier Type: NA
 Aggregate Type: Lms/Grn/Snd
 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":	94	96
1/2":	84	85
3/8":	72	74
No. 4:	53	54
No. 8:	45	44
No. 16:	36	35
No. 30:	28	25
No. 50:	15	13
No. 100:	8	8
No. 200:	5.0	5.4
Asphalt Content:	4.5	5.0
Pill Bulk Gravity:	2.468	2.442
TMD (Rice):	2.571	2.569
Avg Air Voids:	4.0	4.9
Avg VMA:	14.2	15.1

Construction DiaryRelevant Conditions for Construction

Completion Date: October 12, 2006
 24 Hour High Temperature (F): 75
 24 Hour Low Temperature (F): 54
 24 Hour Rainfall (in): 0.00
 Planned Mill / Lift Thickness (in): 2.00
 Paving Machine: Roadtec

Plant Configuration and Placement Details

<u>Component</u>	<u>% Setting</u>
Asphalt Content (Plant Setting)	4.8
78 Opelika Limestone	33.0
57 Opelika Limestone	20.0
M10 Columbus Granite	25.0
Shorter Coarse Sand	22.0
Approximate Length (ft):	202
Survey Mill / Lift Thickness (in):	2.2
Type of Tack Coat Utilized:	67-22
Target Tack Application Rate (gal/sy):	0.05
Avg Temperature at Plant (F):	340
Avg Section Compaction:	92.6%

General Notes:

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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
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Quadrant: S
Section: 11
Sublot: 4

Laboratory DiaryGeneral Description of Mix and Materials

Design Method: Super
 Compactive Effort: 60 gyrations
 Binder Performance Grade: 67-22
 Modifier Type: NA
 Aggregate Type: Lms/Grn/Snd
 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":	94	97
1/2":	84	88
3/8":	72	76
No. 4:	53	56
No. 8:	45	46
No. 16:	36	37
No. 30:	28	26
No. 50:	15	14
No. 100:	8	8
No. 200:	5.0	5.5
Asphalt Content:	4.5	4.9
Pill Bulk Gravity:	2.468	2.437
TMD (Rice):	2.571	2.572
Avg Air Voids:	4.0	5.2
Avg VMA:	14.2	15.3

Construction DiaryRelevant Conditions for Construction

Completion Date: October 11, 2006
 24 Hour High Temperature (F): 82
 24 Hour Low Temperature (F): 64
 24 Hour Rainfall (in): 0.12
 Planned Mill / Lift Thickness (in): 2.00
 Paving Machine: Roadtec

Plant Configuration and Placement Details

<u>Component</u>	<u>% Setting</u>
Asphalt Content (Plant Setting)	4.7
78 Opelika Limestone	33.0
57 Opelika Limestone	20.0
M10 Columbus Granite	25.0
Shorter Coarse Sand	22.0
Approximate Length (ft):	202
Survey Mill / Lift Thickness (in):	2.3
Type of Tack Coat Utilized:	67-22
Target Tack Application Rate (gal/sy):	0.05
Avg Temperature at Plant (F):	350
Avg Section Compaction:	91.8%

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).