

Matthew G. Bevin Governor

COMMONWEALTH OF KENTUCKY TRANSPORTATION CABINET

Frankfort, Kentucky 40622 www.transportation.ky.gov/

Greg Thomas Secretary

March 20, 2017

CALL NO. 101

CONTRACT ID NO. 171011

ADDENDUM # 1

Subject: Lee County, STP 5262 (060)

Letting March 24, 2017

(1) Revised - General Summary - Pages 22-23 of 118

(2) Revised - Special Notes - Pages 42-47 of 118

(3) Added - Detail Sheets - Pages 50(a)-50(b) of 118

(4) Revised - Bid Items - Pages 117-118 of 118

Proposal revisions are available at http://transportation.ky.gov/Construction-procurement/.

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

Sincerely,

Rachel Mills, P.E.

Director

Division of Construction Procurement

Kachel Mille

RM:ks

Enclosures



Contract ID: 171011 Page 22 of 118

REVISED ADDENDUM #1: 3-20-17

GENERAL SUMMARY

ITEM CODE	ITEM	UNIT	PROJECT TOTAL
78	CRUSHED AGGREGATE SIZE NO. 2 (2) (7)	TON	2
462	CULVERT PIPE - 18 IN	L.F.	31
1000	PERFORATED PIPE - 4 IN (2)	L.F.	300
1010	NON-PERFORATED PIPE - 4 IN (2)	L.F.	100
1020	PERFORATED PIPE HEADWALL TY 1-4 IN (2)	EACH	2
1204	PIPE CULVERT HEADWALL - 18 IN	EACH	1
1545	DROP BOX INLET TYPE 11 MOD. (3)	EACH	1
1728	SAFETY BOX INLET - 18 IN DOUBLE (3)	EACH	1
1986	DELINEATOR FOR BARRIER WALL - B/Y (6)	EACH	18
1987	DELINEATOR FOR GUARDRAIL-BW	EACH	15
2003	RELOCATE TEMP CONC BARRIER	L.F.	900
2014	BARRICADE TYPE III	EACH	2
2367	GUARDRAIL END TREATMENT TYPE 1	EACH	1
2381	REMOVE GUARDRAIL	L.F.	737.5
2383	REMOVE & RESET GUARDRAIL	L.F.	150.0
2484	CHANNEL LINING CLASS III	TON	23
21802EN	G/R STEEL BEAM -S FACE (7 FT POST)	L.F.	750
2562	TEMPORARY SIGNS	S.F.	592
2569	DEMOBILIZATION	L.S.	1
2599	FABRIC-GEOTEXTILE TYPE IV	SQ. YD.	1950
2600	FABRIC-GEOTEXTILE TYPE IV FOR PIPE	SQ. YD.	28
2650	MAINTAIN & CONTROL TRAFFIC	L.S.	1
2671	PORTABLE CHANGEABLE MESSAGE SIGN	EACH	2
2676	MOBILIZATION FOR MILL, & TEXT,	L.S.	1
2690	SAEFLOADING PIPE	CU. YD.	2
2697	EDGELINE RUMBLE STRIPS	L.F.	2300
2726	STAKING	L.S.	1
2898	RELOCATE CRASH CUSHION	EACH	2
3171	CONCRETE BARRIER WALL TYPE 9T	L.F.	900
3234	RAILROAD RAILS - DRILLED	L.F.	24920
3235	EXCAVATION AND BACKFILL (4) (5) (8)	CU. YD.	1472
3236	CRIBBING	SQ. FT.	8500
4933	TEMP SIGNAL 2 PHASE	EACH	1
5950	EROSION CONTROL BLANKET (2)	SQ YD	750
6510	PAVE STRIPING-TEMP PAINT-4 IN	L.F.	9200
6514	PAVE STRIPING-PERM PAINT-4 IN	L.F.	4600
8100	CONCRETE - CLASS A (1)	CU. YD.	7.02
8150	STEEL REINFORCEMENT (1)	LBS	753.92
23143ED	KPDES PERMIT AND TEMP E.C.	L.S.	1

Contract ID: 171011 Page 23 of 118

REVISED ADDENDUM #1: 3-20-17

ITEM CODE	ITEM	UNIT					PROJECT TOTAL
20191ED	OBJECT MARKER TYPE 3	EACH					1
20071EC	JOINT ADHESIVE	L.F.					650
21289ED	LONGITUDINAL EDGE KEY (9)	L.F.					500
20738NS112	TEMP CRASH CUSHION	EACH					2
24640ED	OBJECT MARKER TYPE 1	EACH					2
(1) CONCRET	E DITCH						
(2) AT LOCAT	IONS AS DIRECTED BY THE ENGINEER						
` '	IL DRAWING "DOUBLE SAFETY TYPE INLET BO						
` '	ITITY INCLUDES REMOVAL OF EXISTING ASPH						
(5)THIS QUAN	ITITY DOES NOT INCLUDES SHOULDER AND D	ITCH EXCA	VATION FO	R SHLD WI	DENING FF	ROM STA. 6	62+00
TO STA. 64	1+50. MILLING & TEXTURING AND ADDITIONA D	OGA BASE	QUANTITIES	S ARE INCL	UDED FOR	STA 62+0	0 TO STA 64+50
(6) FOR BARR	RIER WALLS 50" OR LESS IN HEIGHT, DEALINE <i>A</i>	TORS MA	/ BE INSTAL	LED ON TO	P OF THE	BARRIER \	WALL.
(/ -	D AT 1 TON PER PERFORATED PIPE HEADWAL						
(8) USED IN T	HE EMBANKMENT REPAIR AREAS INVOLVING	THE DRILL	ED RAILRO	AD STEEL A	ND CRIBB	ING. THIS	BID ITEM IS
MEASURE	D AND PAID ONLY ONCE. THE VOLUME THAT	IS PAID IS	THE LARGE	R OF THE E	XCAVATIO	ON VOLUM	E OR THE
EMBANKM	MENT VOLUME.						
(9) USE AT TH	HE SHOULDER WIDENING, SAWCUT PAVEMENT	Γ REQUIRE	D. SEE TYP	PICAL SECT	IONS		

Contract ID: 171011 Page 42 of 118

REVISED ADDENDUM #1: 3-20-17

<u>SPECIAL NOTES</u> EMBANKMENT REPAIR PROJECT

I. DESCRIPTION

This work shall be performed in accordance with the Department's Current Standard Specifications and applicable Special Provisions except as hereafter specified. Article references are to the Standard Specifications.

This work shall consist of: (1) Do necessary excavation; (2) Furnish and install railroad rails; (3) Furnish and install **wall cribbing**; (4) Excavate, place geotextile material, and backfill the area around the railroad rails and on the fill slope; (5) Reconstruct shoulder area; (6) Install guardrail, as stated in the guardrail special notes; (7) Maintain and control traffic; and (8) any other work as specified by this contract.

II. MATERIALS

All materials shall be sampled and tested in accordance with the Department's Sampling Manual and the materials shall be available for sampling a sufficient time in advance of the use of the materials to allow for the necessary time for testing unless otherwise specified in these Notes.

- **A.** Railroad Rails. Use recycled (used) railroad rails classified with a nominal weight of 130 lb./yd. (pounds per yard) size or greater. Use only visibly straight recycled railroad rails with no splices. The Engineer will verify rail nominal weights (Manufacturer's Stamp with lb./yd, date, etc.). Provide Certification for nominal weight if the Manufacturer's Stamp is unidentifiable. Use a minimum length of 40-feet railroad rails.
- **B.** Wall Cribbing. The Department will furnish used or recycled guardrail elements for Cribbing. The Department will make the materials available to the Contractor at the Lee County Maintenance Garage in Beattyville, Kentucky, 7:30 a.m. to 4:00 p.m. Monday through Friday. The contractor is responsible for hauling the materials to the project site. The contractor is responsible for installing materials furnished by the Department to construct cribbing at locations listed in the Proposal or as determined by the Engineer at the time of construction.
- **C. Backfill material for Drilled Sockets.** Immediately after installing railroad rail, backfill the drilled socket with the following material: concrete; pea gravel; or coarse aggregates (#67, #68, #78, #8 & #9 only). Do not use auger tailings. Engineer will use visual inspection and/or material testing, as applicable to determine acceptability.
- **D. Fill Material for CRIBBING.** Use one of the following backfill materials: Kentucky Coarse Aggregate Nos. 2's 3's, or 23's meeting the requirements of Section 703 and 805 of the Standard Specifications for Road and Bridge Construction (Current

Contract ID: 171011 Page 43 of 118 REVISED ADDENDUM #1: 3-20-17

NOTES SLIDE REPAIR PROJECT Page 2

Edition). Positive drainage must be maintained behind the cribbing. The Engineer will use visual inspection and/or material testing, as applicable to determine acceptability.

- **E. DGA.** Furnish Dense Graded Aggregate as per Section 805. Do not use Crushed Stone Base.
- **F. Final Dressing, Seed and Protection.** Use Seed Mixture No. 1.
- G. Silt Trap A, B or C. Furnish Silt traps as per Std Drawings and Section 213.
- **H. Silt Fence.** Furnish Temporary Silt Fence as per Section 213 and Section 827.
- **I. Geotextile Fabric.** Place Geotextile Fabric Type IV, in according with Section 214 & 843 of the Standard Specifications for Road and Bridge Construction, Current Edition.

III. CONSTRUCTION METHODS

- **A. Maintain and Control Traffic.** See Traffic Control Plan.
- **B.** Staking. Establish proper slope elevations and ratios, shoulder widths, existing ditch profile and final ditch profile to insure positive drainage. Be responsible for field layout. Positive drainage is required upon completion of the project and is the responsibility of the Contractor.
- **C. Site Preparation.** Prepare flood repair sites. This includes clearing and grubbing, if necessary. Remove all obstructions. Sweep and remove debris, if necessary. The area to be cleared has not been measured by the Department and the bidder must draw his own conclusions. Construct silt checks and Temporary silt fence at locations directed by the engineer. The Engineer shall approve all site preparation. The Department will not make direct payment for site preparation.

EXISTING RETAINING WALL WITH GUARDRAIL POSTS SHALL BE REMOVED PRIOR TO DRILLING. AT THE ENGINEER'S DISCRETION, EXISTING RAILROAD RAILS MAY BE LEFT IN PLACE.

D. Installation of Railroad Rails. See attached summary for site locations and estimated quantities of materials required. The depth to rock shown on the cross-sections is approximate.

Contract ID: 171011 Page 44 of 118 REVISED ADDENDUM #1: 3-20-17

NOTES SLIDE REPAIR PROJECT Page 3

REPLACE THE EXISTING CULVERT AT APPROXIMATE STATION 57+30 AS SHOWN ON THE PLANS. MODIFICATIONS TO RAIL SPACING AND LENGTH MAY BE ALLOWED UPON ENGINEER'S APPROVAL TO ACCOMMODATE PLACEMENT OF THE CULVERT PIPE AND HEADWALL.

Install used railroad rail piling in drilled sockets in rock or stable material at locations specified on the plans or as directed by the Engineer.

Drill the socket, furnish, and install the railroad rails into holes at slide locations. Drill sockets into solid rock, if possible. The Department will monitor each hole, which will serve as a sounding for the rail to be installed in it. Embed the railroad rail into solid rock no less than one-half the free end length of the rail. (See attached "Slide Repair Detail Sheets"). If solid rock cannot be obtained, the Engineer will determine the length of embedment required in other stable foundation. Allow adequate size of the drilled socket to allow free insertion of the railroad rail, but the maximum socket size is 1 foot in diameter.

After each hole is drilled, install railroad rail immediately with the flanges positioned parallel to the centerline of the roadway. Determine the height of rail that is needed to reestablish pavement and shoulder typical section. Cut off excess rail flush with the proposed ground line that is not needed. Use cutoffs elsewhere in the project if possible; unusable cutoffs remain the property of the Contractor.

After railroad rail is installed, immediately backfill the drilled hole with the approved materials. Shovel the backfill material into the hole in small amounts. Avoid bridging between the rail and the sides of the hole. Do not use Auger tailings as backfill material.

When double or triple rows are required, stagger the rows to obtain the required spacing. Keep the spacing between the rows of rails as close as is practical; do not space between the rows of more than 2 feet, if possible. See "Slide Repair Detail Sheets" (Case II and Case III) for the diagrams showing two (2) or three (3) rows of rails. Select the spacing as per Table 1 for all 130 pound per yard rail or greater. The Department shall approve the selection prior to work being performed.

Crib any exposed portion of railroad rail before placing backfill.

E. Excavation and Backfill for Embankment Repair. Excavate each embankment/flood repair area to provide a platform for drilling the used railroad rails, if necessary. Excavate for roadway ditches as necessary for slope, shoulder and pavement drainage. Place geotextile fabric, then construct embankment behind railroad rails,

Contract ID: 171011 Page 45 of 118 REVISED ADDENDUM #1: 3-20-17

NOTES SLIDE REPAIR PROJECT Page 4

cribbing and on slope, as per Section 206. Construct embankment up to the approximate existing pavement elevation.

Reconstruct the shoulder area with DGA up to the approximate existing elevation and width of the surrounding typical section or to a minimum width of <u>2 Feet</u> at each slide location. Do not pond water on the shoulder area or at the shoulder edge. Reconstruct the shoulder before installing guardrail.

DO NOT USE EXCAVATED MATERIAL FROM THE SITE AS FILL MATERIAL.

Excess excavation MAY BE wasted at sites on the right-of-way, ONLY if approved by the Engineer. Material may NOT be wasted in flood prone areas or in streams.

If the Engineer deems no suitable sites are available within the right-of-way, the Contractor will be required to waste excess material off the right-of-way at sites obtained by the Contractor and approved by the engineer at no cost to the Department.

- F. Installation of Wall Cribbing. Install Cribbing as shown on "Slide Repair Detail Sheets" as slide location dictates or as directed by the Engineer. Extend wall cribbing 2 feet below the existing ground line. If bedded rock is encountered, install the cribbing to the bedded rock only. If necessary, the Engineer will direct changes to this procedure. Furnish all labor and equipment to deliver and install wall cribbing on the recycled (used) railroad rail piling. Wall cribbing shall be lapped, bolted, and attached solid to the drilled railroad rails.
- **G. Final Dressing, Seeding and Protection**. Apply Final Dressing; Class A to all disturbed areas, both on and off the right-of-way. Sow with Seed Mixture No. 1. The Department will NOT make direct payment for final dressing, or seeding and protection.
- **H. On-Site Inspection.** Each Contractor submitting a bid for this work shall make a thorough inspection of the site prior to submitting his bid and shall thoroughly familiarize themselves with the existing conditions so that the work can be expeditiously performed after a contract is awarded. Submission of a bid will be considered evidence of this inspection having been made.
- **I. Right-of-Way Limits.** Right-of-Way and easement limits shown on the plans are approximate only. The Contractor shall make every effort to limit his activities to obvious right-of-way and permanent or temporary easements and shall be responsible for encroachments onto private lands.
- **J. Property Damage.** The Contractor will be responsible for all damage to public and/or private property resulting from his work.

Contract ID: 171011 Page 46 of 118 REVISED ADDENDUM #1: 3-20-17

NOTES SLIDE REPAIR PROJECT Page 5

IV. METHOD OF MEASUREMENT

- **A. Maintain and Control Traffic.** See Traffic Control Plan.
- **B.** Railroad Rail-Drilled. The Department will measure this item in Linear Feet finished in-place length: Laps, cutoffs, excess and waste will not be measured for payment. If the Engineer determines from the sounding obtained at a drilled socket that railroad rail piling cannot be used in that socket, the depth of the socket shall be measured and 50% of the depth shall be paid as "Railroad Rail-Drilled".
- **C. Wall Cribbing.** The Department will measure this item in square feet finished in-place area. Laps, cutoffs, excess and waste will not be measured for payment.
- **D.** Excavation and Backfill. The Department will measure this item in cubic yards. The Department will measure the quantity in the field as per Section 204 (Roadway Excavation) or other accepted methods of measurement as directed by the Engineer. The following items will not be measured directly by the Department: Site Preparation, Clearing and Grubbing, Seeding and Protection, Final Dressing, Temporary Erosion Control, Temporary Pollution Control, Waste removal, and Disposal, but will be incidental to "Excavation and Backfill" as applicable to each project. Quantity also included for removal of existing asphalt pavement, up to a maximum of 2 feet, on this project.
- E. Site Preparation, Clearing and Grubbing, Seeding and Protection, Fertilizer, Temporary Erosion Control, Temporary Pollution Control, Waste Disposal. The Department will NOT MEASURE for payment these items. They include Site Preparation, Clearing and Grubbing, Seeding and Protection, Final Dressing, Temporary Erosion Control, Temporary Pollution Control, Waste Disposal, and other items not expressly bid as individual items. These items shall be incidental to the bid item "Excavation and Backfill" as applicable to each project.

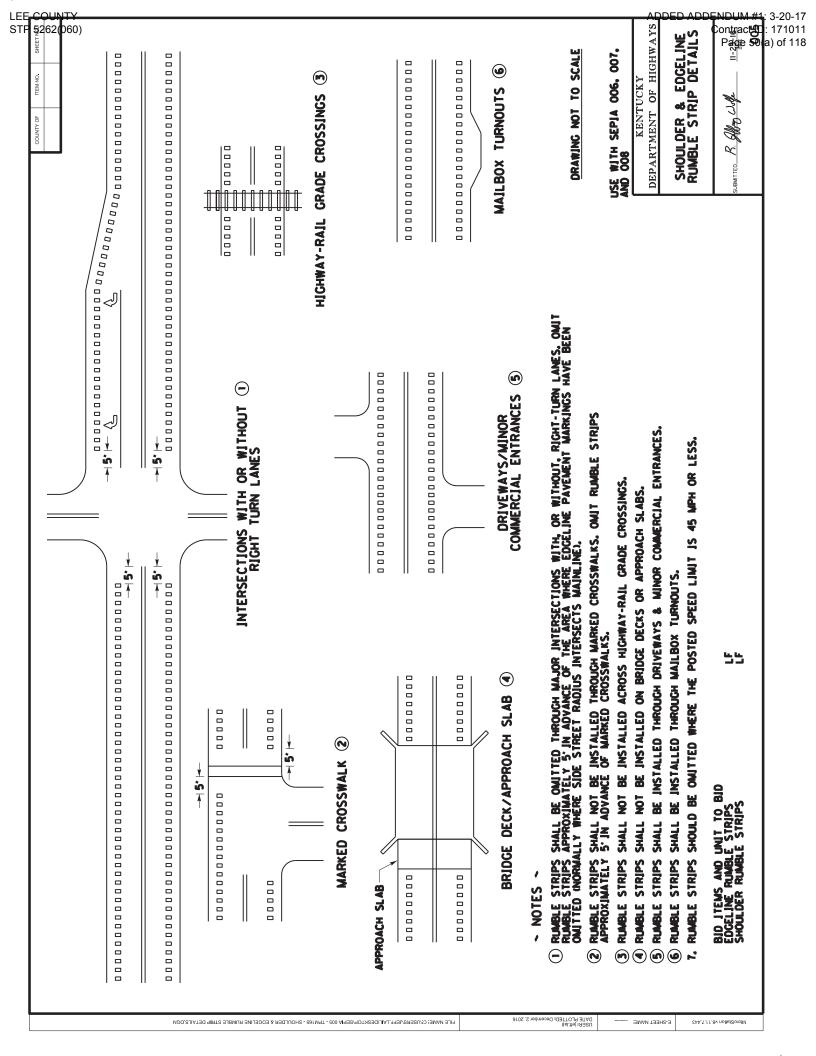
Contract ID: 171011 Page 47 of 118

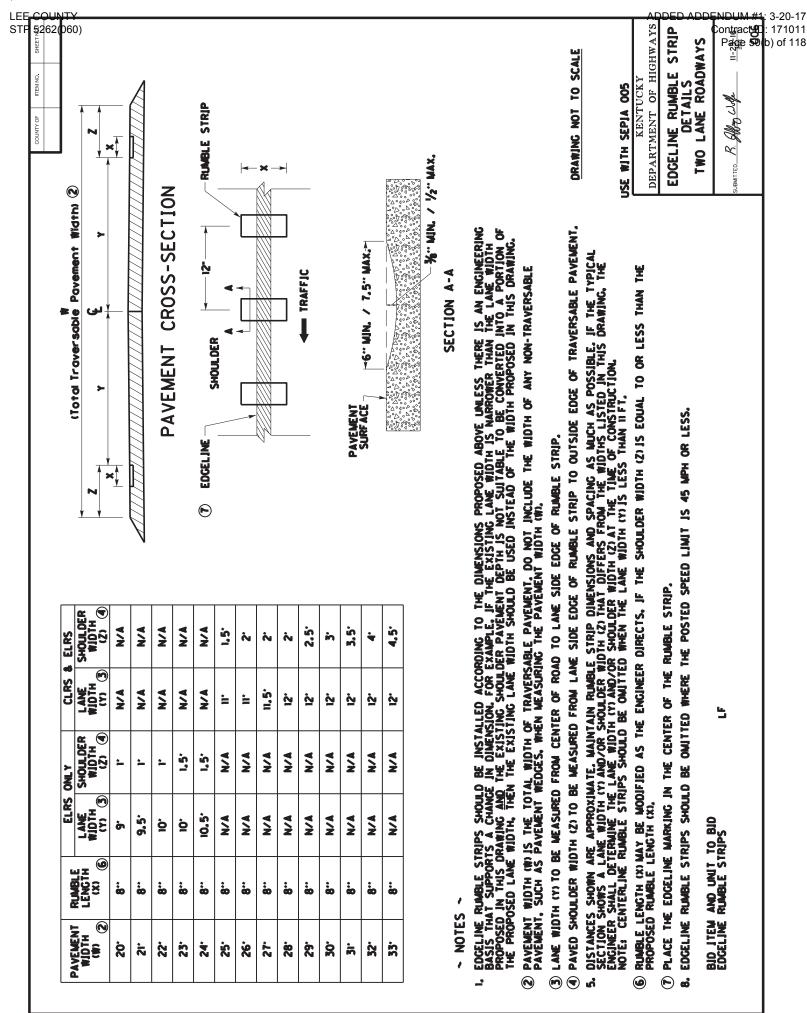
REVISED ADDENDUM #1: 3-20-17

NOTES SLIDE REPAIR PROJECT Page 6

V. BASIS OF PAYMENT

- **A. Maintain and Control Traffic.** See Traffic Control Plan.
- **B.** Railroad Rail-Drilled. The Department will pay for the completed and accepted quantities under the bid item of "Railroad Rail-Drilled". The Department will consider payment full compensation for all work required in these notes and elsewhere in the Contract.
- C. Excavation and Backfill. The Department will pay for the completed and accepted quantities under the bid item: Excavation and Backfill. Payment will be based on quantity measured in the field. The Department will consider payment full compensation for all work required on the project. The following items are incidental to "Excavation and Backfill" and will not be measured directly by the Department. These items include Site Preparation, Clearing and Grubbing, Seeding and Protection, Final Dressing, Temporary Erosion Control, Temporary Pollution Control, Waste removal and Disposal.
- **D.** Wall Cribbing. The Department will pay for the completed and accepted quantities under the bid item of "Wall Cribbing". Payment will be based on the quantity installed in the field. The Department will not make separate payment for the hauling of the wall cribbing to the slide site. The Department will consider payment full compensation for all work required on the project.
- E. Site Preparation, Clearing and Grubbing, Seeding and Protection, Fertilizer, Temporary Erosion Control, Temporary Pollution Control, Waste Disposal. The Department will NOT make direct payment for operations for which bid items do not exist. They include items listed here: Site Preparation, Clearing and Grubbing, Seeding and Protection, Final Dressing, Temporary Erosion Control, Temporary Pollution Control, Waste removal and Disposal. These activities shall be incidental to the bid item "Excavation and Backfill" as applicable to each project.





171011

PROPOSAL BID ITEMS

Contract ID: 171011 Page 117 of 118

REVISED ADDENDUM #1: 3-20-17

Page 1 of 2

Report Date 3/20/17

Section: 0001 - PAVING

LINE	BID CODE	ALT DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0010	00001	DGA BASE	824.00	TON		\$	
0020	00100	ASPHALT SEAL AGGREGATE	15.00	TON		\$	
0030	00103	ASPHALT SEAL COAT	2.00	TON		\$	
0040	00190	LEVELING & WEDGING PG64-22	93.00	TON		\$	
0050	00212	CL2 ASPH BASE 1.00D PG64-22	964.00	TON		\$	
0060	00301	CL2 ASPH SURF 0.38D PG64-22	231.00	TON		\$	
0070	02677	ASPHALT PAVE MILLING & TEXTURING	64.90	TON		\$	

Section: 0002 - ROADWAY

LINE	BID CODE	ALT DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	AMOUNT
0800	00078	CRUSHED AGGREGATE SIZE NO 2	2.00	TON		\$
0090	00462	CULVERT PIPE-18 IN	31.00	LF		\$
0100	01000	PERFORATED PIPE-4 IN	300.00	LF		\$
0110	01010	NON-PERFORATED PIPE-4 IN	100.00	LF		\$
0120	01020	PERF PIPE HEADWALL TY 1-4 IN	2.00	EACH		\$
0130	01204	PIPE CULVERT HEADWALL-18 IN	1.00	EACH		\$
0140	01545	DROP BOX INLET TYPE 11 MOD	1.00	EACH		\$
0150	01728	SAFETY BOX INLET-18 IN DBL SDB-5	1.00	EACH		\$
0160	01986	DELINEATOR FOR BARRIER WALL-B/Y	18.00	EACH		\$
0170	01987	DELINEATOR FOR GUARDRAIL BI DIRECTIONAL WHITE	15.00	EACH		\$
0180	02003	RELOCATE TEMP CONC BARRIER	900.00	LF		\$
0190	02014	BARRICADE-TYPE III	2.00	EACH		\$
0200	02367	GUARDRAIL END TREATMENT TYPE 1	1.00	EACH		\$
0210	02381	REMOVE GUARDRAIL	737.50	LF		\$
0220	02383	REMOVE & RESET GUARDRAIL	150.00	LF		\$
0230	02484	CHANNEL LINING CLASS III	23.00	TON		\$
0240	02562	TEMPORARY SIGNS	592.00	SQFT		\$
0250	02599	FABRIC-GEOTEXTILE TYPE IV	1,950.00	SQYD		\$
0260	02600	FABRIC GEOTEXTILE TY IV FOR PIPE	28.00	SQYD	\$2.00	\$ \$56.0
0270	02650	MAINTAIN & CONTROL TRAFFIC	1.00	LS		\$
0280	02671	PORTABLE CHANGEABLE MESSAGE SIGN	2.00	EACH		\$
0290	02676	MOBILIZATION FOR MILL & TEXT	1.00	LS		\$
0300	02690	SAFELOADING	2.00	CUYD		\$
0310	02697	EDGELINE RUMBLE STRIPS (REVISED: 3-20-17)	2,300.00	LF		\$
0320	02726	STAKING	1.00	LS		\$
0340	02898	RELOCATE CRASH CUSHION	2.00	EACH		\$
0350	03171	CONCRETE BARRIER WALL TYPE 9T	900.00	LF		\$
0360	03234	RAILROAD RAILS-DRILLED	24,920.00	LF		\$
0370	03235	EXCAVATION AND BACKFILL	1,472.00	CUYD		\$
0380	03236	CRIBBING	8,500.00	SQFT		\$
0390	04933	TEMP SIGNAL 2 PHASE	1.00	EACH		\$
0400	05950	EROSION CONTROL BLANKET	750.00	SQYD		\$
0410	06510	PAVE STRIPING-TEMP PAINT-4 IN	9,200.00	LF		\$
0420	06514	PAVE STRIPING-PERM PAINT-4 IN	4.600.00	LF		\$

171011

PROPOSAL BID ITEMS

Contract ID: 171011 Page 118 of 118

REVISED ADDENDUM #1: 3-20-17

Page 2 of 2

Report Date 3/20/17

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0430	08100		CONCRETE-CLASS A	7.02	CUYD		\$	
0440	08150		STEEL REINFORCEMENT	753.92	LB		\$	
0450	20071EC		JOINT ADHESIVE	650.00	LF		\$	
0460	20191ED		OBJECT MARKER TY 3	1.00	EACH		\$	
0470	20738NS112		TEMP CRASH CUSHION	2.00	EACH		\$	
0480	21289ED		LONGITUDINAL EDGE KEY	500.00	LF		\$	
0490	21802EN		G/R STEEL W BEAM-S FACE (7 FT POST)	750.00	LF		\$	
0500	23143ED		KPDES PERMIT AND TEMP EROSION CONTROL	1.00	LS		\$	
0510	24640ED		OBJECT MARKER TYPE 1	2.00	EACH		\$	

Section: 0003 - DEMOBILIZATION &/OR MOBILIZATION

LINE	BID CODE	ALT DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0520	02569	DEMOBILIZATION	1.00	LS		\$	