### PROJECT SPECIAL PROVISIONS

#### **ROADWAY**

#### PRICE ADJUSTMENT - ASPHALT BINDER FOR PLANT MIX:

RR 19

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

The base price index for asphalt binder for plant mix is \$ 350.35 per ton.

This base price index represents an average of F.O.B. selling prices of asphalt binder at supplier's terminals on November 1, 2006.

### **SHOULDER RECONSTRUCTION:**

The Contractor shall place ABC (M) along the completed edge of pavement and construct shoulders as shown on the sketch map and/or as directed by the Engineer. The area shall be backfilled and compacted to the satisfaction of the Engineer.

The ABC (M) shall meet the requirements of Section 1005 in the NC DOT Standard Specifications for Roads and Structures.

This work shall be defined as "Shoulder Reconstruction" and the quantity of such work to be paid for will be the actual number of shoulder miles which have been constructed. Measurement will be made along the edge of each shoulder. Measurement will be made to the nearest 0.01 of a mile.

The quantity of shoulder reconstruction measured as provided above, will be paid for at the contract unit price per shoulder mile for "Shoulder Reconstruction".

Payment will be made under:

Shoulder Reconstruction ...... Shoulder Mile

# **JOINT REPAIR:**

#### **Description:**

The work covered by this provision consists of replacing existing joints (fig. I -1) with Asphalt Concrete Surface Course, Type S9.5, as directed by the Engineer.

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### **Construction Methods:**

The partial concrete slab removal shall be sawed or cut with jackhammer using a flat bit to full depth. When necessary to prevent adjacent slab damage or to prevent shoulder damage, an additional cut shall be made in the adjacent joint.

All existing unitube material, existing joint material, and debris shall be removed from the existing transverse joints which are exposed by the joint removal before the joint area is replaced.

Joint Repair shall include but not limited to the cutting of the existing pavement to a neat vertical joint and uniform line; the removal and disposal of pavement, base, and subgrade material as approved or directed by the Engineer; the coating of the area to be repaired with a tack coat; and the replacement of the removed material with asphalt plant mix, Type S9.5.

The Contractor may develop and submit an alternate method of Joint removal for approval by the Engineer, which satisfactorily avoids damage to the adjacent slabs and underlying base material.

#### **Method of Measurement:**

The quantity of joint removal will be the actual number of square yards removed and disposed of. The quantity will be determined by actual surface measurement of joint area prior to its removal.

### **Basis of Payment:**

The quantity of joint removal measured as provided above will be paid for at the contract unit price per square yard for "Concrete Joint Repair".

Payment Will Be Made Under:

Pay Unit Pay Item Concrete Joint Repair Sq. Yard

The above price and payment will be full compensation for all work covered by this provision for furnishing all labor, materials, tools, equipment, sawing, removal of loose underlying base material, and satisfactory disposal of the asphalt Concrete and Portland Cement Concrete as directed. Replacement of the removed material with asphalt plant mix, Type S9.5. will be paid for at the contract unit price per ton for "Asphalt Concrete Surface Course, Type S9.5B."

# **MILLING ASPHALT PAVEMENT:**

The quantity of milled asphalt pavement, to be paid for will be the actual number of square yards of pavement surface, which has been milled in accordance with the requirements of the contract. This quantity will also include the milling of irregular areas, intersections, and remilled areas. Where the Engineer directs remilling to achieve the final depth, measurement will be made

for each cut, The quantity of milled asphalt pavement, measured as provided in article 607-5, will be paid for at the contract unit price per square yard for the depth milled.

On Map 1, US 19, the Contractor is to mill the surface of the outside lanes approximately 6 inches (4½" below the concrete surface of the gutter). After this milling is complete, the Project Engineer will inspect the milled surface for structural distresses. If distresses are found, the contractor is to mill the distressed areas an additional 3 inches. This additional milling will be paid for at the bid item price for 3 inch milling. The areas of the additional 3 inch milling will be filled with 3 inches of I 19.0 B. If no distresses are found after the initial milling or after the additional 3 inch milling is filled, the entire milled surface in the outside lanes is to receive a 3 inch course of I 19.0 B.

The surface of the inside lanes is to be milled 3 inches. After this milling is complete, the Engineer will inspect the milled surface for structural distresses. If distresses are found, the Contractor is to mill the distressed areas an additional 3 inches. This additional milling will be paid for at the bid item for 3 inch milling. The areas of the additional 3 inch milling will be filled with 3 inches of I19.0 B.

The center turn lane shall be milled 3 inches.

After the mill and fill phase is complete, the entire surface is to receive 1½" of S9.5B with the surface of the new asphalt being flush with the existing concrete gutter.

The Contractor is to notify the Engineer 48 hours prior to milling in the area of any traffic signal loops to allow time for the Traffic Signal Department to make the necessary adjustments to the signals.

On Map 4, SR 1643, the Contractor shall mill the entire surface of the roadway approximately 3" (2 inches below the concrete surface of the gutter). After this milling is complete, the Engineer will inspect the milled surface for structural distresses. If distresses are found, the Contractor is to mill the distressed areas an additional 3 inches. This additional milling will be paid for at the bid item price for 3 inch milling. The areas of the additional 3 inch milling will be filled with 3 inches of I19.0 B.

After the mill and fill phase is complete, the entire surface is to receive 2" of S9.5B with the asphalt being flush with the existing concrete gutter.

The removal of asphalt from the concrete gutter is incidental to the work being paid for as milling asphalt pavement, 3" or 6" depth.

## **CONCRETE DRIVEWAY:**

If the Engineer determines that existing sections of 6 inch concrete driveway are in need of replacement, quantities have been included for the replacement of such concrete driveway.

## **ASPHALT PAVEMENTS - SUPERPAVE:**

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

RR 31

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	Asphalt Rate gal/yd <sup>2</sup>	Application Temperature °F	Aggregate Size	Aggregate Rate lb./sq. yd. Total
Sand Seal	CRS-2 or CRS-2P	0.22-0.30	150-175	Blotting Sand	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	Course Aggregate	Fine Aggregate Angularity	Sand Equivalent	Flat & Elongated 5:1		
Type	Angularity <sup>(b)</sup> ASTM D5821	% Minimum AASHTO T304 Method A	% Minimum AASHTO T176	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> , %		$\pm 0.7\%$		-	$\pm 0.4\%$		-	± 0.3%	
1 1/2" (37.5)	±10	-	-	±7	<del>-</del>	-	±5	-	-
3/4" (19.0)	±10	±10	-	±7	±7	-	±5	±5	- -
1/2" (12.5)	_	±10	±6	<del>-</del>	±7	±3	-	±5	±2
3/8" (9.5)	_	<del>-</del>	±8	_	<b>-</b>	±5	-	- -	±4
No. 4 (4.75)	±10	-	±10	±7	<del>-</del>	±7	±5	<del>-</del>	±5
No. 8 (2.36)	±8	±8	±8	±5	±5	±5	±4	±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	<u>±</u> 4	±4
No. 50 (0.300)	_	-	±8	-	-	±5	-	-	<u>±</u> 4
No. 200 (0.075)	±4	±4	<u>±</u> 4	±2	±2	±2	±1.5	±1.5	±1.5

# **GLASS BEADS:**

(7-18-06) RR 35

Revise the *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.

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

(1-1-02) RR 43

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 4.75A	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 *Standard Specifications*.

### **RESURFACING EXISTING BRIDGES:**

(7-1-95) RR 61

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.

#### **AGGREGATE PRODUCTION:**

(11-20-01) (Rev. 11-21-06) RR 109

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 *Standard Specifications*. Copies of this procedure are available upon request from the Materials and Test Unit.

## CHANGEABLE MESSAGE SIGNS

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

RR 111

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.

# CONCRETE BRICK AND BLOCK PRODUCTION:

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

RR 112

Provide concrete brick and block from a producer who uses the current Solid Concrete Masonry Brick/Unit Quality Control/Quality Assurance Program that is in effect on the date that material is received on the project.

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 *Standard Specifications*. Copies of this procedure are available upon request from the Materials and Test Unit.

### **REMOVAL OF EXISTING PAVEMENT MARKERS:**

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

RR 118

The Contractor's attention is directed to the fact that there are pavement markers on this project.

Remove and dispose of these markers prior to the paving operation.

No direct payment will be made for this work, as it will be incidental to the paving operation and payment at the contract unit price for the various asphalt items in the contract will be full compensation for such work.

# PAVEMENT MARKING LINES MEASUREMENT AND PAYMENT:

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

RR 120

Revise the 2006 Standard Specifications as follows:

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.