



**COMMONWEALTH OF KENTUCKY
TRANSPORTATION CABINET**
Frankfort, Kentucky 40622
www.transportation.ky.gov/

Matthew G. Bevin
Governor

Greg Thomas
Secretary

July 25, 2016

CALL NO. 431
CONTRACT ID NO. 163223
ADDENDUM # 2

Subject: Fleming County, 035GR16R067-CB06
Letting July 29, 2016

- (1) Revised - Note - Page 10 of 78
- (2) Revised - Special Note - Pages 11-13 of 78
- (3) Revised - Material Summary - Pages 24-27 of 78
- (4) Revised - Bid Items - Page 78 of 78

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 cursive script that reads "Rachel Mills".

Rachel Mills, P.E.
Director
Division of Construction Procurement

RM:ks
Enclosures



An Equal Opportunity Employer M/F/D

**SPECIAL NOTE FOR CHIP SEAL
AND FOG SEAL
CB06 035 0170 000-003
CB06 035 1325 004-007**

Except as provided herein, conform to all requirements of the Transportation Cabinet/Department of Highways' 2012 Standard Specifications for Road and Bridge Construction. Section references are to the Standard Specifications.

Prior to placing asphalt seal coat, the area to be sealed shall be cleaned according to Section 405. In addition to the items mentioned, all existing thermoplastic markings shall be removed prior to applying the chip seal. No separate payment will be provided for this removal and shall be incidental to the Preparation of Surface.

Asphalt seal coats shall comply with Section 405. Aggregates shall be type D number 8's or 9m's applied at a rate of 20 lbs./square yard. Apply the asphalt material at a rate of 3.3 lbs./square yard.

The application rate for the CSS-1H Fog Seal was estimated at 0.2 lbs/square yard.

Use only **washed** Aggregate for chip seal applications, as directed by the Engineer.

SPECIAL NOTE FOR ASPHALT CHIP SEAL

1. DESCRIPTION. Construct an asphalt chip seal consisting of one or more applications each of asphalt material and cover aggregate.

2. MATERIAL AND EQUIPMENT.

Asphalt Material. Furnish undiluted CRS-2P or CRS-2L polymer modified emulsion that conforms to AASHTO M 316 and the requirements **Section 806.05**.

Aggregate. A cleaned washed aggregate cover material type D number 8 or 9m shall meet material requirements that conform to **Section 805**, as applicable.

Equipment. Provide, and keep on the project at all times, an accurate thermometer, hand brooms, and other small tools and equipment essential for completion of the work.

The asphalt distributor for the application of the emulsion shall have full circulation spray bar that is adjustable to at least 16 feet wide in 2 feet increments and capable of heating and circulating the emulsion simultaneously, conforming to subsection 406.02.05. It must have computerized rate control for adjusting and controlling the application from the cab within 0.01 gallons per square yard increments. The distributor shall also be equipped with a volume measuring device and a thermometer for measuring the emulsion temperature in the tank.

The aggregate spreader shall be a continuous mechanical feed, self-propelled aggregate spreader with front discharge. Ensure the spreader can evenly distribute the aggregate from the transporting vehicle directly onto the fresh asphalt material in smooth, uniform layers, independent of the forward speed. Ensure that the spreader is capable of being filled and moved without discharging aggregate.

The roller shall be a Pneumatic tire roller weighing at least 5 tons.

The power broom shall be a mechanically powered kick-broom or vacuum type broom.

3. CONSTRUCTION.

Weather Limitations. Application of chip seal shall only be constructed when ambient temperature is 50 degrees F and rising. CRS-2P should not be applied when the air temperature is below 60°F and falling. Do not construct when the ambient temperature within the preceding 24 hours has been 35 degrees F or lower, except with the Engineer's written permission. Do not proceed with construction if rain is expected in a minimum period of 24 hours, nor when rain is impending within 2 hours after completion of the chip seal. If an unexpected shower arises during operations, the asphalt distributor should be shut off immediately and placement of aggregate continued until all asphalt has been covered.

Preparation of Mixture. Submit a complete mix design a minimum of 14 days prior to construction. Mix design shall be prepared by an approved laboratory, to verify the compatibility of the aggregate, asphalt emulsion and other additives. Perform the mix design with the same materials that will be used on the project.

Surface Preparation. Prior to operation, the contractor shall remove all existing thermoplastic striping, thermoplastic legends, and raised markers within application limits. All surfaces intended for application shall be thoroughly cleaned of all vegetation, loose material, dirt, or other objectionable material immediately before application of emulsion using a mechanical sweeper and wire hand brooms, when necessary. Clean the edges of the

surface providing a full and uniformly clean width of roadway. Where mud or earth exists, remove it in advance and allow surface to thoroughly dry before applying emulsion. Mowing or removal of shoulder vegetation and or brush may be necessary for proper application.

If cracks cannot be adequately filled by emulsion, fill with proper asphalt material or hot pour joint sealer conforming to subsection 807.03.01. If applicable, apply cover aggregate before applying chip seal application.

Application Rates of Materials.

Properties	Minimum	Maximum
Application rate of emulsion, gallons/sq yard*	0.22	0.35
Emulsion temperature, F	110	185
Application rate of aggregate, lb/sy*	16	22

*Engineer may adjust application rates due to existing conditions

4. APPLICATION.

Application of Emulsion. Heat and maintain emulsion between 110 and 185 degrees F during application. Polymer modified emulsion shall be applied when air temperature is at least 50 degrees F and rising and a minimum surface temperature of 70 degrees F.

Emulsion shall be applied using a pressure distributor in a uniform, continuous quantity at specified rates.

Keep the nozzles of the spray bar clean at all times. Immediately make any streaked areas uniform by use of a hand hose equipped with a nozzle.

Do not apply the asphalt material farther in advance of the spreading of the aggregate than can be covered directly by the aggregate immediately available at the site of work.

When the chip seal treatment is constructed in half-widths, provide complete coverage by overlapping the 2 applications approximately 4 inches along centerline.

Prevent spotting or discoloring curbs, headwalls, and other structures. When such discolorations occur, remove them at no expense to KYTC.

Make joints utilizing an approved method.

Aggregate. Aggregate cover material shall be cleaned and washed to remove dirt and dust, ensuring appropriate adhesion with emulsion. Due to this process, aggregate may be damp during application. Prior to breaking of the emulsion, aggregate shall be continuously and evenly spread with the proper equipment at the specified rates. Spreading equipment shall not contact the asphalt material before it is covered with aggregate. Precautions should be taken not to exceed the designated rate by more than 5 percent. Use hand brooms to correct any irregularities.

Rolling. A self-propelled pneumatic tire roller shall be used for the required rolling of the aggregate. This shall be done immediately following the spreading of aggregate. Operate the rollers parallel to the centerline in a manner preventing the dislodgment of newly applied aggregate. Rolling should proceed from the outer edge to the center, with each pass overlapping the previous by one-half. Cover the entire surface with at least 3 passes or more when the engineer directs.

Sweeping. Power sweep/vacuum the completed application to remove all excess aggregate after the asphalt material has cured sufficiently. Sweeping/vacuuming must be completed prior to any striping and/or before the end of the application day. Little to no aggregate shall be remaining on entrance/exit aprons of intersecting crossroads

and driveways. A second sweeping may be required following the initial application day. Prior to applying a fog seal or other of surface treatment over the chip seal, it may be opened to traffic for an amount of time specified in the contract. This may be necessary to ensure maximum aggregate retention.

5. MEASUREMENT.

When an authorized adjustment is made, KYTC will measure quantities up to 5 percent in excess of the designated application rate for payment. KYTC will not measure quantities exceeding the designated application rate by more than 5 percent for payment.

Asphalt Material. KYTC will measure the quantity in tons according to **Section 109.**

Aggregate. KYTC will measure the quantity in tons according to **Section 109.**

6. PAYMENT.

KYTC will make payment for the completed and accepted quantities under the following:

<u>Pay Item</u>	<u>Pay Unit</u>
Polymer Modified Emulsified Asphalt	Ton
Crushed Aggregate	Ton

KYTC will consider payment as full compensation for all work required under this section.

MATERIAL SUMMARY

CONTRACT ID: 163223

035GR16R067-CB06

0903501561701

MT. HOPE ROAD (KY 156) FROM 0.272 MILE EAST OF FARRIS ROAD EXTENDING EAST TO KY 32 ASPHALT RESURFACING, A DISTANCE OF 1.41 MILES.

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0105	02562	TEMPORARY SIGNS	190.00	SQFT
0110	02650	MAINTAIN & CONTROL TRAFFIC - KY 156	1.00	LS
0115	00301	CL2 ASPH SURF 0.38D PG64-22	840.00	TON
0120	00001	DGA BASE	195.00	TON
0125	00190	LEVELING & WEDGING PG64-22	173.00	TON
0130	02676	MOBILIZATION FOR MILL & TEXT - KY 156	1.00	LS
0135	02677	ASPHALT PAVE MILLING & TEXTURING	21.00	TON
0140	06514	PAVE STRIPING-PERM PAINT-4 IN	14,920.00	LF
0145	06510	PAVE STRIPING-TEMP PAINT-4 IN	8,950.00	LF
0150	02569	DEMOBILIZATION	1.00	LS

CONTRACT ID: 163223

035GR16R067-CB06

0903501701701

ENERGY ROAD (KY 170) FROM KY 1325 EXTENDING NORTH TO KY 1347 ASPHALT RESURFACING, A DISTANCE OF 2.08 MILES.

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0050	02562	TEMPORARY SIGNS	230.00	SQFT
0055	02650	MAINTAIN & CONTROL TRAFFIC - KY 170	1.00	LS
0060	00103	ASPHALT SEAL COAT - CSS-1H FOR FOG SEAL (REVISED: 7-25-16)	2.00	TON
0065	00103	ASPHALT SEAL COAT - CRS-2P (REVISED: 7-22-16)	36.00	TON
0070	00083	CRUSHED AGGREGATE SIZE NO 8	217.00	TON
0075	06567	PAVE MARKING-THERMO STOP BAR-12IN	20.00	LF
0080	06514	PAVE STRIPING-PERM PAINT-4 IN	21,944.00	LF
0085	06510	PAVE STRIPING-TEMP PAINT-4 IN	21,944.00	LF
0090	02569	DEMOBILIZATION	1.00	LS
0095	02677	ASPHALT PAVE MILLING & TEXTURING	8.00	TON
0100	02676	MOBILIZATION FOR MILL & TEXT - KY 170	1.00	LS

MATERIAL SUMMARY

CONTRACT ID: 163223

035GR16R067-CB06

0903513251701

PECKS RIDGE ROAD (KY 1325) FROM KY 1123 EXTENDING NORTH TO KY 170 ASPHALT RESURFACING, A DISTANCE OF 1.18 MILES.

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0005	02562	TEMPORARY SIGNS	210.00	SQFT
0010	02650	MAINTAIN & CONTROL TRAFFIC - KY 1325 MP 4.830-6.008	1.00	LS
0015	00103	ASPHALT SEAL COAT - CSS-1H FOR FOG SEAL (REVISED: 7-25-16)	2.00	TON
0020	00103	ASPHALT SEAL COAT - CRS-2P (REVISED: 7-22-16)	21.00	TON
0025	00083	CRUSHED AGGREGATE SIZE NO 8	126.00	TON
0030	06567	PAVE MARKING-THERMO STOP BAR-12IN	10.00	LF
0035	06514	PAVE STRIPING-PERM PAINT-4 IN	12,440.00	LF
0040	06510	PAVE STRIPING-TEMP PAINT-4 IN	12,440.00	LF
0045	02569	DEMOBILIZATION	1.00	LS

CONTRACT ID: 163223

035GR16R067-CB06

0903513251702

ENERGY ROAD (KY 1325) FROM KY 170 EXTENDING NORTH TO BRANCH BROTHERS ROAD ASPHALT RESURFACING, A DISTANCE OF 1.12 MILES.

Project Line No	Bid Code	DESCRIPTION	Quantity	Unit
0155	02562	TEMPORARY SIGNS	190.00	SQFT
0160	02650	MAINTAIN & CONTROL TRAFFIC - KY 1325 006-008	1.00	LS
0165	00301	CL2 ASPH SURF 0.38D PG64-22	720.00	TON
0170	00001	DGA BASE	155.00	TON
0175	00190	LEVELING & WEDGING PG64-22	147.00	TON
0180	02676	MOBILIZATION FOR MILL & TEXT - KY 1325 006-008	1.00	LS
0185	02677	ASPHALT PAVE MILLING & TEXTURING	22.00	TON
0190	06514	PAVE STRIPING-PERM PAINT-4 IN	11,848.00	LF
0195	06510	PAVE STRIPING-TEMP PAINT-4 IN	7,100.00	LF
0200	02569	DEMOBILIZATION	1.00	LS

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0120	00001	DGA BASE	195.00	TON
0125	00190	LEVELING & WEDGING PG64-22	173.00	TON
0130	02676	MOBILIZATION FOR MILL & TEXT - KY 156	1.00	LS
0135	02677	ASPHALT PAVE MILLING & TEXTURING	21.00	TON
0140	06514	PAVE STRIPING-PERM PAINT-4 IN	14,920.00	LF
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0065	00103	ASPHALT SEAL COAT - AE90-S	36.00	TON
0070	00083	CRUSHED AGGREGATE SIZE NO 8	217.00	TON
0075	06567	PAVE MARKING-THERMO STOP BAR-12IN	20.00	LF
0080	06514	PAVE STRIPING-PERM PAINT-4 IN	21,944.00	LF
0085	06510	PAVE STRIPING-TEMP PAINT-4 IN	21,944.00	LF
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0170	00001	DGA BASE	155.00	TON
0175	00190	LEVELING & WEDGING PG64-22	147.00	TON
0180	02676	MOBILIZATION FOR MILL & TEXT - KY 1325 006-008	1.00	LS
0185	02677	ASPHALT PAVE MILLING & TEXTURING	22.00	TON
0190	06514	PAVE STRIPING-PERM PAINT-4 IN	11,848.00	LF
0195	06510	PAVE STRIPING-TEMP PAINT-4 IN	7,100.00	LF
0200	02569	DEMOBILIZATION	1.00	LS

PROPOSAL BID ITEMS

Report Date 7/25/16

Page 1 of 1

Section: 0001 - ROADWAY

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0010	00001		DGA BASE	350.00	TON		\$	
0020	00083		CRUSHED AGGREGATE SIZE NO 8	343.00	TON		\$	
0030	00103		ASPHALT SEAL COAT CRS-2P (REVISED: 7-22-16)	57.00	TON		\$	
0040	00103		ASPHALT SEAL COAT CSS-1H FOR FOG SEAL (REVISED: 7-25-16)	4.00	TON		\$	
0050	00190		LEVELING & WEDGING PG64-22	320.00	TON		\$	
0060	00301		CL2 ASPH SURF 0.38D PG64-22	1,560.00	TON		\$	
0070	02562		TEMPORARY SIGNS	820.00	SQFT		\$	
0080	02650		MAINTAIN & CONTROL TRAFFIC KY 1325 006-008	1.00	LS		\$	
0090	02650		MAINTAIN & CONTROL TRAFFIC KY 1325 MP 4.830-6.008	1.00	LS		\$	
0100	02650		MAINTAIN & CONTROL TRAFFIC KY 156	1.00	LS		\$	
0110	02650		MAINTAIN & CONTROL TRAFFIC KY 170	1.00	LS		\$	
0120	02676		MOBILIZATION FOR MILL & TEXT KY 1325 006-008	1.00	LS		\$	
0130	02676		MOBILIZATION FOR MILL & TEXT KY 156	1.00	LS		\$	
0140	02676		MOBILIZATION FOR MILL & TEXT KY 170	1.00	LS		\$	
0150	02677		ASPHALT PAVE MILLING & TEXTURING	51.00	TON		\$	
0160	06510		PAVE STRIPING-TEMP PAINT-4 IN	50,434.00	LF		\$	
0170	06514		PAVE STRIPING-PERM PAINT-4 IN	61,152.00	LF		\$	
0180	06567		PAVE MARKING-THERMO STOP BAR-12IN	30.00	LF		\$	

Section: 0002 - DEMOBILIZATION

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0190	02569		DEMOBILIZATION	1.00	LS		\$	