



**TRANSPORTATION CABINET**

Frankfort, Kentucky 40622  
[www.transportation.ky.gov/](http://www.transportation.ky.gov/)

**Steven L. Beshear**  
Governor

**Michael W. Hancock, P.E.**  
Secretary

March 12, 2012

CALL NO. 339  
CONTRACT ID NO. 122126  
ADDENDUM # 1

Subject: Union County, FD05 113 0060 013-027  
Letting March 23, 2012

- (1) Revised - Table of Contents - Page 2 of 102
- (2) Added - Special Note - Pages 11(a)-11(f) of 102
- (3) Revised - Bid Items - Pages 101-102 of 102

Proposal revisions are available at <http://transportation.ky.gov/Construction-Procurement/>.

If you have any questions, please contact us at 502-564-3500.

Sincerely,

A handwritten signature in blue ink that reads "Ryan Griffith".

Ryan Griffith  
Director  
Division of Construction Procurement

RG:ks  
Enclosures



An Equal Opportunity Employer M/F/D

## **TABLE OF CONTENTS**

<b>PART I</b>	<b>SCOPE OF WORK</b> <ul style="list-style-type: none"><li>• PROJECT(S), COMPLETION DATE(S), &amp; LIQUIDATED DAMAGES</li><li>• CONTRACT NOTES</li><li>• STATE CONTRACT NOTES</li><li>• 2012 DEFERRED PAY</li><li>• SURFACING AREAS</li><li>• ASPHALT MIXTURE</li><li>• INCIDENTAL SURFACING</li><li>• FUEL AND ASPHALT PAY ADJUSTMENT</li><li>• COMPACTION OPTION A</li><li>• SPECIAL NOTE(S) APPLICABLE TO PROJECT</li><li>• AWARD OF CONTRACT</li><li>• ASPHALT MIX PAVEMENT WEDGE MONOLITHIC OPERATION</li><li>• EDGE KEY</li><li>• ASPHALT MILLING AND TEXTURING</li><li>• TYPICAL SECTION DIMENSIONS</li><li>• TRAFFIC CONTROL PLAN</li><li>• TRAFFIC CONTROL FOR RAISED PAVEMENT MARKER INSTALLATIONS</li><li>• CENTER LINE RUMBLE STRIPES</li><li>• EDGE LINE RUMBLE STRIPES (EXPERIMENTAL)</li><li>• PAVEMENT SAFETY EDGE (EXPERIMENTAL)</li><li>• TRAFFIC SIGNAL LOOP DETECTORS</li><li>• TRAFFIC SIGNAL LOOP REPLACEMENT</li><li>• SKETCH MAP(S)</li><li>• SUMMARY SHEET(S)</li><li>• TYPICAL SECTION(S)</li><li>• BRIDGE DETAIL FOR PAVING PROJECT</li></ul>
<b>PART II</b>	<b>SPECIFICATIONS AND STANDARD DRAWINGS</b> <ul style="list-style-type: none"><li>• SPECIFICATIONS REFERENCE</li><li>• SUPPLEMENTAL SPECIFICATIONS</li><li>• 2008 STANDARD DRAWINGS THAT APPLY</li><li>• SIDEWALK RAMPS</li><li>• DETECTABLE WARNINGS</li></ul>
<b>PART III</b>	<b>EMPLOYMENT, WAGE AND RECORD REQUIREMENTS</b> <ul style="list-style-type: none"><li>• LABOR AND WAGE REQUIREMENTS</li><li>• EXECUTIVE BRANCH CODE OF ETHICS</li><li>• KENTUCKY EQUAL EMPLOYMENT OPPORTUNITY ACT OF 1978</li><li>• PROJECT WAGE RATES</li></ul>
<b>PART IV</b>	<b>INSURANCE</b>
<b>PART V</b>	<b>BID ITEMS</b>

**SPECIAL NOTE FOR LONGITUDINAL JOINT CONSTRUCTION**  
**FD05 113 0060 013 027**

The Department has selected this project as one of several for experimentation involving the construction of longitudinal joints. Personnel from the Kentucky Transportation Center will perform numerous density, permeability, and other related tests on the compacted pavement throughout the course of this project.

The Department will schedule a pre-construction meeting for this project to discuss the longitudinal joint construction technique(s) and experimentation involved.

Contact the Department at least ten calendar days prior to starting mainline paving operations on this project.

Construct the longitudinal joint for the mainline pavement according to Subsection 403.03.07 of the Department's *Standard Specifications for Road and Bridge Construction* between Milepoint 13.059 (Eagle Creek Bridge) and Milepoint 16.937 (KY 2091).

Construct the longitudinal joint for the mainline pavement according to the *Special Note for Longitudinal Joint Construction, Joint Adhesive* as contained herein between Milepoint 16.937 (KY 2091) and Milepoint 21.702 (KY 141 SB).

Construct the longitudinal joint for the mainline pavement according to the *Special Note for Longitudinal Joint Construction, Notched Wedge Technique* as contained herein between Milepoint 21.702 (KY 141 SB) and Milepoint 26.069 (Union-Henderson County Line)

March 8, 2012

## **SPECIAL NOTE FOR LONGITUDINAL JOINT CONSTRUCTION NOTCHED WEDGE TECHNIQUE**

### **1. DESCRIPTION.**

1.1 This specification covers the requirements and practices for the construction of longitudinal joints in asphalt pavement using the notched wedge technique. This technique involves constructing the joint between the adjacent lanes as two overlapping wedges. Form the wedge joint by tapering the edge of the lane paved first. Then, overlap the wedge joint when placing the adjacent lane.

1.2 This technique for longitudinal joint construction is one of several techniques attempted as part of a research effort by the Kentucky Transportation Center (KTC). KTC personnel will perform numerous density, permeability, and other related tests throughout the course of this project.

1.3 Section references herein are to the Department's Standard Specifications for Road and Bridge Construction.

### **2. MATERIALS AND EQUIPMENT.**

2.1 In addition to Subsection 403.02, provide an asphalt paver with a wedge attachment capable of constructing a longitudinal joint with the dimensions specified in Subsection 3.2 and Figure 1 of this note. Ensure the attachment provides a uniform slope and will not restrict the main screed.

2.2 In addition to Subsection 403.02, provide a roller wheel attached to the paver, moistened with water and weighing 300 to 400 lb<sub>m</sub>.

### **3. CONSTRUCTION.**

3.1 Contrary to Subsection 402.03.02, do not obtain any density core closer than 2 ft. from the longitudinal joint.

3.2 Contrary to Subsection 403.03.07, construct a 0.5 to 1.0 inch notched wedge joint on the first lane paved as displayed in Figure 1 of this note. Taper out the remaining course depth below the notch at a 1:12 ratio (vertical:horizontal) such that the tapered portion extends beyond the normal lane width. Overlap the notched wedge joint when placing the adjacent lane.

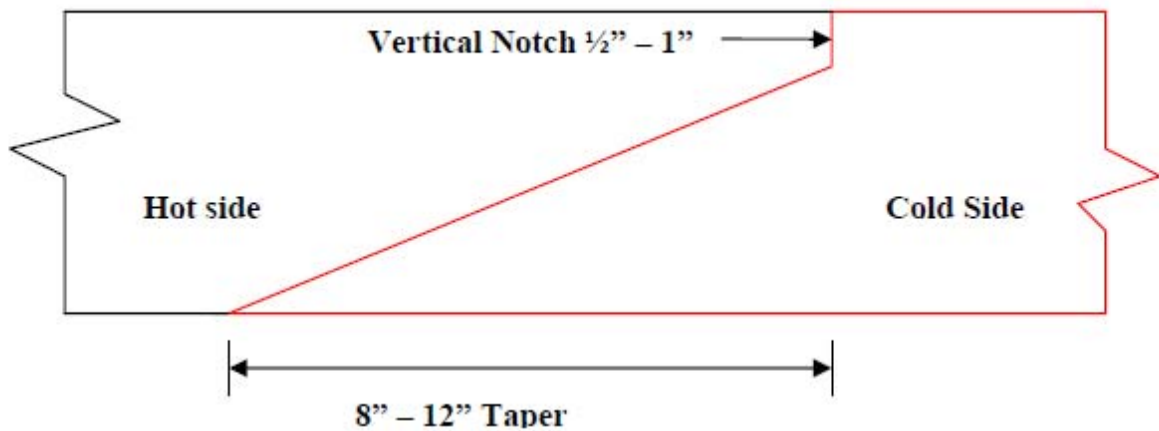
3.3 In addition to Subsection 403.03.10, compact the tapered portion of the notched wedge joint with one pass of a steel roller conforming to Subsection 2.2 of this note.

When compacting the initial lane, do not permit the roller(s) to extend more than 2 in. beyond the top of the unconfined edge. Do not roll the taper or step edge.

4. **MEASUREMENT.** The Department will not measure for payment any extra materials, methods, equipment, or construction techniques used to satisfy the requirements of this note. The Department will consider all such items incidental to the asphalt mixture.

5. **PAYMENT.** The Department will make payment for the completed and accepted quantities according to Section 402.

Figure 1 – Cross Section of Notched Wedge



February 23, 2012

## **SPECIAL NOTE FOR LONGITUDINAL JOINT CONSTRUCTION JOINT ADHESIVE**

### **1. DESCRIPTION.**

1.1 This specification covers the requirements and practices for applying a modified-asphalt adhesive material to the longitudinal joint of the surface course of an asphalt pavement.

1.2 This technique involves applying the adhesive to the longitudinal joint between adjacent traffic lanes. Apply the adhesive material to the face of the joint for the lane paved first. Then, place and compact the adjacent lane against the face of the joint of the lane paved first to produce a strong, waterproof bond along the longitudinal joint between the lanes.

1.3 This technique for longitudinal joint construction is one of several techniques attempted as part of a research effort by the Kentucky Transportation Center (KTC). KTC personnel will perform numerous density, permeability, and other related tests throughout the course of this project.

1.4 Section references herein are to the Department's Standard Specifications for Road and Bridge Construction.

### **2. MATERIALS, EQUIPMENT, AND PERSONNEL.**

2.1 Pavement Joint Adhesive. Provide a solid, ready-to-use adhesive conforming to the following requirements:

<u>Property</u>	<u>Specification</u>	<u>Test Procedure</u>
Brookfield Viscosity, 400 °F (cp)	4000 – 10,000	ASTM D 2669
Cone Penetration, 77 °F	60 – 100	ASTM D 5329
Flow, 140 °F	5mm (maximum)	ASTM D 5329
Resilience, 77 °F (%)	30% (minimum)	ASTM D 5329
Ductility, 77 °F	30cm (minimum)	ASTM D 113
Ductility, 39.2 °F	30cm (minimum)	ASTM D 113
Tensile Adhesion, 77 °F (%)	500 (minimum)	ASTM D 5329
Softening Point (°F)	170 (minimum)	ASTM D 36
Asphalt Compatibility	Pass	ASTM D 5329

2.2 Melter Kettle. Provide an oil-jacketed, double-boiler, melter kettle equipped with both agitation and recirculating systems.

2.3 Applicator System. Provide a pressure-feed-wand applicator system with a 3 to 4-in. applicator shoe attached.

2.4 Pavement Joint Adhesive Representative. Ensure a technical representative from the manufacturer of the pavement joint adhesive is present during the initial construction activities and available upon the request of the Engineer.

### 3. CONSTRUCTION.

3.1 Surface Preparation. Prior to the application of the pavement joint adhesive, ensure the face of the longitudinal joint of the first traffic lane paved is thoroughly dry and free from any loose material, dust, or any other debris that would inhibit adhesion. Clean the joint face by the use of compressed air. If moisture is present, use a hot, compressed-air lance. Ensure this preparation process occurs shortly before application to prevent the return of debris on the joint face prior to applying the pavement joint adhesive.

3.2 Pavement Joint Adhesive Temperature Control. Ensure the temperature of the pavement joint adhesive is between 380 and 400°F when applied to the longitudinal joint.

3.3 Pavement Joint Adhesive Application. Ensure the ambient temperature is a minimum of 40°F during the application of the pavement joint adhesive. Prior to applying the adhesive, demonstrate competence in applying the adhesive according to this note to the satisfaction of the Engineer. Heat the adhesive in the melter kettle to the specified temperature range. Pump the adhesive from the melter kettle through the wand onto the vertical face of the joint. Apply the adhesive in a continuous, 1/8-in.-thick band over the entire face of the longitudinal joint. Do not use excessive material in either thickness or location. Then, place and compact the adjacent lane against the face of the joint coated with the pavement joint adhesive.

3.4 Pavement Joint Adhesive Certification. Furnish the pavement joint adhesive manufacturer's certification to the Engineer stating the material conforms to all requirements herein prior to use.

4. MEASUREMENT. The Department will measure the quantity in linear feet. The Department will not measure for payment any extra materials, labor, methods, equipment, or construction techniques used to satisfy the requirements of this note. The Department will not measure for payment any trial applications of pavement joint adhesive, the cleaning of the joint face, or furnishing and placing the adhesive. The Department will consider all such items incidental to the pavement joint adhesive.

5. PAYMENT. The Department will make payment for the completed and accepted quantities under the following:

<u>Code</u>	<u>Pay Item</u>	<u>Pay Unit</u>
20071EC	Joint Adhesive	Linear Foot

February 23, 2012



CONTRACT ID: 122126  
COUNTY: UNION  
PROPOSAL: FD05 113 0060 013-027

PAGE: 1  
LETTING: 03/23/12  
CALL NO: 339

LINE NO	ITEM	DESCRIPTION	APPROXIMATE UNIT QUANTITY	UNIT PRICE	AMOUNT
SECTION 0001 ROADWAY					
0010	00001	DGA BASE	850.000 TON		
0020	00190	LEVELING & WEDGING PG64-22	1,029.000 TON		
0030	00324	CL3 ASPH SURF 0.50B PG64-22	22,510.000 TON		
0040	02562	SIGNS	1,250.000 SQFT		
0050	02650	MAINTAIN & CONTROL TRAFFIC	( 1.00) LS		
0060	02676	MOBILIZATION FOR MILL & TEXT	( 1.00) LS		
0070	02677	ASPHALT PAVE MILLING & TEXTURING	3,924.000 TON		
0080	02720	SIDEWALK-4 IN CONCRETE	173.000 SQYD		
0090	04820	TRENCHING AND BACKFILLING	25.000 LF		
0100	04830	LOOP WIRE	440.000 LF		
0110	04895	LOOP SAW SLOT AND FILL	220.000 LF		
0120	06510	PAVE STRIPING-TEMP PAINT-4 IN	154,000.000 LF		
0130	06514	PAVE STRIPING-PERM PAINT-4 IN	240,000.000 LF		
0140	06565	PAVE MARKING-THERMO X-WALK-6 IN	76.000 LF		
0150	06566	PAVE MARKING-THERMO X-WALK-12 IN	1,007.000 LF		
0160	06568	PAVE MARKING-THERMO STOP BAR-24IN	398.000 LF		
0170	06569	PAVE MARKING-THERMO CROSS-HATCH	261.000 SQFT		
0180	06574	PAVE MARKING-THERMO CURV ARROW	43.000 EACH		
0190	06589	PAVEMENT MARKER TYPE V-MW	40.000 EACH		
0200	06591	PAVEMENT MARKER TYPE V-BY	431.000 EACH		

CONTRACT ID: 122126  
COUNTY: UNION  
PROPOSAL: FD05 113 0060 013-027

PAGE: 2  
LETTING: 03/23/12  
CALL NO: 339

LINE NO	ITEM	DESCRIPTION	APPROXIMATE UNIT QUANTITY	UNIT PRICE	AMOUNT
0210	06600	REMOVE PAVEMENT MARKER TYPE V	1,718.000 EACH		
0220	10020NS	FUEL ADJUSTMENT	32,450.000 DOLL	1.00	32,450.00
0230	10030NS	ASPHALT ADJUSTMENT	56,709.000 DOLL	1.00	56,709.00
0231	20071EC	JOINT ADHESIVE (ADDED: 3-12-12)	25,195.000 LF		
0240	20458ES403	CENTERLINE RUMBLE STRIPS	54,400.000 LF		
0250	23158ES505	DETECTABLE WARNINGS NEW CONSTRUCTION	277.000 SQFT		
0260	23158ES505	DETECTABLE WARNINGS RETROFIT CONSTRUCTION	110.000 SQFT		
0270	23595EC	RUMBLE STRIPE-SAW CUT	108,850.000 LF		
SECTION 0002 DEMOBILIZATION					
0280	02569	DEMOBILIZATION (AT LEAST 1.5%)	LUMP		
		TOTAL BID			