

Matthew G. Bevin Governor

COMMONWEALTH OF KENTUCKY TRANSPORTATION CABINET

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

Greg ThomasSecretary

January 22, 2018

CALL NO. 105

CONTRACT ID NO. 184001

ADDENDUM # 2

Subject: McCracken County, HSIP 9010 (303)

Letting January 26, 2018

(1) Revised - Special Note - Page 60 of 251 (2) Added - Sheet- Page 60 (a) of 251 (2) Revised - Special Note - Pages 76-79 of 251 (4) Added - Alteration Request Letter - 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

Kachel Mille

RM:mr

Enclosures



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 culvert and to match the existing roadway alignment and curvature to ensure positive drainage upon completion of the work.
- 3. Verify the dimensions, type, and quantities of the culvert pipes, entrance pipes, and/or box culverts 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 drainage structures with existing and/or proposed ditches, stream channels, swales, 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. Prior to ordering sign material, notify and coordinate with the District Traffic Engineer, and perform a review of the proposed signs within this proposal (including removal and relocation of any existing signage). Using paint marks on the pavement, mag nails, stakes, or any other means approved by the Engineer, the Contractor shall mark and/or stake the proposed sign locations in the field. NOTE: Proposed signs are listed in the proposal by approximate location and are NOT to be taken as the exact location for the signs. During staking operations the Contractor shall review the signing layout and existing field conditions and look for potential conflicts, including but not limited to utilities, driveways, visual obstructions, etc. When conflicts are found, adjust the staked location of signs to mitigate conflicts. Because the sign locations in the proposal are approximate and the location of some signs may need to be adjusted due to conflicts, during staking operations the Contractor shall refer to and utilize the information in Sections 2C.05 through 2C.15 and Section 2C.46; Tables 2C-4, 2C-5, and 2C-6; and Figure 2C-2 of the Manual on Uniform on Traffic Control Devices (MUTCD), current edition. These Sections, Tables, and Figures within the MUTCD cover items such as: appropriate sign location, advance placement distances, and spacing requirements for signing. The intent is for the proposed signs to be consistent with, and meet the requirements of, the MUTCD. Before sign installation begins and after proposed sign locations have been staked, obtain final sign location approval from the District Traffic Engineer.
- 6. Produce and furnish to the Engineer "As Built" plans of the superelevation improvements and the drainage/culvert improvements.
- 7. Verify the accuracy of the survey control network.
- 8. Provide independent testing and inspection of all work.
- 9. Perform independent soil testing of levee embankment material.
- 10. Perform any and all other staking operations required to control and construct the work.

SURVEY CONTROL POINT INFORMATION

Point Number	Northing	Easting	Elevation	Description	
1	3523428.723	4088377.973	396.299	CP/AEI CP 1	
2	3523965.651	4088487.933	425.121	CP/AEI CP 2	
3	3524292.268	4088494.135	416.008	CP/AEI CP 3	
4	3524823.925	4088591.681	377.762	CP/AEI CP 4	
5	3525877.053	4088747.29	339.385	CP/AEI CP 5	
6	3527498.328	4088844.977	343.221	CP/AEI CP 6	
7	3528731.282	4088897.287	339.613	CP/AEI CP 7	
8	3529289.69	4088970.183	337.93	CP/AEI CP 8	
9	3530874.014	4089323.241	337.914	CP/AEI CP 9	
10	3531624.937	4089293.492	336.357	CP/AEI CP 10	
11	3533809.011	4089503.681	337.562	CP/AEI CP 11	
12	3534301.523	4089528.95	335.769	CP/AEI CP 12	
13	3534316.733	4089323.942	334.811	CP/AEI CP 13	
14	3534374.343	4089106.73	336.735	CP/AEI CP 14	
15	3535037.782	4089170.674	335.215	CP/AEI CP 15	
16	3537498.307	4089510.254	337.368	CP/AEI CP 16	
17	3537893.786	4089570.852	338.12	CP/AEI CP 17	
18	3538280.736	4089549.665	350.479	CP/AEI CP 18	
19	3538400.326	4089419.205	337.318	CP/AEI CP 19	
20	3539410.147 4090275.559		337.712	CP/AEI CP 20	

TRAFFIC CONTROL PLAN – SPECIAL NOTES

TRAFFIC CONTROL GENERAL.

Except as provided herein, traffic shall be maintained in accordance with the current editions of the Manual on Uniform Traffic Control Devices (MUTCD), Standard Specifications and the Standard Drawings. Except for the roadway and traffic control bid items listed, all items of work necessary to maintain and control traffic will be paid at the lump sum bid price to "Maintain and Control Traffic".

Contrary to Section 106.01, traffic control devices used on this project may be new, or used in like new condition, at the beginning of the work and maintained in like new condition until completion of the work. Any temporary traffic control items, devices, materials, and incidentals shall remain the property of the contractor unless otherwise addressed, when no longer needed.

PROJECT PHASING & CONSTRUCTION PROCEDURES

At the discretion of the Engineer, days and hours may be specified when lane closures will not be allowed. No lane closures will be allowed on the following dates:

•	Easter Weekend	March 30- April 1, 2018
•	Memorial Day Weekend,	May 26-28, 2018
•	Independence Day Weekend,	June 29 – July 5, 2018
•	Labor Day Weekend,	September 1-4, 2018
•	Thanksgiving Weekend	November 22-25, 2018
•	Christmas Holiday,	December 21-26, 2018
•	New Year's Holiday,	December 29, 2018-January 2, 2019

Construction Phasing for Clark Line Levee Crossing Reconstruction:

- **Phase I** consists of constructing making the new cut in the levee, beginning the levee benching and compaction according to the special notes for the USACE requirements to construct the new subgrade between Stations 251+50 to 255+25 and to the new Clark Line Road approach Station 48+90. Temporary drainage will be the responsibility of the contractor. All Phase I will be completed using flag persons.
- Phase II consists of a road closure for KY 1954 between Station 249+00 to Clark Line Road for the purpose of completing the roadway through the final base course between Stations 249+00 to Station 254+50, tying the new approach to existing KY 1954 at the south tie-in and constructing the new approach to Clark Line Road. The Tie-in to Clark Line Road will be completed using flag persons. (Traffic flow from Clark Line Road to northbound KY 1954 must be maintained during construction.) The old roadway will be removed to match slopes of the existing levee using USACE requirements. The extension

of the 3-60" Cross Drains will be completed. The extension of the 5 Levee Pipes will begin in this phase using the Hobas Pipe installation requirements.

- **Phase III** consists of Clark Line Road to Station 259+00 for the purpose of completing the roadway through the final base course and tying into KY 1954 at the north tie-in. (Traffic flow from Clark Line Road to southbound KY 1954 must be maintained during construction using flag persons.) The extension of the 5 levee pipes will be completed. The old roadway on the levee will be removed to match slopes of the existing levee using USACE requirements with the remaining segment of old roadway being constructed to drain as shown on the cross sections.
- **Phase IV** consists of moving all traffic to the new road, completing the headwalls on all pipe extensions, placing the final surface, guardrail, and all other items. All Phase IV will be completed using flag persons.

With the prior approval of the Engineer, KY 1954 may be closed for no more than a period of two weeks (14 Calendar days) from Station 249+00 to Clark Line Road while maintaining traffic flow from Clark Line Road to northbound KY 1954 during Phase II construction. Additionally, KY 1954 may be closed for no more than a period of two weeks (14 Calendar days) from Clark Line Road to Station 259+00 while maintaining traffic flow from Clark Line Road to southbound KY 1954 during Phase III construction. Timing for all road closures must be approved by the Engineer and extended road closures shall not occur before the last school day for McCracken County and must not occur after August 1, 2018. Any work in these limits requiring road closures that exceed the two weeks will result in a per day penalty of \$2,400.

All tree removal and Tree canopy trimming/clearing are to be completed by no later than March 15, 2018. Any tree removals that are removed after that date may be subject to bat mitigation fees for disturbing or harming of bat hibernaculum's and will solely be the responsibility of the contractor as a non-reimbursable cost.

All other KY 1954 work must be completed at all times, maintaining alternating one way traffic during construction operations. The clear lane width shall be 9 feet. With approval of the Engineer, short stoppages of no more than 20 minutes for construction operations can be experienced, however, the contractor shall make all provisions for the passage of all emergency vehicles and school buses on an official run as quickly as possible in less than the 20 minute allowed stoppage time.

Asphalt Leveling and Wedging shall be placed in lifts to insure pavement keep drop offs are not too high and 2-lanes of traffic can be maintained overnight. Leveling and Wedging thicknesses shall be approved by the engineer.

The Department will provide public notification regarding approved closures. Notify the Engineer immediately and obtain approval of any deviations from the previously approved closure schedule. The contractor shall be responsible for road closure barricades and signs; work zone and pavement condition signs; advanced warning signs; additional signs as directed by the Engineer; changeable message signs.

Under special circumstances, KYTC reserves the right to restrict the use of lane closures due to unforeseen special events.

MAINTAIN & CONTROL TRAFFIC.

Will be measured only once for payment.

SIGNS.

Contrary to Section 112.04.02, only long term signs (signs intended to be continuously in place for more than 3 days) will be measured for payment; short term signs (signs intended to be left in place for 3 days or less) will not be measured for payment but will be incidental to Maintain and Control Traffic.

LANE CLOSURES

Other than the allowed 2 week closure, do not leave lane closures in place during non-working hours.

VARIABLE MESSAGE SIGNS.

If deemed necessary by the Engineer, variable message signs will be installed, operated and maintained by the Department. Specifically, signs indicating the insufficient lane width for oversized loads may be required.

BARRICADES

Barricades used in lieu of barrels and cones for channelization or delineation will be incidental to Maintain and Control Traffic according to Section 112.04.01. Barricades used to protect pavement removal areas will be bid as each according to Section 112.04.04.

PAVEMENT EDGE DROP-OFFS

A pavement edge between opposing directions of traffic or lanes that traffic is expected to cross in a lane change situation shall not have an elevation difference greater than 1½". Warning signs (MUTCD W8-9 or W8-9A, or W8-11) shall be placed in advance of and at 1500 feet intervals throughout the drop-off area. Dual posting on both sides of the traveled way shall be required. All transverse transitions between newly surfaced pavement and the existing pavement areas that traffic may cross shall be wedged with asphalt mixture for leveling and wedging. Remove wedges prior to placement of the final surface course.

Pavement edges that traffic is not expected to cross, except accidentally, shall be treated as follows:

Less than 2" – No protection required.

2" to 4" – Place plastic drums, vertical panels, or barricades every 50 feet. Cones may be used in place of plastic drums, panels, and barricades during daylight hours. Wedge with asphalt mixture for leveling and wedging with a 1:1 or flatter slope in daylight hours, or 3:1 or flatter slope during nighttime hours, when work is not active in the drop-off area.

Temporary drop-offs during working hours, where construction operations are taking place, should be kept to minimum.

INGRESS AND EGRESS

Reasonable means of ingress and egress shall be maintained to all properties within the project limits. Access to fire hydrants must also be maintained at all times.



DEPARTMENT OF THE ARMY

U.S. ARMY ENGINEER DISTRICT, LOUISVILLE CORPS OF ENGINEERS P.O. BOX 59 LOUISVILLE, KENTUCKY 40201-0059

August 22, 2016

Engineering Division

REPLY TO ATTENTION OF:

Mr. Rick Murphy, P.E. City Engineer, City of Paducah, KY 300 South 5th Street P.O. Box 2267 Paducah, KY 42003

Dear Mr. Murphy:

I am returning one original approved alteration request (Reference Number 2016056.PAD) for the proposed modifications to the Paducah Levee System; near levee STA 28+62 and 32+25. We understand that the project will consist of a realignment of KY 1954 (Husband Road) to improve the highway safety at the intersection of KY 1954 and Clark Line Road. The realignment will include the relocation of the existing sandbag closure at Station 28+62 to approximate Station 30+23, as well as the extension of the five pipes located at Station 32+25, as well as filling in the ponding area adjacent to the inlets of the pipes.

We have reviewed the submitted documents and have no objections to the proposed work provided the following conditions are adhered to:

- a. The O&M Manual is to be updated to show the removal of the existing sandbag closure at Station 28+62 and the new sandbag closure at Station 30+23 (including an estimate of the number of sandbags required, as well as the length of the new closure). The manual shall also show the increased length in the pipes.
- b. Construction activities shall follow the Standard Operating Procedure (SOP) Benching and Compaction for Levee and Floodwall Modifications attached herein and available from the Louisville District's levee safety website: http://www.lrl.usace.army.mil/lsp.
- c. A set of "As-Built" drawings for the above project and digital copies of the construction photos taken before, during, and after the completion of the project are to be provided to this office, ATTN: CELRL-ED-T-G (Neil Cash), upon completion of this project. As-built drawings shall indicate graphically the levee As-Built station numbers provided by USACE for the Paducah Levee System.

It should be noted that this approval is for only the work discussed herein. It is the responsibility of the City of Paducah to ensure the work is completed in accordance with the plans and specifications. Failure to meet these requirements may affect the overall rating of the project during our next routine inspection.

This approval will be valid for a period of two years from the date of this letter. Any failure to meet these requirements may affect the overall rating of the project during our next annual inspection. If you have any questions regarding this letter, please contact your area representative Mr. Neil Cash at (502)-315-6419 or by email at Neil.Cash@usace.army.mil.

Sincerely,

John F. Allison, P.E.

Chief, Civil Engineering Branch Alternate Levee Safety Officer

Enclosures

RECORD COPY

Cash/ED-T-G NC Frank/ED-T-G NSW Whelan/ED-T-G MSW Purcell/ED-T-CANSW Allison/ED-T

Q:\PROJECT FILES\FEDERAL LEVEE SYSTEMS\Paducah KY LFPP\PERMITS (Paducah, KY)\2016056.PAD – Realignment of KY 1954 (Husband Road)

HSIP 9010 (303)

Levee System Modification Permit

Contract ID: 184001 Page 4 of 5

Instructions for Submitting a request for the US Army Corps of Engineers, Louisville District to review a proposed modification to a Levee System using Form CELRL-803

Part 1 - Completing the Levee System Modification Permit Form (CELRL-803)

The Local sponsor is the Permitter of any modifications to Levee Systems and a third party is the Permittee. The Local Sponsor/Permittee should complete each line on the permit form as follows:

Name of Levee System - This line should contain the name of the Levee System to be modified by this proposal

Name of Permitter – Local Sponsor for Levee System – This line should contain the name of the Local Sponsor who must approve of this modification request prior to forwarding to USACE for review. The Local Sponsor is the non-federal government organization responsible for operating and maintaining the levee system.

Permittee Information: These lines should contain the name (and titles) of the individual person, or company, or entity, or organization requesting the proposed modification. The Point-of-Contact who will be responsible for operation and maintenance of the proposed modification and all associated communication must put their contact information here as required. Note: This POC line is **not** intended for the signature of a representative of a design firm or consultant.

Description of Modification – The next four lines should contain a brief description of the proposed modification to include the work which will be accomplished. Most important is location features of the proposed modification, including **BOTH** the Levee System Stationing (as shown on the as-built levee drawings) of the site **AND** geographic (GPS) coordinates of the site. Please **do not** write only "See Attached" in this space in case the permit form gets separated from the required submittal materials. Required submittal materials are described in Part 2 below.

Special Conditions – The next four lines will contain any special conditions to the permit assigned by the Local Sponsor or USACE.

Signature on Behalf of Local Sponsor – This line should contain the name, title, and signature/date of the Local Sponsor or an authorized representative. This is commonly signed by a Levee Commissioner, City Engineer, Public Works Director or Mayor. Signature of this line indicates the Local Sponsor approves of the proposed modification.

Signature of Permitee – This line should contain the name, title, and signature/date of the individual or authorized representative of the entity, company or organization who will be responsible for the proposed modification and all associated communication. Note: This line is **not** intended for the signature of a representative of a design firm or consultant.

Approved – The permit form must be properly filled out prior to USACE technical review. The authorized representative of USACE will only sign this line if a technical review of the full permit package including this form and all technical submittals (plans & specifications) has been completed and approved. Any alterations to the permit package (including the submitted technical plans and specifications) as submitted by the permittee is prohibited and voids USACE approval of the modification.

Part 2 - What to Submit for a Technical Review

All technical submittals should include:

- 3 copies of properly completed permit form CELRL-803 as described above
- Scope of proposed work
- Electronic copies of plans, details, data sheets and specifications related to the levee system modification work only
- Hard copies of plans (should not exceed 11 x 17 inch size paper) related to the levee system modification work only
- Clearly defined location/area of the proposed modification including both as-built levee stationing and geographic coordinates (GPS) shown on the plan sheets
- Electronic copies of digital photos of the proposed modification work area in its current condition

Submittals should not include full size drawing sets unless specifically requested by this office.

Feel free to contact the Louisville District Levee Safety Program if you have any questions regarding these requirements: http://www.lrl.usace.army.mil/

Contract ID: 184001 Page 5 of 5

Levee System Modification Permit									
Ohio River Shoreline, Paducah, KY, LFPP, Section C, Station 20+00 to Station 35+00 (Name of Levee System to be modified)									
Rick Murphy, P.E., City Engineer, City of Paducah, KY (Name of Permitter - Local Sponsor for Levee System)									
PERMITTEE INFORMATION:	ne of Permitter - Local S	Sponsor for Leve	e System)						
KY Transportation Cabinet		200 Mero Street							
(Name of Firm/Organization requesting modification, if any)		Frankfort	(Address)	KY	40622				
Andy Barber, P.E. (Name of Individual requesting modification)	Ng ====================================	FIGURIOIT	(City, State, Zip	0.0.00	40022				
Andy.Barber@Ky.gov		(502)564-37		(502)564-2	277				
(Email) Permission is hereby given to the above permitted	то.		(Phone/Fax)						
Construct realigned KY 1954 (Husbands Road) over Paducah-Clark Line Floodwall Levee. New alignment will cross existing levee at station 30+23.50 (37.005708°N, 88.598292°W) and remove a maximum of 3' of levee. This realignment is necessary to improve highway safety at the intersection of KY 1954 and Clark Line Road. The existing road cut through the levee at station 28+61.85 (37.005416°N, 88.598708°W) will be backfilled per USACE Specs to the adjacent levee elevation. Grassed swales will be constructed between the levee fill and roadway fill to transport water to the levee toe. The five pipes under the levee at approximate station 32+25 will be extended under the relocated KY 1954.									
(Describe in the space above a summary of the project stationing AND GPS geographic coordinates. Inclureference herein) All technical plans and specific upon termination or expiration of this poor otherwise) the permittee shall remove all the describes a permittee shall remove and shall remove a replacement of the project of the permittee of the permittee shall remove the permittee and shall remove the permittee and shall remove the permittee and shall remove the permittee.	de means for access to mo cifications associated with ermit (whether by volum structures, improvemen	dification site, etc. the modification stary relinquishments, or appurtena	Use separate sheets in have been enclosed ent by the permittences which may h	f necessary, identi as part of this pe e, by revocation ave been erecte	fying each by rmit package by the permitter d or constructed				
under this permit, and shall repair or replace any portion of the Levee System or right-of-way which may have been damaged by his operations (including grading and seeding, or sodding, if necessary), to the satisfaction of the permitter. The structure or operation for which this permit is issued shall be maintained by the permittee in such manner as shall not injure or									
damage the Leveee System, or interfere with	its operation and mainte	nance in accorda	nce with regulation	ns of the Secreta	ry of the Army.				
The structure or operation covered by emergency if such action is determined by impairment to the use or safety of the Levee S	the permitter to be nec	cessary in order	to preserve life or	property or pr	event damage or				
Unless otherwise specifically provided h mailed to the address shown above. During s permitted to remove any property or improve right-of-way or structures resulting from his u dispose of any such property or improvemen and the permittee herein shall be liable to the	such 10-day period, (or ements installed under the use or operations. At the ts remaining upon its ri	such other period his permit, and to e end of such peri ght-of-way, and	d as may be provided repair or replace a lod, the permitter s may proceed to rep	led herein), the any damage to t hall have the rig	permittee will be he Levee System ht to possess and				
The construction, installation and mainterpresentatives of the permitter and the Unite			ered by this permit	shall be subject	to inspection by				
In the event the work covered by this permit consists of or includes major construction, the cost of inspection thereof by the permitter and/or the United States shall be paid by the applicant.									
Permittee agrees that it will not use the other than is specifically covered by this perm		red by this permi	t, or permit such a	rea to be used	, for any purpose				
(Use the space below for special conditions applica-	able to this permit.)								
	¢ .				450) 00				
THIS PERMIT SHALL NOT BE VAL ALTERNATE LSO, CORPS O									
Rick Murphy, P.E. (Authorized Representative of Local Sponsor) [please print or type]	(Signature of Local Spon	shy	City Engir	neer	S/1/10 (Date)				
Terms of this permit are hereby accepted.	()	>			77511				
Andy Barber, P.E. (Authorized Representative of Permittee)	(Signature of Pekmittee)		(Title)	ject Delivery & Preservation	(Date)				
[please print or type]	APPROVED:	Allison, P.E.	Pllisi	0	8-24-2016 (Pata)				
	Chief,	Civil Engineering ate Levee Safety O			(Date)				