

**Quadrant: N**  
**Section: 1**  
**Sublot: Surface**

**Laboratory Diary**

General Description of Mix and Materials

Design Method: Superpave  
 Compactive Effort: 80 gyrations  
 Binder Performance Grade: 76-22  
 Modifier Type: SBS  
 Aggregate Type: Grn/Lms/Snd  
 Gradation Type: ARZ

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	81
No. 8	62	63
No. 16	47	51
No. 30	34	38
No. 50	19	20
No. 100	11	12
No. 200	5.0	7.0
Asphalt Content	6.3	6.2
Pill Bulk Gravity:		2.373
TMD (Rice ):		2.482
Avg Air Voids		4.4
Avg VMA:		18

**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.

**Construction Diary**

Relevant Conditions for Construction

Completion Date: Thursday, July 24, 2003  
 24 Hour High Temperature (F): 86  
 24 Hour Low Temperature (F): 62  
 24 Hour Rainfall (in): 0  
 Lift type: Surface  
 Planned Mill / Lift Thickness (in): 1.0

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	27.0
M10 Columbus Granite	30.0
Shorter Coarse Sand	19.0
Approximate Length (ft):	200
Survey Mill / Lift Thickness (in):	0.6
Type of Tack Coat Utilized:	PG67-22
Target Tack Application Rate (gal/sy):	0.03
Avg Temperature In Truck (F):	326
Avg Section Compaction:	92.8

**Quadrant: N**  
**Section: 1**  
**Sublot: Binder**

**Laboratory Diary**

General Description of Mix and Materials

Design Method: Superpave  
 Compactive Effort: 80 gyrations  
 Binder Performance Grade: 76-22  
 Modifier Type: SBS  
 Aggregate Type: Lms/Grn/Snd  
 Gradation Type: ARZ

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	69
No. 4	53	52
No. 8	45	44
No. 16	36	35
No. 30	28	29
No. 50	15	16
No. 100	8	9
No. 200	5.0	5.8
Asphalt Content	4.5	4.5
Pill Bulk Gravity:		2.465
TMD (Rice ):		2.575
Avg Air Voids		4.3
Avg VMA:		14

**Construction Diary**

Relevant Conditions for Construction

Completion Date: Tuesday, July 22, 2003  
 24 Hour High Temperature (F): 89  
 24 Hour Low Temperature (F): 69  
 24 Hour Rainfall (in): 0.12  
 Lift type: Binder  
 Planned Mill / Lift Thickness (in): 2.0

Plant Configuration and Placement Details

<u>Component:</u>	<u>% Setting:</u>
Asphalt Content (Plant Setting)	4.3
78 Opelika Limestone	33.0
57 Opelika Limestone	22.0
M10 Columbus Granite	25.0
Shorter Coarse Sand	20.0
Approximate Length (ft):	200
Survey Mill / Lift Thickness (in):	2.1
Type of Tack Coat Utilized:	PG67-22
Target Tack Application Rate (gal/sy):	0.03
Avg Temperature In Truck (F):	326
Avg Section Compaction:	92.8

**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: 1**  
**Sublot: Base**

**Laboratory Diary**

General Description of Mix and Materials

Design Method: Superpave  
 Compactive Effort: 80 gyrations  
 Binder Performance Grade: 76-22  
 Modifier Type: SBS  
 Aggregate Type: Lms/Grn/Snd  
 Gradation Type: ARZ

Avg. Lab Properties of Plant Produced Mix

<u>Sieve Size:</u>	<u>Design</u>	<u>QC:</u>
1":	100	100
3/4":	94	92
1/2":	84	80
3/8"	72	71
No. 4	53	49
No. 8	45	40
No. 16	36	33
No. 30	28	24
No. 50	15	13
No. 100	8	8
No. 200	5.0	5.5
Asphalt Content	4.5	4.3
Pill Bulk Gravity:		2.496
TMD (Rice ):		2.586
Avg Air Voids		3.5
Avg VMA:		12

**Construction Diary**

Relevant Conditions for Construction

Completion Date: Monday, July 21, 2003  
 24 Hour High Temperature (F): 90  
 24 Hour Low Temperature (F): 66  
 24 Hour Rainfall (in): 0  
 Lift type: Base  
 Planned Mill / Lift Thickness (in): 2.0

Plant Configuration and Placement Details

<u>Component:</u>	<u>% Setting:</u>
Asphalt Content (Plant Setting)	4.4
78 Opelika Limestone	33.0
57 Opelika Limestone	22.0
M10 Columbus Granite	25.0
Shorter Coarse Sand	20.0
Approximate Length (ft):	200
Survey Mill / Lift Thickness (in):	2.2
Type of Tack Coat Utilized:	PG67-22
Target Tack Application Rate (gal/sy):	0.03
Avg Temperature In Truck (F):	338
Avg Section Compaction:	93.0

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- 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.