Matthew G. Bevin
Governor

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

Greg Thomas
Secretary

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CALL NO. 322
CONTRACT ID NO. 183220
ADDENDUM # 1

Subject: PIKE COUNTY, CB06 098 3419 003-004
Letting June 22, 2018

(1)Revised – Special Notes for Culvert Replacement – Pages 10-15 of 40
(2)Revised – Proposal Bid Items – Page 40 of 40
(3)Added – Special Note for Aluminum and Steel Plate Box Culverts – Pages 1-5 of 5

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

RM:mr
Enclosures

SPECIAL NOTES FOR CULVERT REPLACEMENT

KY 3419

I. DESCRIPTION

Except as specified herein, perform all work in accordance with the Department's 2012 Standard and Supplemental Specifications, Special Provisions and Special Notes, and Standard and Sepia Drawings, current editions. Section references are to the Standard Specifications. Furnish all labor, equipment, materials, and incidentals for the following work:

(1) Site preparation and Erosion Control; (2) Designing, furnishing, and constructing Structural Plate Box Culvert; (3) Excavation, backfill, and construction of embankments; (4) Restoring roadway, pavement, and shoulders; (5) Maintaining and controlling traffic; and (6) any other work as specified by this contract.

II. MATERIALS

Except as provided herein, provide materials conforming to Sections 603, 612, 701, 809, and the Special Note for Aluminum and Steel Structural Plate Box Culvert, as applicable. The Department will sample and test all materials in accordance with the Department's Sampling Manual. Unless specified otherwise in these motes, make the materials available for sampling a sufficient time in advance of the use of the materials to allow for the necessary time for.

A. Maintain and Control Traffic. See Traffic Control Plan.

B. Foundation Preparation. For Structural Plate Box Culvert, use Crushed Limestone Size No. 57 wrapped in Type III Geotextile Fabric.

C. Structural Plate Box Culvert. Furnish a 13’-10” X 5’-5” Aluminum Structural Plate Box Culvert with full invert and toe walls according to the Special Note for Aluminum and Steel Structural Plate Box Culverts designed by the manufacturer for a 1’4” minimum and 4’ maximum fill cover height, 0^{o} skew, with an HS25 loading arrived at by increasing the standard HS20-44 truck and lane loads as specified in the AASHTO Specifications by 25%. Provide for a manufacturer’s representative to be available on site during culvert or assembly, installation and backfilling.

Prior to fabrication, verify the fill cover height, box culvert length, submit to the Engineer, and obtain approval of the manufacturer’s design and shop drawings prepared by a Professional Engineer licensed in Kentucky. Obtain the Engineer’s

approval of any substitution prior to fabrication and/or construction as applicable. Include with each shipment of the structural plates and accessories a certification that all materials furnished comply with the applicable specifications and these special notes.

D. Culvert Backfill. Use 1,000 psi flowable fill with an additional bag of cement.

E. Channel Lining. Use Class II Channel Lining

F. Surfacing and Shoulder Materials. Class 2 Asphalt Surface 0.38D PG64-22.

III. CONSTRUCTION METHODS

Except as provided herein, construct Structural Plate Box Culvert according to Sections 603, 612, and 701 as applicable

A. Maintain and Control Traffic. See Traffic Control Plan.

B. Site Preparation. Be responsible for all site preparation, including, but not limited to: clearing and grubbing and tree and stump removal; structure, common, solid rock, and special excavation; structural granular backfill, embankment, borrow, and embankment in place; foundation preparation; removal of existing obstructions or any other items; disposal of materials, waste, and debris; cleaning inlet and outlet ditches; restoration, clean up, and final dressing. Limit clearing and grubbing to the absolute minimum required to construct the culvert, roadway approaches, and guardrail. Obtain the Engineer's prior approval before removing any trees. Perform all site preparation only as approved or directed by the Engineer.

Construct Aluminum Box Culvert on KY 3419 at the same location as the existing structure. Prior to excavation for trenches for the new culvert and culvert removal, saw cut pavement to a neat edge. Obtain the Engineer's approval of the trench widths prior to saw cutting pavement. Close the road during the approved periods allowed by the Traffic Control Plan, excavate trenches, and remove the existing culverts. Provide positive drainage of slopes and ditches at all times during and upon completion of construction. Stockpile excavation within the right of way for reuse in constructing embankments. Obtain the Engineer's approval of the suitability of excavated materials before reusing in the embankments. Use excess suitable excavation to flatten slopes as approved or directed by the Engineer. Waste unsuitable and remaining excess excavation and other removed materials at sites off the right of way obtained by the Contractor at no additional cost to the Department (See Special Note for Waste and Borrow). Perform all excavation and removal of existing structure only as approved or directed by the Engineer.

Without regard to the materials encountered, consider all roadway, drainage, solid rock, and special excavation to be unclassified. It shall be distinctly understood that

any reference to rock, earth, or any other material on the plans or cross sections, whether in numbers, words, letters, or lines, is solely for the Department's information and is not to be taken as an indication of classified excavation or the quantity of either rock, earth, or any other material involved. The bidder must draw his own conclusions as to the conditions to be encountered. The Department does not give any guarantee as to the accuracy of the data and no claim will be considered for additional compensation if the materials encountered are not in accord with the classification shown.

C. Excavation and Removal of Existing Structures. Completely remove the existing culvert, including masonry (stone and/or concrete), if present except for the old existing abutment on the Phelps end of the project. Be responsible for all excavation (structure, common, rock, and unclassified) required for foundation preparation and all other excavation required by the work. Excavate rock in channel as required to allow for construction of foundation and installation of culvert with the designed fill cover height. Use suitable excavated materials to backfill the trench from the removed structure on KY 3419. Provide positive drainage of slopes and ditches at all times during and upon completion of construction. Perform all excavation only as approved or directed by the Engineer.

D. Foundation Preparation and Bedding. Except as provided herein, prepare foundation and bedding for the Structural Plate Box Culvert according to the Special Note for Aluminum and Steel Structural Plate Box Culverts; however provide a minimum depth of 18 inches of No. 57 crushed limestone wrapped in Geotextile Fabric Type III.

E. Structural Plate Box Culvert. Construct Structural Plate Box Culvert according to the manufacturer’s design with invert, and toe walls as shown on the typical section. Be responsible for field layout and survey of the approved box culvert according to the approved designs furnished by the Contractor, or the standard drawings, as applicable. Provide for a manufacturer’s representative to be present during assembly, construction, and backfilling of the structure. Obtain the Engineer’s approval of the final centerline, flow line, length and skew prior to backfilling. Provide positive drainage upon completion of the project.

F. Backfill and Embankments. Construct #2 stone on each of the culvert ¼ way up the culvert then flowable fill backfill to the top of the existing pavement elevation. Complete the remainder of the embankments with approved suitable excavation and/or embankment in place. Use excess suitable excavation to flatten slopes as approved or directed by Engineer. Warp finished slopes to match existing slopes and ditches. Provide positive drainage of slopes and ditches at all times during and upon completion of construction.

G. Channel Lining. Place and grout Class II Channel Lining to protect culvert ends, wing walls, and slopes as directed by the Engineer. In addition to the requirements of section 703, the Engineer may require additional hand placement.

H. Pavement and Shoulder Restoration. Establish width, crown, superelevation and final grade lines as shown on the typical section or as directed by the Engineer.

After the existing culvert on KY 3419 is removed and trench backfilled and the Structural Plate Box Culvert is installed and backfilled, place #2 stone on each side of the culvert ¼ way up then place flowable fill to the same elevation as existing pavement. Traffic will be allowed to use roadway 24 hours after the flowable fill has been installed. Asphalt surface will be placed over the entire project after all work is completed. Asphalt is not limited to be completed within the 7 day project.

I. Final Dressing and Clean Up. After all work is completed, completely remove all waste and debris from the construction worksite. Backfill all excavated areas and compact as directed by the Engineer. Perform Class A Final Dressing on all disturbed areas, both on and off the right of way. Sow all disturbed earthen areas according to the Special Note for Erosion Control.

J. On-Site Inspection. Make a thorough inspection of the site prior to submitting bid and be thoroughly familiar with existing conditions so that the work can be expeditiously performed after a contract is awarded. The Department will consider submission of a bid as evidence of this inspection having been made. The Department will not consider any claims resulting from site conditions.

K. Right-of-Way Limits. The Department has not determined exact Right-of-Way limits. Limit work activities and operations to obvious existing Right-of-Way, Permanent Easements, and work areas obtained by the Department through consent and release of the adjacent property owners. Be responsible for encroachments onto private lands.

L. Utilities. Locate all underground and overhead utilities prior to construction. Be responsible for repairing all utility damage that occurs as a result of the Contractor's operations at no additional cost to the Department.

M Restoration. Be responsible for all damage to public and/or private property resulting from the work. Remove and replace all damaged or disturbed roadway features in like kind materials and design at no additional cost to the Department.

N. Disposal of Waste. Dispose of all removed pipe, stone masonry, concrete and reinforcing steel, pavement, debris, unsuitable and excess excavation, and other waste off the right-of-way at sites obtained by the Contractor at no additional cost to the Department (see Special Note for Waste and Borrow).

O. Caution. Consider the information shown on the plans and the type of work listed herein as approximate only and do not take the information as an accurate evaluation of the materials and conditions to be encountered during construction; the bidder must draw his own conclusions. The Department does not give any guarantee as to the

accuracy of the data and no claim will be considered for if the conditions encountered are not in accordance with the information shown.

P. Control. Perform all work under the absolute control of the Department of Highways. Obtain the Engineer's approval of all designs required to be furnished by the Contractor and/or the manufacturer and design modifications proposed by the Contractor or Manufacturer prior to incorporation into the work. The Department reserves the right to have other work performed by other contractors and its own forces and to permit public utility companies and others to do work during the construction of and within the limits of, or adjacent to, the project. Conduct work activities and operations in cooperation with such other parties so that interference with such other work will be reduced to a minimum. The Department will consider submission of a bid as Contractor's agreement to not make any claims for additional compensation due to delays or other conditions created by the operations of such other parties. Should a difference of opinion arise as to the rights of the Contractor and others working within the limits of, or adjacent to, the project, the Engineer will decide as to the respective rights of the various parties involved in order to assure the completion of the Department's work in general harmony and in a satisfactory manner, and his decision shall be final and binding upon the Contractor.

IV. METHOD OF MEASUREMENT

The Department will measure for payment only the bid items listed. All other items required to complete the construction shall be incidental to the bid items listed.

A. Maintain and Control Traffic. See Traffic Control Plan

B. Site Preparation. The Department will measure Site Preparation as one lump sum.

C. Structural Plate Box Culverts. The Department will measure the Box Culvert of each type in linear feet along the culvert centerline. The Department will not measure box culvert invert or toe walls; box culvert design; bedding, and backfill: and furnishing the manufacturer's technical representative for separate payment, but shall be incidental to the Structural Plate Box Culvert as applicable.

D. Foundation Preparation. The Department will not measure Foundation Preparation for the Structural Plate Box Culvert for payment, but shall be incidental to Site Preparation.

E. Excavation, Backfill, and Embankment. The Department will not measure excavation, backfill, embankment, borrow, or embankment in place for separate payment, but shall be incidental to Site Preparation as applicable.

F. Channel Lining Class II. The Department will measure Channel Lining Class II in tons.

V. BASIS OF PAYMENT

The Department will make payment only for the bid items listed. All other items required to complete the construction shall be incidental to the bid items listed.

A. Maintain and Control Traffic. See Traffic Control Plan.

B. Structural Plate Box Culvert. Accept payment at the contract unit prices per linear foot as full compensation for all materials, equipment, labor and incidentals necessary to complete the work as specified in these notes and the Standard Specifications for box culvert design, furnishing and installing the box culvert, and furnishing the manufacturer's technical representative.

C. Site Preparation. Accept payment at the contract lump sum unit price as full compensation for all materials, equipment, labor, and incidentals, necessary to complete site preparation as specified in these notes and the Standard Specifications, including, but not limited to: clearing and grubbing and tree and stump removal; structure, common, solid rock, and special excavation; backfill, embankment, borrow, and embankment in place; foundation preparation; removal obstructions or any other items; disposal of materials, waste, and debris; cleaning inlet and outlet ditches; restoration, clean up, and final dressing.

PROPOSAL BID ITEMS

Report Date 6/13/18

Section: 0001 - ROADWAY

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0010	00301		CL2 ASPH SURF 0.38D PG64-22	25.00	TON		$	
0020	00356		ASPHALT MATERIAL FOR TACK	.50	TON		$	
0030	02562		TEMPORARY SIGNS	150.00	SQFT		$	
0040	02650		MAINTAIN & CONTROL TRAFFIC KY 3419 - CULVERT	1.00	LS		$	
0050	06514		PAVE STRIPING-PERM PAINT-4 IN	75.00	LF		$	

Section: 0002 - BRIDGE

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0060	00078		CRUSHED AGGREGATE SIZE NO 2	150.00	TON		$	
0080	02220		FLOWABLE FILL	85.00	CUYD		$	
0090	02483		CHANNEL LINING CLASS II	30.00	TON		$	
0100	02731		REMOVE STRUCTURE KY 3419 - CULVERT	1.00	LS		$	
0103	20257NC		SITE PREPARATION (ADDED: 6-13-18)	1.00	LS		$	
0107	20694EN		ALUMINUM STRUCTURAL PLATE BOX CULVERT 13'-10"X5'-5" (ADDED: 6-13-18)	63.00	LF		$	
0110	23911EC		GROUT	10.00	CUYD		$	

Section: 0003 - DEMOBILIZATION

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0130	02569		DEMOBILIZATION	1.00	LS		$	

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SPECIAL NOTE FOR ALUMINUM AND STEEL STRUCTURAL PLATE BOX CULVERTS

This Special Note will apply when indicated on the plans or in the proposal. Section references herein are to the Department's 2012 Standard Specifications for Road and Bridge Construction.

1.0 DESCRIPTION. Furnish and install either an aluminum or a steel structural plate box culvert as the Contract specifies.

2.0 MATERIALS.

2.1 Structure. These structures consist of prefabricated sections assembled and erected at the site. Prefabricated sections consist of corrugated aluminum or steel plates, as the Contract specifies, which have been factory shaped, punched, and coated when required. The Department will not permit field modification except for tapping saddles or other devices to permit passage of other conduits or utilities through the structure. Furnish and install all auxiliary items such as ribs, wales, stiffeners, footing pads, etc. that the design requires. Furnish and install endwalls and toewalls when the plans require them. When endwalls are required, construct full height wing sections. Do not field bevel cut wing sections.

Before beginning erection, furnish to the Engineer applicable shop drawings, erection layouts, and manufacturer's brochures for submittal to the Division of Construction. Indicate the location of the drawing number, design load (as applicable), contract award year, and contractor stencils on the shop drawings. If a drawing number has not been assigned for the structure, obtain one from the Division of Structural Design. The Department will accept plates and accessories by certificate of compliance from the manufacturer. Upon completion of construction, submit to the Division of Structural Design an as-built set of structure plans and reviewed shop drawings in 22 inch by 36 inch Portable Document Format (PDF) for archiving.

2.1.1 Aluminum Structure. Obtain the aluminum structural plate box culvert, and aluminum endwalls or toewalls when required, from either Contech Construction Products or Lane Metal Products.

The Department will accept comparable aluminum structures produced by other companies when the Engineer approves. For such approval, submit sufficient data and design calculations to show that the proposed structures are equal in all respects to the Contech product and also include evidence of actual installations now in service that are performing satisfactorily. Design according to the current AASHTO LRFD Bridge Design Specifications, except design for KYHL-93 live load. The KYHL-93 live load is arrived at by increasing the standard AASHTO HL-93 truck and lane loads as specified in the AASHTO Specifications by 25%. Do not consider as a tunnel or tunnel liner plate for design. Before beginning erection, furnish the Engineer applicable shop drawings and structural design calculations performed, stamped, and signed by a qualified Professional Engineer licensed to practice in the State of Kentucky.

Use aluminum accessories and plates, of the plan specified thickness, that conforms to AASHTO M 219 or ASTM B 308 as applicable.

Where non-aluminum utilities are passed through, insulate with an alumilastic compound or approved equal, to prevent bi-metallic contact.

2.1.2 Steel Structure. Use either (1) Contech Construction Products'

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Multi-Plate Steel Box Culvert; or (2) Lane Metal Products Company's Low Profile Box Culvert.

The Department will accept comparable steel structures produced by other companies when the Engineer approves. For such approval, submit sufficient data and design calculations to show that the proposed structures are equal in all respects to those specified above and also include evidence of actual installations now in service that are performing satisfactorily. Design according to the current AASHTO LRFD Bridge Design Specifications, except design for KYHL-93 live load. The KYHL-93 live load is arrived at by increasing the standard AASHTO HL-93 truck and lane loads as specified in the AASHTO Specifications by 25%. Do not consider as a tunnel or tunnel liner plate for design. Before beginning erection, furnish the Engineer applicable shop drawings and structural design calculations performed, stamped, and signed by a qualified Professional Engineer licensed to practice in the State of Kentucky.

Use steel accessories and plates, of the plan specified thickness, that conform to AASHTO M 167 for galvanized steel.

2.2 Asphalt Coating. On all steel drainage structures, except those installed as railroad tunnels, cattle underpasses, bicycle or pedestrian underpasses, or similar dry conditions, apply an asphalt coating conforming to Subsection 806.06.

2.3 Bedding Material. Use granular material with 100% passing 1 inch sieve that conforms to Subsection 804.08. Bedding shall be placed at a minimum thickness of twice the corrugation depth.

2.4 Backfill Material. Select any of the following alternates and obtain the Engineers approval.

1) well graded or uniformly graded bank or creek gravel, crushed or uncrushed, up to 3 inches maximum size;
2) well graded or uniformly graded natural or crushed sand;
3) finely shot limestone or sandstone providing no individual fragment is larger than 3 inches and the material contains no more than 5 percent dirt and/or shale, as determined by visual inspection by the Engineer;
4) crushed stone or crushed slag up to 3 inches maximum size (except DGA or Size No. 610);
5) other locally available materials meeting the approval of the Engineer (local soils conforming to soil classifications A-2-4 or A-2-5 from AASHTO M 145 will be acceptable). Do not use plastic soils, or materials containing significant amounts of nondurable shale (SDI < 95 by KM 64-513); or
6) flowable fill conforming to Subsection 601.03.03, B), 5).

2.5 Foundation Material. Use material capable of supporting the imposed loads due to backfill weight and footing pressures of 2 tons per square foot.

3.0 CONSTRUCTION.

3.1 Technical Representative. Provide a technical representative from the structure manufacturer to advise at the start of the project. Ensure the technical representative is available thereafter to assist in the event problems or special circumstances arise.

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Technical assistance shall be provided at no additional cost to the Department.

3.2 Site Preparation. Perform structure excavation according to Section 603, except as modified herein.

On structures with footing pads, excavate trenches 3 inches below the elevation shown on the plans, and level the bottom of the trench with 3 inches of bedding material before placing the footing pads.

On structures with a full metal invert, excavate the entire area covered by the invert plates to accommodate bedding material placement to a minimum thickness of twice the corrugation depth before placing the invert plates.

Take soundings for foundation design at the inlet and outlet of each culvert and at intervals no greater than 20 feet along the grade line of the bottom of the culvert, to a depth of one foot. Make soundings on the centerline and at each edge of the culvert. Where ledge rock, gravel, hardpan, or other unyielding material is encountered or known to exist within the limits stated, perform excavation in the area under the invert plates or footing pads. Extend the additional excavation to a depth of 0.042 H below the bottom of the metal plates, where H is the height of fill above the top of the culvert. However, regardless of the height of fill, the Department will require the additional depth to be a minimum of one foot and will not require it to be more than 0.75 Hc, where Hc is the total height of the culvert.

Backfill the additional excavation with an earth cushion of firmly compacted fine soils in layers of 6 inches or less, prior to placing the sand bedding layer.

Excavate cross trenches as necessary to place metal toewalls when the plans require them.

Excavate a minimum width of the outside dimension of the box culvert including footing pads or invert plates plus 6 inches on each side.

Proper bedding preparation is critical for satisfactory performance of the box culvert. Place the bed for footing pads or invert plates to uniform lines and grade to avoid distortions and undesirable stresses in the structure.

Construct concrete footings or bottom slabs in accordance with the plans and standard specifications.

3.3 Installation. Erect the culvert, and endwalls when required, in strict accordance with the manufacturer's recommendations. The Department will allow offsite assembly of the structure, provided prior approval is obtained, and assembly is in accordance with the manufacturer's instructions. Structural plates shall be assembled with their inside circumferential sheet laps pointing downstream. Align plates circumferentially to avoid permanent distortion from the specified shape. Ensure the width and height of the completed structure is within 2 percent of the specified dimensions or 2 inches, whichever is greater.

Tighten bolts in the erected structure according to the manufacturer's recommendations, with good seam laps, while in proper shape, using nuts and bolts the manufacturer supplies. Construct concrete footings and headwalls in accordance with the plans.

Install the ribs, wales, and toewalls when required, according to the manufacturer’s recommendations.

In side-by-side installations, install the box culverts with footing pads or invert plates of each culvert no closer than 2 feet to the footing pads or invert plates of the adjacent culvert, unless the plans show otherwise. Excavate the entire volume between the culverts and place backfill.

3.4 Backfill. Proper placement and compaction of backfill are essential to obtain

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maximum strength and stability of the finished structure. Use equipment and construction procedures to prevent excessive structure distortion from occurring. The manufacturer of the structure will specify the magnitude of allowable shape changes during backfill. Monitor the shape of the structure to control distortion until all backfilling operations are completed.

On structures with concrete footing pads, backfill the trench for the pads to the flowline inside the culvert before outside backfilling begins.

Place granular backfill material in horizontal layers not exceeding 6 inches loose depth, and bring up uniformly on both sides of the structure. Compact each layer to the same level on all sides before proceeding to the next lift. Do not use compaction equipment or methods that produce earth pressures that cause distortion or damage. Place material on top of the structure at right angles to the centerline of the structure. Compact each layer of backfill to a density of at least 95 percent of the maximum density according to KM 64-511. The Department will determine the in-place density using nuclear gages. The Engineer may waive density testing when not feasible due to the nature of the material. When using flowable fill, place according to Subsection 601.03.09, C).

If the structure is not installed in a full depth trench, use backfill material for embankment adjacent to the structure for a distance equal to the span width on each side of the box culvert and to a height of 2 feet or subgrade elevation, whichever is lower, above the structure.

3.5 Construction Loads. Do not allow construction loads in excess of HS-20 vehicles to cross the completed box culvert unless it is internally braced. Design the support for such bracing so as not to impair the structural integrity or severely interfere with the hydraulics of the box culvert or its invert. Have the culvert manufacturer review the details of the bracing and submit them to the Engineer for approval.

3.6 Headwalls. Construct concrete headwalls, when required, according to the plans. Apply masonry coating to exposed surfaces of the headwalls when required by Subsection 601.03.18, B). When using an aluminum structure, coat aluminum surfaces that will be in contact with concrete with alumilastic compound or an approved equal prior to placing concrete.

4.0 MEASUREMENT.

4.1 Structure Excavation. The Department will measure Structure Excavation as Structure Excavation, Common or Structure Excavation, Solid Rock according to Subsection 206.04.03, except on the sides of the structure the volume will be bounded by vertical planes 6 inches outside the footing pads or invert plates and parallel thereto.

The Department will measure material necessary for backfill in excess of the material excavated as Borrow Excavation, Roadway Excavation, or Embankment-in-Place, as applicable.

The Department will measure granular material used to replace excavated material that is unsuitable for backfill as Borrow Excavation, Roadway Excavation, or Embankment-in-Place. The Department will not measure earthwork for payment when the bid item is Embankment-in-Place unless the unsuitable material is wasted.

The Department will not measure flowable fill for payment and will consider it incidental to the structure.

The Department will not measure bedding for payment and will consider it incidental to the structure.

4.2 Aluminum Structural Plate Box Culvert. The Department will measure the

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quantity in linear feet at each location. The Department will consider the number of linear feet in each installation to be the plan length, increased or decreased by authorized adjustments. The Department will not measure ribs, wales, stiffeners, footing pads, toewalls, endwalls, internal braces, or asphalt coating for payment and will consider them incidental to the structure.

4.3 Steel Structural Plate Box Culvert. See 4.2.

4.4 Class A Concrete. The Department will measure Class A Concrete in footings and headwalls according to Subsection 601.04.

4.5 Reinforcement. The Department will measure Steel Reinforcement in the footings and headwalls according to Subsection 602.04.

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

Code	Pay Item	Pay Unit
20694EN	Aluminum Structural Plate Box Culvert	Linear Foot
20695EN	Steel Structural Plate Box Culvert	Linear Foot
----	Structure Excavation, as classified	See Section 603.05
----	Concrete, Class	See Section 601.05
----	Steel Reinforcement	See Section 602.05

The Department will consider payment as full compensation for all work required in this note.

June 15, 2012