January 17, 2017

CALL NO. 200
CONTRACT ID NO. 172022
ADDENDUM # 2

Subject: Casey County, 023GR16P97-FD05 & HSIP
Letting January 27, 2017

(1) Added – General Notes – Pages 1-10 of 10

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: ks
Enclosures
CAUTION
The information in this proposal and the type of work listed herein are approximate only and are not to be taken as an accurate evaluation of the materials and conditions to be encountered during construction; the bidder must draw his/her own conclusions. The Department does not give any guarantee as to the accuracy of the data and no claim for money or time extension will be considered if the conditions encountered are not in accordance with the information shown.

ON-SITE INSPECTION
Before submitting a bid for the work, make a thorough inspection of the site and determine existing conditions so that the work can be expeditiously performed after a contract is awarded. The Department will consider submission of a bid to be evidence of this inspection having been made. The Department will not honor any claims for money or time extension resulting from site conditions.

RIGHT OF WAY LIMITS
The Department has not established the exact limits of the Right-of-Way. Unless a consent and release from is obtained from the adjoining property owner, limit work activities to the obvious Right-of-Way and staging areas secured by the Contractor at no additional cost to the Department. In the event that private improvements (i.e. fences, buildings, etc.) encroach upon the Right-of-Way, the contractor shall notify the Engineer and limit work activities in order to NOT disturb the improvements. If they become necessary, the Department will secure consent and releases from property owners through the Engineer. Be responsible for all encroachments onto private lands.

CONCRETE – CLASS A
Concrete – Class A quantities are for the construction of the mitered sloped concrete headwalls. Concrete – Class A unit bid price shall include all materials and labor to construct the mitered sloped concrete headwalls as shown on the Mitered Sloped Concrete Headwall detail sheet. This headwall is intended to combine the benefits of a pipe headwall with the advantages of safety and adaptability by allowing the headwall to be custom fit with the surrounding embankment. The Pipe and Drainage Items Summary identifies which pipe ends are to receive the Mitered Sloped Concrete Headwall. The identified pipes shall be mitered at an angle to match the final embankment slopes at each the pipe location. If the pipe is on a skew, miter the pipe so that when the new headwall and final grading is complete, there is no slope discontinuity or bulge that is common with traditional precast headwall installations. In other words the embankment slope should not be warped to fit the pipe and headwall; the pipe should be mitered and the headwall installed to match the embankment slope. When completed the edges of the Mitered Sloped Concrete Headwall should be flush with the surround ground line. Payment at the Contract unit price Cubic Yard shall be full compensation for furnishing all labor, materials, equipment, and incidentals necessary to miter the pipe and install the headwall.

NOTE: For pipes that receives the Mitered Sloped Concrete Headwall, the pipe length will be measured to the furthest point along the mitered end of the pipe.

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 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 within the limits of, or adjacent to, the project. Conduct operations and cooperate with such other parties so that interference with such other work will be reduced to a minimum. The Department will not honor any claims for money or time extension 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/her decision shall be final and binding upon the Contractor.
SUPERELEVATION IMPROVEMENTS
The intent of this work is to bring a consistent pavement cross slope through the identified curve. Refer to the Superelevation Improvement Summary for locations and approximate quantities. The Contractor will need to utilize Leveling & Wedging and/or Asphalt Base in order to achieve the desired superelevation improvements at the identified curves. In certain areas where the superelevation improvement will only require adding 1-2 inches of additional pavement depth, Leveling & Wedging PG64-22 will be required. In areas where the superelevation improvement will require 3 or more inches of additional pavement depth, Class 2 Asphalt Base 1.00D PG 64-22 will be required. It has been assumed the asphalt material needed to construct the superelevation improvements will be approximately 50% Leveling & Wedging and 50% Asphalt Base. The Engineer will make the final determination as to which bid items will be required at each superelevation improvement area, as well as the appropriate lift thicknesses and number of lifts based on the existing conditions encountered at the time of construction. After placement of the Leveling & Wedging and Asphalt Base, the entire route will be overlaid with a surface course. As a result of these paving operations within the identified curves, the roadside shoulders and fill slopes will have to be modified to match the final pavement elevations and tie in with the existing ground lines. A quantity of Embankment-In-Place has been estimated for regarding the shoulder and fill slopes within the identified curves. The bid item “Embarkment-In-Place” is only to be used for the material necessary to regrade the shoulder and fill slopes within the identified curves. A representative cross section is given for each curve showing the proposed superelevation improvements and the resulting shoulder and fill slope grading.

NOTE: Some field adjustments of the shoulder, fill slope, and/or superelevation improvement may be required. The resulting shoulder and fill slope grading is intended to occur within Right-Of-Way and not disturb any sensitive obstructions (i.e. fences, tree lines, utility poles, etc.). Superelevation improvements with sensitive obstructions along the roadside shall still require embankment, but the slope may have to be constructed steeper than shown on the representative cross section. The desire of the Department is to keep the fill slopes at 3:1 or flatter; however, some 2:1 slopes may be necessary, especially when the existing slope is 2:1 or close to 2:1. Further, if a desired superelevation improvement will result in a fill slope having to be graded steeper than 2:1 in order to not impact a sensitive obstruction, then the superelevation rate should be modified (reduced) in order to reduce the final change in pavement edge elevation, thereby reducing the height of the new fill slope grading, and allowing for a flatter fill slope.

CHANNEL LINNING
75 Tons of Channel Lining Class II has been included on the Guardrail and Cribbing Summary for use at the locations indicated on the Summary in on the Pipe Sections. The Engineer will make the final determination as to the placement of Channel Lining.

EROSION CONTROL BLANKET
A quantity of 275 square yards of Erosion Control Blanket has be included in the contract for potential use along areas of regraded ditch line and/or fill slopes, inlets and outlets of pipes, and any other areas as directed by the Engineer. The Contractor and Engineer should work together to determine the location and best use of Erosion Control Blanket throughout this project. The Engineer will make the final determination as to the placement of Channel Lining.
DITCHING AND SHOULDERING

Perform ditching and shouldering according to Section 209 and the applicable Standard and Sepia Drawings, Typical Sections, and Details provided. The bid item “Ditching and Shouldering” is to be used for the Ditching and Shouldering operations in conjunction with the Shoulder Repair areas, as identified on the Shoulder Repair Summary, or as directed by the Engineer. No Embankment-In-Place quantities will be paid for the work listed as “Ditching and Shouldering”. Final front and back slopes less than a 3:1 will be determined by the Engineer. Immediately prior to completion, clean all existing pipes, new culvert and entrance pipes, and grade ditches to drain. Provide positive drainage of pavement, shoulders, slopes, and ditches at all times during and upon completion of construction. Use Erosion Control Blanket as directed by the Engineer.

NOTE: The Department will measure the bid item “Ditching and Shouldering” as the length of the work measured in linear feet along the centerline of the roadway. Contrary to Section 209.04, this quantity will include only one side of the roadway. Therefore, for areas where ditching and shouldering occurs on both sides of the road, the Department will measure each side independently. The Department will include in the quantity all work required on the road approaches within the limits of right-of-way. No additional compensation will be allowed for excavation of rock encountered in the back slope while executing the bid item “Ditching and Shouldering.”

PIPE LINERS (28 inch, 36 inch, 42 inch)

The pipe liners are to be used as listed in the on the Drainage Summary provided within this proposal. Payment at the Contract unit price Linear Feet shall be full compensation for furnishing all labor, materials (including bedding, liner, bulk head and grouting the void around the full length of the pipe), equipment, and incidentals necessary to installation of pipe liners.

Special Note for
Erosion Prevention and Sediment Control

The Contractor shall be responsible for filing the Kentucky Pollution Discharge Elimination System (KPDES) KYR10 permit Notice of Intent (NOI) with the Kentucky Division of Water (DOW) and any KPDES local Municipal Separate Storm Sewer System (MS4) program that has jurisdiction. The NOI shall name the contractor as the Facility Operator and include the KYTC Contract ID Number (CID) for reference.

The Contractor shall perform all temporary erosion/sediment control functions including: providing a Best Management Practice (BMP) Plan, conducting required inspections, modifying the BMP plan documents as construction progresses and documenting the installation and maintenance of BMPs in conformance with the KPDES KYR10 permit effective on ______________ or a permit re-issued to replace that KYR10 permit. This work shall be conducted in conformance with the requirements of Section 213 of KYTC 2012 Department of Highways, Standard Specifications for Road and Bridge Construction.

Contrary to Section 213.03.03, paragraph 2, the Engineer shall conduct inspections as needed to verify compliance with Section 213 of KYTC 2012 Department of Highways, Standard Specifications for Road and Bridge Construction. The Engineer’s inspections shall be performed a minimum of once per month and within seven days after a storm of 1/2 inch or greater. Copies of the Engineer’s inspections shall not be provided to the contractor unless improvements to the BMP’s are required. The contractor shall initiate corrective action within 24 hours of any reported deficiency and complete the work within 5 days. The Engineer shall use Form TC 63-61 A for this report. Inspections performed by the Engineer do not relieve the Contractor of any responsibility for compliance with the KPDES permit.
Contrary to Section 213.05, bid items for temporary BMPs will not be listed and will be replaced with one lump sum item for the services. Payment will be pro-rated based on the Project Schedule as submitted by the Contractor and as agreed to by the Engineer.

The contractor shall be responsible for applying “good engineering practices” as required by the KPDES permit. The contractor may use any temporary BMPs with the approval of the KYTC Engineer.

The contractor shall provide the Engineer copies of all documents required by the KPDES permit at the time they are prepared.

The contractor shall be responsible for the examination of the soils to be encountered and make his own independent determination of the temporary BMPs that will be required to accomplish effective erosion prevention and sediment control.

The Contractor shall be responsible for filing the KPDES permit Notice of Termination (NOT) with the Kentucky DOW and any local MS4 program that has jurisdiction. The NOT shall be filed after the Engineer agrees that the project is stabilized or the project has been formally accepted.

**Payment:** Payment will be at the contract unit price for K.P.D.E.S Permit & Temporary Erosion Control: Lump Sum.

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**SPECIAL NOTE FOR STAKING**

Perform Contractor Staking according to Section 201; except, in addition to the requirements of Section 201, perform the following:

1. Contrary to Section 201, perform items 1-3 usually performed by the Engineer.

2. Establish typical section cross slopes for superelevation improvements, transitions and tapers, and details to align the culvert extensions with the existing pipe and to match the existing roadway alignment and curvature to ensure positive drainage upon completion of the work.

3. Verify the dimensions and quantities of the Culvert Pipe/Culvert Extensions as listed and detailed in the proposal, and determine flow line elevations and slopes necessary to provide positive drainage. Revise as necessary to accommodate the existing site conditions; to provide proper alignment of the culvert pipe with existing stream channels, swales, ditches, and the roadway lines and grades; and to ensure positive drainage upon completion of the work.

4. Prior to incorporating into the work, obtain the Engineers approval of all designs and revisions to be provided by the Contractor,

5. Produce and furnish to the Engineer "As Built" plans of the superelevation improvements and the drainage/culvert improvements.

6. Perform any and all other staking operations required to control and construct the work.
SPECIAL NOTE FOR TRENCHING

If trenching is achieved by means other than milling, saw cut the pavement four inches (4”) deep and remove the existing shoulder wedge to create a smooth edge prior to excavating the two foot (2’) wide shoulder trench. The intent is to excavate or mill the entire trench so that the appropriate shoulder slope is obtained at the end of the paving operation.

Excavate material from the shoulder and maintain a four percent (4%) cross-slope. The unit bid price per square yard for “Shoulder Milling/Trenching” shall be full compensation for sawcutting pavement, excavation, and disposal of material. The excavation and disposal of material shall be as directed by the Engineer. Waste all materials removed from the project off of right-of-way at sites obtained by the Contractor, at no additional cost to the Department.

The Department will pay “Shoulder Milling/Trenching” in square yards. The Department will NOT measure saw cutting for pavement. The sawcut shall be INCIDENTAL to the bid item “Shoulder Milling/Trenching.” Payment at the contract unit price per square yard shall be full compensation for all labor, materials, equipment, and incidentals for excavating and disposing of waste.

**SPECIAL NOTES**

**CRIBBING NOTES**

**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 extra length guardrail posts; (3) **Install wall cribbing furnished by the Department of Highways**; (4) Excavate and backfill the area around the guardrail posts 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. Extra Length Guardrail Posts.** See Guardrail Special Notes.

**B. Wall Cribbing.** Use wall cribbing: recycled (used) steel “W” beam guardrail. **Cribbing material will furnished by the Department of Highways.** Wall cribbing will be located at the **Department of Highways Casey County Maintenance Facility.**

**C. Fill Material for CRIBBING.** Use one of the following backfill materials: Millings obtained from the resurfacing portion of this project or Kentucky Aggregate Gradation No. 2's or larger. Backfill material shall meet requirements of Section 805. The Engineer will use visual inspection and/or material testing, as applicable to determine acceptability.
D. **DGA.** Furnish Dense Graded Aggregate as per Section 805. Do not use Crushed Stone Base.

E. **Final Dressing, Seed and Protection.** Use Seed Mixture No. 1.

F. **Silt Trap A, B or C.** Furnish Silt traps as per Std Drawings and Section 213.

G. **Silt Fence.** Furnish Temporary Silt Fence as per Section 213 and Section 827.

H. **Geotextile Fabric.** Furnish Geotextile Fabric Type IV as per Section 843.

### 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.

D. **Installation of Extra Length Guardrail Posts.** See Guardrail Special Notes. Crib any exposed portion of the guardrail posts before placing backfill.

**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 at no cost to the Department.
I. DESCRIPTION

Except as provided herein, perform all work in accordance with the Department's Standard Specifications, interim Supplemental Specifications, Standard and Sepia Drawings, and Special Notes and Special Provisions, current editions. Article references are to the Standard Specifications. This project shall consist of furnishing all labor, equipment, materials, and incidentals for the following:

(1) Maintaining and Controlling Traffic; (2) Constructing pipe replacements and/or pipe extensions; (3) Embankment; (4) Erosion Control; and (6) any other work as specified by this contract.

II. MATERIALS

Provide for sampling and testing of all materials in accordance with the Department's Sampling Manual. Make materials 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.


B. Culvert Pipe. Furnish pipe meeting the requirements of Section 810. Select pipe for pH range Medium and minimum fill cover height according to Standard Drawing RDI-001-09, RDI-002-04, and RDI-035-01. See Section 701.03.06 for backfill requirements. Verify maximum and minimum fill cover height required for new pipe prior to construction and obtain the Engineer’s approval of the class or gauge of pipe and type of coating prior to delivering pipe to project. Furnish approved connecting bands or pipe anchors and toe walls. Use flowable fill for pipe backfill according to Section 601.03.03(B).

C. Erosion Control. See Special Note for Erosion Prevention and Sediment Control.

III. CONSTRUCTION METHODS


B. Erosion Control. See Special Note for Erosion Prevention and Sediment Control.

C. Site Preparation. Be responsible for all site preparation, including but not limited to saw cutting and removing pavement; clearing and grubbing; staking; incidental excavation and backfilling; common and solid rock excavation; embankment in place; removal of obstructions, or any other items; restoration of pavements, slopes, and all disturbed areas; final dressing and cleanup; and disposal of materials. Limit clearing and grubbing to the absolute minimum required to construct drainage features. Perform all site preparation only as approved or directed by the Engineer.
D. Removing Headwalls, Pipe, and Excavation. Remove existing headwalls and/or culvert and entrance pipes at the approximate locations noted on the summary. The Engineer will determine that actual locations at the time of construction. Saw cut the existing asphalt pavement and base to a neat edge prior to excavation and removal of the existing pipe. Obtain the Engineer’s approval of trench width prior to cutting pavement. Excavate trench and remove pipe as directed or approved by the Engineer without disturbing existing underground utilities. Waste excavated materials and removed pipe at approved sites off the right of way obtained by the Contractor at no additional cost to the Department.

E. Constructing Pipe, Headwalls, Drainage Boxes. Construct culvert pipes, headwalls, and/or drainage boxes at the locations shown in the proposal or as designated by the Engineer. The contractor will establish, with the approval of the Engineer, the final centerlines, flow lines, and skews to obtain the best fit with the existing ditches and proposed improvements. Drop Box Inlets may need to be field modified depending on the conditions encountered at each location. This may include modifying the width and/or height of the chamber from what is shown on the Standard Drawings. Any modifications must be approved by the Engineer. Alternatively, if field conditions are such that a Safety Box Inlet would have a better fit than a Drop Box Inlet, or vice versa, substitutions may be made, if requested and approved by the Engineer. Construct pipe bedding according to Section 701 and the applicable Standard or Sepia Drawings. Use approved connecting bands or concrete anchors as required. Prior to backfilling pipe, obtain the Engineer’s approval of the pipe installation. Provide Positive drainage upon completion of pipe installation.

F. Pipe Backfill. Backfill culvert and entrance pipe according to Section 701.03.06.

G. Embankments. Backfill pipe and culvert extensions, and construct shoulder embankments as directed by the Engineer. Provide positive drainage of slopes at all times during and upon completion of construction. The contractor shall properly bench into the existing slope according to the current Standard Drawings and apply proper compaction according to Section 206.

H. Property Damage. Be responsible for all damage to public and/or private property resulting from the work. Repair or replace damaged roadway features in like kind materials and design as directed by the Engineer at no additional cost to the Department. Repair or replace damaged private property in like kind materials and design to the satisfaction of the owner and the Engineer at no additional cost to the Department.

Coordination with Utility Companies. Locate all underground, above ground, and overhead utilities prior to beginning construction. Be responsible for contacting and maintaining liaison with all utility companies that have utilities located within the project limits. Do not disturb existing overhead or underground utilities. It is not anticipated that any utility facilities will need to be relocated and/or adjusted; however, in the event that it is discovered that the work does require that utilities be relocated and/or adjusted, the utility companies will work concurrently with the Contractor while relocating their facilities. Be responsible for repairing all utility damage that occurs as a result of pipe replacement and pipe extension operations at no additional cost to the Department. NOTIFY THE ENGINEER AND THE UTILITY OWNER(S)
IMMEDIATELY WHEN IT IS DISCOVERED OR ANTICIPATED THAT ANY
UTILITY CONFLICT COULD DELAY THE CONTRACTOR’S OPERATIONS.
Working days will not be charged for those days on which work on the controlling item
is delayed, as provided in the Specifications. If the total delay exceeds ten working days,
an extension of the specified completion date will be negotiated with the Contractor for
delay to the Contractor's work; however, no extension will be granted for any delay
caused by the Contractor’s failure to notify the Engineer and/or the utility company as
specified above when a conflict is discovered or anticipated as specified.

J. Right-of-Way Limits. The Department has not established exact limits of the Right-
of-Way. Unless a consent and release from is obtained from the adjoining property
owner, limit work activities to the obvious Right-of-Way and staging areas secured by the
Contractor at no additional cost to the Department. In the event that private
improvements (i.e. fences, buildings, etc.) encroach upon the Right-of-Way, the
contractor shall notify the Engineer and limit work activities in order to NOT disturb the
improvements. If they become necessary, the Department will secure consent and
releases from property owners through the Engineer. Be responsible for all
encroachments onto private lands.

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

L. Final Dressing, Clean Up, Seeding and Protection, and Restoration. After all work
is completed, remove all waste and debris from the job site, clean all existing and new
culvert pipe, and clean ditches. Grade all disturbed areas to blend with the adjacent
roadways features and to provide a suitable seed bed. Perform Class A Final dressing on
all disturbed areas. Seed and protect all disturbed earthen areas according to the Special
Note for Erosion Prevention and Sediment Control.

M. Erosion Control. See Special Note for Erosion Prevention and Sediment Control.

IV. METHOD OF MEASUREMENT


B. Site Preparation. Other than the bid items listed, site preparation will NOT be
measured for payment, but shall be incidental to culvert pipe.

C. Remove Headwall. The Department will measure the removal of existing headwalls
as Each.

D. Remove Pipe. Removal of existing culvert and entrance pipe shall be measured
according to Section 701.01.14. Any excavation necessary to remove existing pipe will
NOT be measured for payment, but shall be incidental to the bid item “Remove Pipe”.

E. Culvert and Entrance Pipe. The Department will measure the quantity according to
Section 701. Any excavation necessary to install culvert or entrance pipe will be
incidental to the corresponding pipe bid items.

F. Excavation, Pipe Backfill, Embankments. The excavation of pipe trenches, backfill
material for pipe replacements or extensions, constructing shoulder embankments, and Geotextile Fabric Type IV For Pipe (when required by the Standards) will be considered incidental to the bid items for culvert and entrance pipe.

G. Final Dressing, Clean Up, Seeding and Protection, and Restoration. The Department will NOT measure for payment the operations of Final Dressing, Clean Up, Seeding and Protection, and Restoration. These activities shall be incidental to Erosion Control.

H. Erosion Control. See Special Note for Erosion Prevention and Sediment Control.

V. BASIS OF PAYMENT


B. Remove Headwall. The Department will make payment for the completed and accepted quantity of Each existing headwall removed. The Department will NOT make payment for any excavation necessary to remove an existing headwall and will consider this incidental to the bid item “Remove Headwall”. Payment at the Contract unit price per Each shall be full compensation for furnishing all labor, materials, equipment, and incidentals for removing an existing headwall.

C. Remove Pipe. The Department will make payment for the completed and accepted quantities of existing culvert and entrance pipe removed. The Department will NOT make payment for any excavation necessary to remove existing pipe and will consider this incidental to the bid item “Remove Pipe”. Payment at the Contract unit price per linear foot shall be full compensation for furnishing all labor, materials, equipment, and incidentals for removing the existing pipe.

D. Culvert and Entrance Pipe. The Department will make payment for the completed and accepted quantities of culvert and entrance pipe. Payment at the Contract unit price per linear foot shall be full compensation for furnishing all labor, materials, equipment, and incidentals necessary for installing and backfilling new culvert and entrance pipe.

E. Erosion Control. See Special Note for Erosion Prevention and Sediment Control