# **PROJECT SPECIAL PROVISIONS**

#### **ROADWAY**

### **ASPHALT PAVEMENTS - SUPERPAVE:**

(7-18-06) (Rev 9-19-06)

R6 R01

Revise the 2006 Standard Specifications as follows:

Page 6-2, Article 600-9 Measurement and Payment

Delete the second paragraph.

Page 6-12, 609-5(C)2(c) add after (AASHTO T 209):

or ASTM D 2041

Page 6-13, last line on page & Page 6-14, Subarticle 609-5(C)(2)(e), delete and substitute the following:

- (e) Retained Tensile Strength (TSR) (AASHTO T 283 Modified), add subarticle (1) Option 1 before the first paragraph.
  - (1) Option 1

Add subarticle (2) Option 2 and the following sentence as the first sentence of the second paragraph:

(2) Option 2

Mix sampled from truck at plant with one set of specimens prepared by the Contractor and then tested jointly by QA and QC at a mutually agreed upon lab site within the first 7 calendar days after beginning production of each new mix design.

Page 6-28, 610-3(A) Mix Design-General, third sentence of the fourth paragraph:

Substitute 20% for 15%

First, second and third sentences of the fifth paragraph:

Substitute 20% for 15%

Page 6-44, 610-8, third full paragraph, replace the first sentence with the following:

Use the 30 foot minimum length mobile grade reference system or the non-contacting laser or sonar type ski with at least four referencing stations mounted on the paver at a minimum length of 24 feet to control the longitudinal profile when placing the initial lanes and all adjacent lanes of all layers, including resurfacing and asphalt in-lays, unless otherwise specified or approved.

Page 6-54, Article 620-4, add the following pay item:

Pay Item Pay Unit

Asphalt Binder for Plant Mix, Grade PG 70-28 Ton

Page 6-69, Table 660-1 Material Application Rates and Temperatures, add the following:

Type of Coat	Grade of Asphalt Rate		Application	Aggregate Size	Aggregate Rate	
Sand Seal	CRS-2 or CRS-2P	$gal/yd^2$ 0.22-0.30	Temperature °F 150-175	Blotting Sand	lb./sq. yd. Total 12-15	

Page 6-75, 660-9(B), add the following as sub-item (5)

# (5) Sand Seal

Place the fully required amount of asphalt material in one application and immediately cover with the seal coat aggregate. Uniformly spread the fully required amount of aggregate in one application and correct all non-uniform areas prior to rolling.

Immediately after the aggregate has been uniformly spread, perform rolling.

When directed, broom excess aggregate material from the surface of the seal coat.

When the sand seal is to be constructed for temporary sealing purposes only and will not be used by traffic, other grades of asphalt material meeting the requirements of Articles 1020-6 and 1020-7 may be used in lieu of the grade of asphalt required by Table 660-1 when approved.

Page 10-41, Table 1012-1, add the following:

Mix Type	Course Aggregate Angularity <sup>(b)</sup> ASTM D5821	Fine Aggregate Angularity % Minimum AASHTO T304 Method A	Sand Equivalent % Minimum AASHTO T176	Flat & Elongated 5:1 Ratio % Maximum ASTM D4791 Section 8.4
S 9.5 D	100/100	45	50	10

Page 10-45, Replace Table 1012-2 with the following:

TABLE 1012-2 NEW SOURCE RAP GRADATION and BINDER TOLERANCES

(Apply Tolerances to Mix Design Data)

Mix Type	0-20% RAP			21-25% RAP			•	26%+ RAP	
Sieve (mm)	Base	Inter.	Surf.	Base	Inter.	Surf.	Base	Inter.	Surf.
P <sub>b</sub> , % 1 1/2"	110	± 0.7%		17	± 0.4%			± 0.3%	
(37.5)	±10			±7	-	-	±5	-	-
3/4" (19.0)	±10	±10	-	±7	±7	-	±5	±5	-
1/2" (12.5)	_	±10	±6	-	±7	±3	-	±5	±2
3/8" (9.5)	<u> </u>		±8	-	-	±5	· _	-	±4
No. 4 (4.75)	±10	-	±10	±7	-	±7	±5	-	±5
No. 8 (2.36)	±8	±8	±8	±5	±5	±5	± <b>4</b>	±4	±4
No.16 (1.18)	±8	±8	±8	±5	±5	±5	±4	±4	±4
No. 30 (0.600)	±8	±8	±8	±5	±5	±5	±4	±4	±4
No. 50 (0.300)	-	_	±8	-	_	±5	-	-	<u>±</u> 4
No. 200 (0.075)	±4	±4	±4	±2	±2	±2	±1.5	±1.5	±1.5

# **ASPHALT BINDER CONTENT OF ASPHALT PLANT MIXES:**

R6 R15

The approximate asphalt binder content of the asphalt concrete plant mixtures used on this project will be as follows:

Asphalt Concrete Base Course	Type B 25.0	4.3 %
Asphalt Concrete Intermediate Course	Type I 19.0	4.7 %
Asphalt Concrete Surface Course	Type S $4.75\overline{A}$	7.0 %
Asphalt Concrete Surface Course	Type SF 9.5A	6.5 %
Asphalt Concrete Surface Course	Type S 9.5	6.0 %
Asphalt Concrete Surface Course	Type S 12.5	5.5 %

The actual asphalt binder content will be established during construction by the Engineer within the limits established in the 2006 Standard Specifications.

# PRICE ADJUSTMENT - ASPHALT BINDER FOR PLANT MIX:

(11-21-00)

R6 R25

Price adjustments for asphalt binder for plant mix will be made in accordance with Section 620 of the 2006 Standard Specifications.

The base price index for asphalt binder for plant mix is \$317.86 per ton.

This base price index represents an average of F.O.B. selling prices of asphalt binder at supplier's terminals on **July 1, 2007**.

#### ASPHALT CONCRETE SURFACE COURSE COMPACTION:

 $\overline{(7-1-95)}$ 

R6 R49

Compact the asphalt surface course on this project in accordance with Subarticle 610-9 of the 2006 Standard Specifications and the following provision:

Perform the first rolling with a steel wheel roller followed by rolling with a self-propelled pneumatic tired roller with the final rolling by a steel wheel roller.

# **WEDGE COURSE:**

(7-1-95)

R6 R52

Place a wedge course at locations ahead of the paving operation as required by the Engineer.

# **RESURFACING EXISTING BRIDGES:**

(7-1-95)

R6 R61

The Contractor's attention is directed to the fact that he will be required to resurface the bridges on this project if directed by the Engineer.

Place the surface so as to follow a grade line set by the Engineer with the minimum thickness as shown on the sketch herein or as directed by the Engineer. State Forces will make all necessary repairs to the bridge floors prior to the time that the Contractor places the proposed surfacing. Give the Engineer at least 15 days notice prior to the expected time to begin operations so that State Forces will have sufficient time to complete their work.

At all bridges that are not to be resurfaced, taper out the proposed resurfacing layer adjacent to the bridges to insure a proper tie-in with the bridge surface.

#### MILLING AROUND MEDIAN WALL DROP INLETS:

Each median drop inlet that is less than five feet from the edge of pavement of the inside travel lane in each direction is to be milled in accordance with the detail shown in the plans. The milling is to be accomplished by holding a zero depth against the median barrier wall and tapering the depth of the outside limit of the four-foot milling from zero at each end of the milled strip to 1.5" at each edge of the drainage structure. The area between the front of each drainage structure and the four-foot milling limit is to be milled to a uniform depth of 1.5".

Measurement will the actual number of drop inlets that require this special milling.

Payment will be made Per Each at the contract unit price bid for *Milling Around Drop Inlets* and will be considered full compensation for all work associated with this milling.

### **MILLING AT BRIDGE ENDS:**

Bridge ends are to be milled in accordance with the detail shown in the Typical Sections. This milling is to be considered incidental to the paving items and no direct payment will be made.

# **MEDIAN BARRIER WALL ADJUSTMENT:**

A section of median barrier wall located approximately 1.2 miles east of the McDowell-Buncombe line is to be adjusted to correct a sag in the vertical alignment. Adjustment is to be made by removing the individual sections of barrier wall and placing asphalt surface course underneath to raise the wall section to the elevation necessary to correct the alignment problem.

Measurement will be the number of linear feet of median barrier wall that is raised to correct the vertical alignment.

Payment will be made per linear foot at the contract unit price for Median Barrier Wall Adjustment. The asphalt used in this adjustment will be paid for at the contract unit price for Asphalt Concrete Surface Course, Type S9.5D.

#### **PATCHING EXISTING PAVEMENT:**

(1-15-02) (Rev.7-18-06)

R6 R88

# **Description**

The Contractor's attention is directed to the fact that there are areas of existing pavement on this project that will require repair prior to resurfacing. Patch the areas that, in the opinion of the Engineer, need repairing. The areas to be patched will be delineated by the Engineer prior to the Contractor performing repairs.

#### Materials

The patching consists of Asphalt Concrete Base Course, Asphalt Concrete Intermediate Course, Asphalt Concrete Surface Course, or a combination of base, binder and surface course.

#### **Construction Methods**

Remove existing pavement at locations directed by the Engineer in accordance with Section 250 of the *Standard Specifications*.

Place Asphalt Concrete Base Course, in lifts not exceeding 5 1/2 inches. Utilize compaction equipment suitable for compacting patches as small as 3.5 feet by 6 feet on each lift. Use an



approved compaction pattern to achieve proper compaction. If patched pavement is to be open to traffic for more than 48 hours prior to overlay, use Asphalt Surface Course in the top 1.25 inches of the patch.

Schedule operations so that all areas where pavement has been removed, will be repaired on the same day of the pavement removal and all lanes of traffic restored.

# **Measurement and Payment**

Patching Existing Pavement will be measured and paid for as the actual number of tons of asphalt plant mix complete in place, that has been used to make completed and accepted repairs. The asphalt plant mixed material will be measured by being weighed in trucks on certified platform scales or other certified weighing devices. The above price and payment will be full compensation for all work covered by this provision, including but not limited to removal and disposal of pavement; furnishing and applying tack coat; furnishing, placing, and compacting of asphalt plant mix; furnishing of asphalt binder for the asphalt plant mix; and furnishing scales.

Patching Existing Pavement will be considered a minor item. In the event that the item of Patching Existing Pavement overruns the original bid quantity by more than 100 percent, the provisions of Article 104-5 of the *Standard Specifications* pertaining to revised contract unit price for overrunning minor items will not apply to this item. Any provisions included in the contract that provides for adjustments in compensation due to variations in the price of asphalt binder will not be applicable to payment for the work covered by this provision.

Payment will be made under:

Pay Item

Pay Unit

Patching Existing Pavement

Ton

#### **AGGREGATE PRODUCTION:**

(11-20-01) (Rev. 11-21-06)

R10 R05

Provide aggregate from a producer who uses the current Aggregate Quality Control/Quality Assurance Program which is in effect at the time of shipment.

No price adjustment is allowed to contractors or producers who use the program. Participation in the program does not relieve the producer of the responsibility of complying with all requirements of the 2006 Standard Specifications. Copies of this procedure are available upon request from the Materials and Test Unit.

# **GLASS BEADS:**

(7-18-06) R10 R35

Revise the 2006 Standard Specifications as follows:

Page 10-223, 1087-4(C) Gradation & Roundness

Replace the second sentence of the first paragraph with the following:

All Drop-On and Intermixed Glass Beads shall be tested in accordance with ASTM D1155.

Delete the last paragraph.

# **CHANGEABLE MESSAGE SIGNS**

(11 21 06)

R11 R11

Revise the 2006 Standard Specifications as follows:

Page 11-9, Article 1120-3, Replace the 3rd sentence with the following:

Sign operator will adjust flash rate so that no more than two messages will be displayed and be legible to a driver when approaching the sign at the posted speed.

# **PAINT PAVEMENT MARKING LINES:**

Paint pavement marking lines are to be used on the East Bound Lane if the completion of the milling and paving operations exceed the November 15 seasonal limitations for placement of thermoplastic plastic pavement markings. Paint pavement markings are to be applied in accordance with Section 1205-8 of the *Standard Specifications for Road and Structures* and paid for at the contract bid prices for the paint items used.

Paint pavement marking lines are to be replaced with thermoplastic pavement markings after the seasonal limitation has passed.

#### PAVEMENT MARKING LINES MEASUREMENT AND PAYMENT:

Revise the 2006 Standard Specifications as follows:

 $\overline{(11-21-06)}$ 

R12 R01

Page 12-14, Subarticle 1205-10, delete the first sentence of the first paragraph and replace with the following:

Pavement Marking Lines will be measured and paid for as the actual number of linear feet of pavement marking lines per application that has been satisfactorily placed and accepted by the Engineer.