

KENTUCKY TRANSPORTATION CABINET

Department of Highways

DIVISION OF PLANNING

TC 59-113

Rev. 04/2024

Page 1 of 2

KENTUCKY PUBLIC RIVERPORT CONSTRUCTION AND MAINTENANCE (KPRCM) APPLICATION

INSTRUCTIONS: A guidance document is provided to assist in completing the application packet and may be accessed at https://transportation.ky.gov/MultimodalFreight/Pages/KPRCM.aspx
See the guidance document for required attachments and acceptable methods of submittal.

SECTION 1: APPLICANT INFORMATION							
PUBLIC RIVERPORT NAME			TOTAL I	PROJECT	KPRCM FU	JND	
				ST	REQUES		
	Regional Riverport Authority (WKRRA)	\$250,000		\$250,000.0		
	REET ADDRESS			CITY		STATE	
	37 Ohio Street			ckliffe		KY	42087
	ACT NAME & TITLE		PHONE		EMAIL		
•	Ballard Co. EDC Director	270.559	jppace@brtc.net		t		
SECTION 2: PROJECT DESCRIPTION							
PROJECT TITLE				DURA			
Archaeological Excavat	ion of Fort Jefferson (15Ba174, 15Ba	-		2	months		weeks
	FACILITIES AFFECTED BY	THE PRO	POSED PI	ROJECT			
<u> </u>	rport Authority						
•	project will improve public riverport				-		
trade potential offered b	by water transportation.: (Text limited	for accure	ate printin	g. Attach a	dditional pa	ges as r	needed.)
	develop a new 19-acre inland riverpo						
the 950 river mile in Bal	llard County. This site is home to the	former Fo	ort Jeffer	son, locate	ed in the va	lley of	Mayfield
Creek. To date, the WKI	RRA has executed an agreement with	Phoenix	Paper fo	r Right Ent	ry access to	o the p	roposed
riverport site, HDR, inc.	has completed the wetlands and Sec	tion 7 ha	oitat stud	ly, and an	agreement	has be	en executed
with Cultural Resource	Analysts, Inc. (CRA) to conduct the Ph	ase 1 arc	haeologi	cal investi	gation for t	he pro	posed site.
Stage 1 is scheduled for	completion by June 2026. This funding	ng reques	t will be	utilized to	execute St	age 2 d	of the
archaeological investiga	ition. This will include hand-excavatio	n, exami	nation of	artifact co	ncentratio	ns, and	omalies, and
areas that may contain	intact subsurface deposits. All artifac	ts collect	ed will be	catalogue	ed and don	ated to	the Fort
Jefferson Museum. The	probable archaeological deposits wil	l yield ne	w and sig	nificant in	formation	pertair	ning to one of
the three westernmost	American forts during the American I	Revolutio	n, as wel	l as to the	historical s	ettlem	ent and
development of Ballard	County and the Mississippi Embayme	ent Regio	n of Kent	ucky. Com	pletion of	the arc	chaeological
investigation will allow	WKRRA to develop the riverport.						
Select ONE: Applicant plans to use their own manpower, equipment, or materials on the project (Force Account).							
Applicant plans to competitively bid out all work related to the project.							
TRAFFIC	CURRENT			AFTER PROJECT			
Trucks per day	day 0 0		0				
Train cars per week	0			0			
Barges per week	0			0			
FOR KYTC USE ONLY							
Date Received:	WTAB Approval	Yes	☐ No				
Application Complete?	Yes No Sec. Approval	Yes	☐ No	Notificat	ion of Awar	d:	
Eligible Applicant?	☐ Yes ☐ No Award Amount:				МОА	#:	
Permits Needed?	☐ Yes ☐ No Award Date:			Notic	e to Procee	d:	



KENTUCKY TRANSPORTATION CABINET

Department of Highways

DIVISION OF PLANNING

TC 59-113

Rev. 04/2024 Page 2 of 2

KENTUCKY PUBLIC RIVERPORT CONSTRUCTION AND MAINTENANCE (KPRCM) APPLICATION

RENTOCKT POBLIC RIVERPORT CONSTR	COCHON AND MAINTENANCE	KF KCIVI) AF	FLICATION		
SECTION 3: PERMITS AND APPROVALS		VES	N/O		
		YES	NO		
Has the applicant consulted with state and federal agencies (US Army Corps of Engineers, US Coast Guard, US Fish & Wildlife Service, KY Division of Water, KY Heritage Council, etc.)?					
Has state and federal agency consultation determined permits are needed?					
Have all required permits (environmental, encroachm	ent, etc.) been obtained?		V		
SECTION 4: SUBMISSION CHECKLIST (See guidance	document for details.)				
 ✓ Kentucky Public Riverport Construction and May ✓ Statement of Work ✓ Scope of Work ✓ Purchase quote or cost estimate for the project ✓ Project Schedule/Timeline ✓ Maps, aerial photos, drawings, and photograph ✓ Engineering plans, schematics, details, drawing ✓ Copies of all correspondence or evidence of co ✓ Required Affidavit for Bidders, Offerors and Co SECTION 5: CERTIFICATION I have read the Kentucky Public Riverport Construct agree to abide by what is stated therein. I agree that supporting documents, or applications received afficonsideration for KPRCM funds and returned to ap (unsworn falsification to authorities), that the above in 	t as, as needed as of the proposed project, as needed as of the proposed project, as needed as nultation that has occurred with state an antractors from applicant ion and Maintenance Project Guidance E incomplete applications, applications mis ater the deadline, will be deemed inelig plicant. I also hereby certify, subject to	Document and using any of the gible by Division the provision of	understand and above required n staff without of KRS 523.100		
PRINTED NAME & TITLE S	IGNATURE	DATE	DATE		
David Rambo, Chair	elail R. Rate	10/	110/2025		
Completed applications and all required attachments must be submitted electronically in PDF format. Paper copies will not be accepted. Emailed applications must be received by the Division by date indicated in call for projects. PDF copies shall be sent via email to: KYTC.ModalPrograms@ky.gov					



Proposal for the Stage II Archaeological Excavations (National Register of Historic Places Evaluation) of Fort Jefferson (15Ba174 and 15Ba48), Ballard County, Kentucky

September 4, 2025

Submitted to:

Oliver Douthitt, EIT, PMP GEO Consultants Corporation 325 Kentucky Ave Kevil, KY, 42053 Office: (270) 462-3882

Cell: (270) 564-8746 Fax: (270) 462-2396

douthitto@geoconsultantscorp.com

Project Identification

Fort Jefferson (15Ba174 and 15Ba48) Ballard County, Kentucky Wickliffe Quad CRA Proposal No. KY23P-0414

Introduction

This proposal is for the National Register of Historic Places (NRHP) evaluation of Fort Jefferson (15Ba174) and Block House 3 and two period house lots (15Ba48).

In 2023, CRA submitted a proposal for four stages of investigation. The stages of investigation include:

- I. Remote Sensing, Coring, and Metal Detecting
- II. Test Unit Excavation
- III. Mechanical Stripping
- IV. Feature Excavation

In 2024, CRA submitted a geophysical and metal detecting proposal of the sites (Stage I Investigations). Stage I fieldwork is anticipated to begin in December of 2025, and Stages II–IV at some future indeterminate date. At the request of Kim Morris of Geo Consultants Corporation, Stages II–IV have been subdivided into tasks in anticipation of grant funding to cover associated costs. Stage II consists of the excavation of test units at the sites to determine the presence or absence of intact sedimentary units and archaeological deposits, to field verify the results of geophysical investigation, and to determine the sites' NRHP eligibility.



Scope of Services

The archaeological excavations to determine the sites' NRHP eligibility will follow the current *Specifications for Conducting Fieldwork and Preparing Cultural Resource Assessment Reports* (Sanders 2017) issued by the Kentucky SHPO and standard archaeological methods.

NRHP Evaluation Goals

The goals of the project are to document and recover data relating to the occupation, use and site structure of Fort Jefferson within the areas identified by Mabelitini and Carstens. The excavations will serve to flesh out details of the Fort and civilian community of Clarksville to compare with historic documents and historic accounts of fort activity.

The NRHP significance of the site will be assessed on its potential to provide important information about the history and prehistory of the region. For a site to be considered significant they must contain data (features, artifacts, and ecofacts) that can be used to answer research topics or questions of local or regional importance and presented in The Kentucky State Plan. NRHP fieldwork and analysis are designed to:

- 1. Determine the presence or absence of subsurface features or intact archaeological deposits.
- 2. Determine the general intra-site spatial characteristics, i.e., the spatial distribution of features and artifact types and the co-occurrence or clustering of features and artifacts.
- 3. Determine the classes of archaeological remains retrievable.
- 4. Determine the archaeological integrity of the remains.
- 5. Place the sites within the regional precontact and historic cultural context.
- 6. Recover Eighteenth century artifacts that will be displayed at the proposed Fort Jefferson Museum.

Field Research

The phase I archaeological survey identified several undisturbed areas containing potentially significant archaeological deposits within sites 15Ba174 and 15Ba48 that were recommended for avoidance or additional archaeological work (Mabelitini 2021). These areas include archaeological deposits associated with the 1780–1781 settlement and defenses of Fort Jefferson and Clarksville including the main fort, a block house and residential area. It was recommended that a staged approach be employed for the investigation. This scope of services includes Stage II.

Stage II Unit Excavation

The Stage II NRHP evaluation will include hand-excavating a maximum of 20 units measuring 1-x-1 m in size at Site 15Ba174 and 10 units at 15Ba48 (Table 1). These units will be placed in such a way as to examine artifact concentrations, anomalies identified during the remote sensing assessment, and areas that may potentially contain intact subsurface deposits. These units will also help identify stratigraphic deposits if present. Unit excavation will rely heavily on shallow shovel skimming. Units will be excavated by 10 cm arbitrary or natural levels as appropriate to increase the resolution of patterning and association. The plow zone will be treated as a discrete stratigraphic unit and, therefore, will be excavated as a single unit (e.g., not in arbitrary levels). Artifacts collected from each site will be bagged by unit and level. Each artifact bag will be logged in a standardized inventory form and assigned a unique bag number. Site sediments will be passed through traditional 0.25-inch mesh shaker screens. Standardized level forms will be completed for



each level excavated. All rough rock will be counted, size graded, and weighed. At least one wall of each unit will be profiled and photographed. The location of test units will be referenced to the site grid.

Table 1. Proposed Test Unit Excavations.

Site	Number of 1-x-1 m Test Units	Estimated Number of 10 cm Levels	Total Cubic Meters
15Ba174	20	100	10.0 m ³
15Ba48	10	50	5.0 m ³
Totals	30	150	15.0 m ³

A maximum of 5 features will be excavated, three at 15Ba174 and two at 15Ba48, including two large features (larger than 80 cm in diameter, greater than 60 cm deep) and three medium-sized features (40–80 cm in diameter, 30–60 cm deep). Any additional features encountered will be photographed, their locations will be recorded, and they will be covered in black plastic. When subsurface features are encountered, each will be assigned a unique identification number, their maximum dimensions measured, sketched, and photographed. The location of each feature will be referenced to the site grid, depth below the datum, and depth below the ground surface. A standardized feature record will be completed for each feature investigated. A flotation sample of about 10 liters may be collected from features or zones within features that contain primary deposits, which may include small artifacts and/or botanical materials. The total number of floats will not exceed 5.

Laboratory Analysis

It is anticipated that with the guidance of geophysical investigations and metal detecting, no more than 300 artifacts per test unit will be recovered (9,000 artifacts total).

All recovered artifacts will be returned to the CRA laboratory at Lexington, Kentucky, for cleaning, analysis, and cataloging following standard practices. Initial processing of recovered artifacts involves washing all artifacts, sorting the artifacts into the major material classes (i.e., ceramic, faunal, historic, and lithic) for further analysis, and assigning catalog numbers. In general, catalog numbers consisted of the site number and a unique number for each provenience lot or diagnostic specimen.

Up to three radiocarbon samples may be submitted to the University of Georgia's Center for Applied Isotope Studies for Radiocarbon AMS analysis.

Considering that the excavations will target areas of high potential, we estimate no more than 9,000 artifacts will be recovered during the NRHP evaluation. We anticipate that no more than 10 boxes of materials will be recovered. If the cannon that was reportedly left behind after the evacuation of Fort Jefferson is recovered, CRA will work with the client on appropriate measures for its conveyance to the museum.

Deliverables

The results of the geophysical analysis, metal detecting, and coring (Stage I), and NRHP eligibility determination (Stage II) will be documented in a detailed written report. The report will conform to *Specifications for Conducting Fieldwork and Preparing Cultural Resource Assessment Reports* issued by the Kentucky State Historic Preservation Office. Additionally, an updated site survey form will be prepared for the sites and submitted to the Kentucky OSA. Initially, a PDF of the report will be submitted to the Ballard Economic Industrial Development Committee and the West Kentucky Regional Riverport Authority for review and comment. CRA will submit a revised report in PDF format for review by the



USACE and SHPO. CRA will make any necessary revisions to the report requested by the reviewing agencies.

Schedule

CRA can initiate the study within 30 business days of NTP. The excavations will require approximately fourteen (14) field days. A summary of the excavation results, in PDF format, will be submitted within 20 business days of completion of the fieldwork. If the site is determined to be eligible for listing in the NRHP, additional mechanical stripping (Stage III) and mitigation (Stage IV) may be required.

Fee Proposal

Stage II Unit Excavations

CRA will complete Stage II investigations on a time and materials basis at a cost not-to-exceed \$236,433.

Terms are payment in full within 30 calendar days of receipt of the invoice for Cultural Resource Analysts, Inc. Invoicing may be done monthly. The following assumptions have been made when preparing the scope of work and estimated cost for this project. These are not intended to be all-inclusive, and it is recognized that unforeseen changes and circumstances may result during the project. Should these situations arise, CRA will promptly address specific scope or budget issues with the client to reach an agreement for any needed contract modifications and additional compensation per our standard rate schedule.

- There will be no delays in fieldwork due to inclement weather or other conditions adverse to conducting fieldwork.
- There will be no issues or delays in obtaining access to project areas.
- No more than 15 m³ of sediment will be excavated.
- No more than 9,000 artifacts will be recovered during test unit excavation.
- No more than 5 features (three at 15Ba174 and two at 15Ba48) will be excavated.
- No more than three radiocarbon samples will be taken.
- Any additional safety training or drug testing is not included.
- There will be no delays in the performance of work caused by the client, agencies, landowners, or other parties.
- Deep testing will not be a requirement of this project. If it is determined during the course of field investigation that deep testing will be required, additional costs will be incurred.
- Both sites have been identified as potential bat habitat, and trees 3 inches or larger in diameter must
 be avoided. If the project area is too densely overgrown with bat habitat trees, a change in method
 may be warranted.
- Formal meetings with clients, agencies, tribes, or others are beyond the scope of this proposal.
- If the cannon is recovered, CRA will stabilize and preserve it and coordinate with the client to deliver to the proposed Fort Jefferson Museum.



- Features in excess of five will not be excavated during this portion of the investigation, but will be returned to and excavated during the mechanical stripping and feature excavation portion of the study.
 - No more than 5 10-liter float samples will be taken.

FOR Cultural Resource Analysts:

Stew D Creama

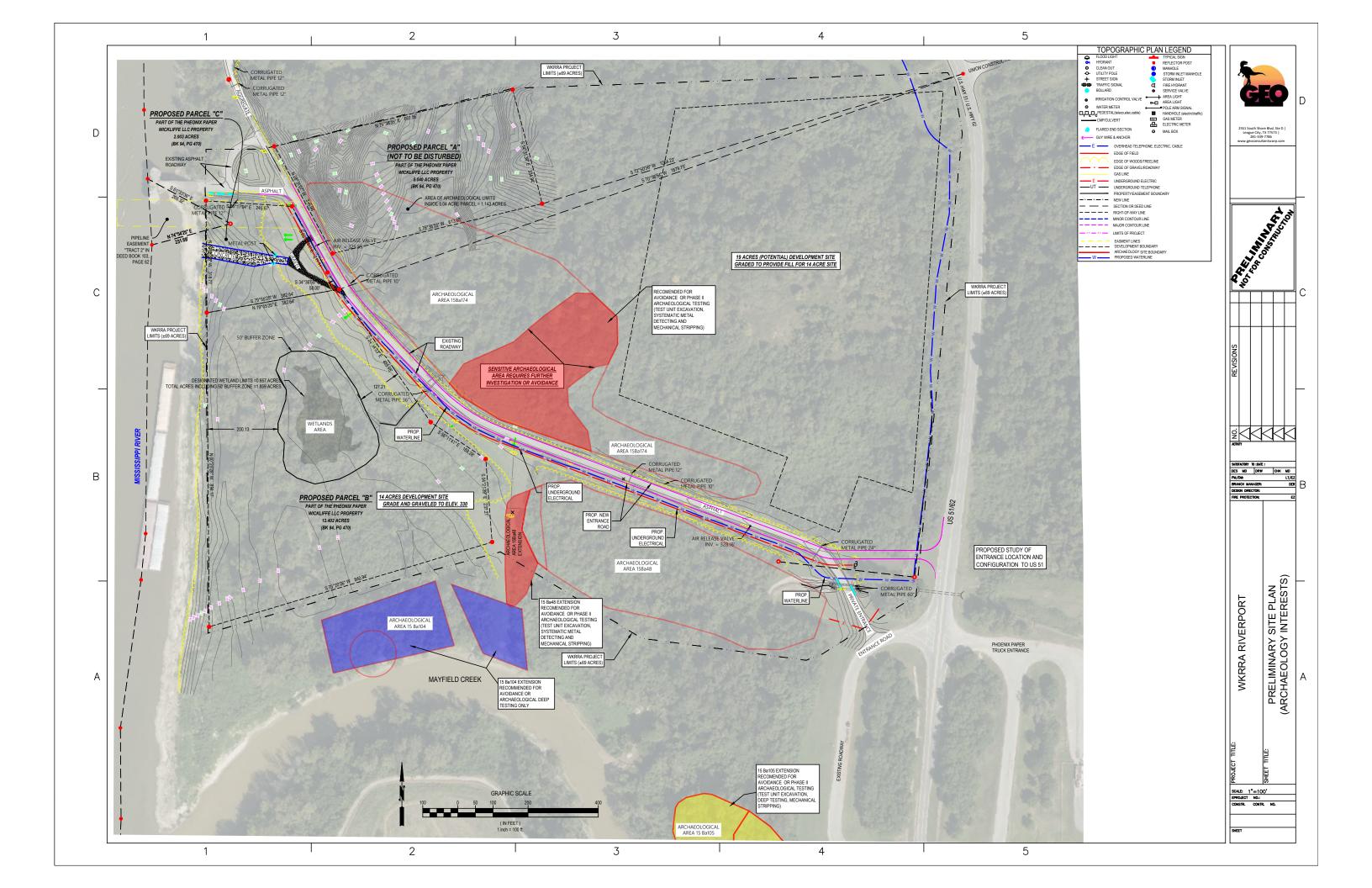
Signed:__

Steven D. Creasman, RPA

Executive Vice President

West Kentucky Regional Riverport Authority (WKRRA) TC 59-113 Application Budget Schedule

Cost Category	Cost	Schedule
Stage II Archaeological	\$ 236,433	120 Days
Contract & Project Management	\$ 13,567	120 Days
Total	\$ 250,000	





ANDY BESHEAR
GOVERNOR

JACQUELINE COLEMAN

LT. GOVERNOR

TOURISM, ARTS AND HERITAGE CABINET KENTUCKY HERITAGE COUNCIL

THE STATE HISTORIC PRESERVATION OFFICE

410 HIGH STREET FRANKFORT, KENTUCKY 40601 (502) 564-7005 www.heritage.ky.gov MICHAEL E. BERRY SECRETARY

CRAIG A. POTTS

EXECUTIVE DIRECTOR &

STATE HISTORIC

PRESERVATION OFFICER

December 21, 2021

William Miller Acting Director West Kentucky Regional Riverport Authority 297 Kentucky Avenue Kevil, Kentucky 42053

Re: A Phase I Archaeological Survey for the Proposed Mayfield Creek Slack Water Harbor Project in Ballard County, Kentucky, prepared by Brian Mabelitini (Cultural Resource Analysts, Inc.), November 1, 2021.

Dear William Miller,

Thank you for your submission of a hard copy of an archaeological report regarding the above-referenced project received by our office on November 29, 2021. My office requested and received an electronic copy of the report on December 9, 2021. This report describes the Phase I archaeological survey of an Area of Potential Effect (APE) of approximately 69.9-acres associated with the proposed construction of a slack water harbor on the right bank of and at the mouth of Mayfield Creek. We understand this survey was completed as due diligence because it is anticipated that a permit from the United States Army Corps of Engineers (USACE), Memphis District, will be required to complete the proposed project. Field methods included shovel test excavation, pedestrian survey, metal detector reconnaissance, and hand bucket augering. One previously unrecorded site (15Ba174) was documented and the boundaries for two previously recorded sites (15Ba48 and 15Ba105) were expanded during this investigation. One previously recorded archaeological site (15Ba104) could not be assessed, and no evidence of the previously recorded site 15Ba153 was identified within the APE.

Site 15Ba174 is a multicomponent historic site that dates from the late eighteenth through the mid-twentieth century. The investigators identified significant, intact subsurface historic deposits. Cultural materials associated with the previously postulated Fort Jefferson blockhouse and the Civil War encampment as well as nineteenth-century materials and structural debris associated with support buildings for either the railroad or a nearby farmstead were recorded. For the portion of the site within the APE, additional archaeological testing is recommended to determine the eligibility of this site for listing on the National Register of Historic Places (NRHP) if avoidance is not possible.

Site 15Ba48 is a multicomponent prehistoric open habitation without mounds that contains historic occupations dating from at least the mid-nineteenth through the mid-twentieth century. Historic materials and structural debris associated with a mid-to-late nineteenth century farmstead as well as late nineteenth century railroad support structures were recorded, and it is possible that intact remnants of the For Jefferson stockade trench may be present in western portions of the site. The investigators identified significant, intact subsurface historic deposits. Additional archaeological testing is recommended to determine the eligibility of this site for listing on the NRHP if avoidance is not possible.

[Continued on Next Page]



Project: Mayfield Creek Slack Water Harbor Project

Date: December 21, 2021

Page 2/2

Site 15Ba105 is a prehistoric open habitation without mounds with occupations during the Late Woodland and Late Mississippian periods that contains historic occupations dating from the late eighteenth through the mid-twentieth century. Investigators encountered intact, buried midden and fire-cracked rock as well as hand wrought nails indicative of the late eighteenth-century village of Clarksville. The investigators identified significant, intact subsurface prehistoric and historic deposits. For the portion of the site within the APE, additional archaeological testing is recommended to determine the eligibility of this site for listing on the NRHP if avoidance is not possible.

Site 15Ba104 was recorded as a prehistoric open habitation without mounds as well as the potential 1780–1781 location of Fort Jefferson. Due to the potential for deeply buried archaeological deposits at the mapped location of this site indicated by augering, the investigators could not adequately assess the site and the investigator recommends additional deep testing or avoidance at this location.

After review of the Phase I archaeological survey report, we concur with the findings and recommendations of the investigators that additional archaeological investigation is necessary to assess the eligibility of sites 15Ba48, 15Ba104, 15Ba105, and 15Ba174. We look forward to receiving the official determination of effect for this project from USACE and will provide our comment on effect at that time.

If you have questions or if the project should change, please contact Jennifer Ryall of my staff at jennifer.ryall@ky.gov.

Sincerely,

Executive Director and

State Historic Preservation Officer

CP: jr_vh, KHC #63638-9



August 4, 2023

N. Nicole Konkol Site Protection Program Administrator Tourism, Arts and Heritage Cabinet The State Historic Preservation Office 410 High Street Frankfort, KY 40601

Re: West Kentucky Regional Riverport Authority (WKRRA), Archaeological Impacts Ballard County, Kentucky

Dear Nicole Konkol.

Thank you for meeting with representatives representing the WKRRA and the professional consultants' representatives that have been contracted to assist the WKRRA with this exciting development for our area. The following people were in attendance, excluding yourself, Hannah Chretien, WKRRA, Todd Cooper, Ballard County Judge Executive, Chuck Niquette, Cultural Resource Analysts, Inc. (CRA), Jack Mundy, GEO Consultants Corporation, Sheryl Chino, Jeff Schaefer, and Kristi Nichols, HDR. WKRRA requested the meeting to present the current status of the proposed riverport development and the revisions that were made to eliminate impacts to archaeological sites identified in previous studies and more recently in the Phase I Archaeology Study performed by CRA at the request of WKRRA and completed in November 2021.

The Phase I Archaeology Study identified an area not previously studied labeled 15Ba174 and extended two previously studied sites, 15Ba48 and 15Ba105. The study area 15Ba174 is on the north side of the entrance road and within this area is an area identified to be avoided, or Phase II Archaeology Testing. There are also two areas on the north side of Mayfield Creek and near the south boundary of the 14-acre development area that are identified as areas to be avoided or Phase II Archaeology Testing. Please refer to the Phase I Archaeology Study for more detailed descriptions and analysis of these areas. These areas are highlighted on the attached Preliminary Site Plan

The current Preliminary Site Plan showing proposed development areas outlined was presented at the meeting. There are basically two areas that are proposed for development in the early stages of the riverport. The first area is approximately 14 acres on the west side of the existing entrance road and adjacent to the east bank of the Mississippi River. Developing this area will require approximately 300,000 cubic yards of fill material to raise the elevation of the site to one foot above the Base Flood Elevation, 329 (BFE). This area has been disturbed previously with construction of a railroad and containing a "turn-around" in this general area. The second development area is located on the north side of the entrance road and contains 19 acres. This area will be used, primarily, to provide fill material for the 14-acre site in the early stages of the riverport development. This area has been previously disturbed and used as a borrow site for fill material to construct a local highway and bridge project in the 1980s.



Another part of the development is to place the overhead electric supply underground and construct a new entrance road higher in elevation to one foot above the BFE. These three construction activities will be on the south side of the existing entrance road to avoid impacts and disturbance of archaeology survey site 15Ba 174.

WKRRA has applied for a Port Infrastructure Development Program Grant (PIDP) and expects notification of acceptance or denial in late September or early October of this year. The grant is requesting primarily additional permitting and planning funds to perform additional studies and permitting with USACE and US Fish & Wildlife Service among other agencies. There are construction funds requested to provide earthwork to fill and surface (gravel) the 14-acre development area one foot above the BFE, reconstruct the entrance road shifted slightly south of the existing location and raising to one foot above the BFE, placing the overhead electric underground on the south side of the entrance road, and construct a new water main along the south side of the entrance road. The WKRRA is committed to avoid and protect the sensitive archaeology areas shown on the Preliminary Site Plan during the first stages of the riverport development. If additional areas are needed as the riverport progresses, additional archaeological surveys and testing will be performed to mitigate those areas. As development of this first phase progresses with additional studies, permitting, and these first phase construction items, SHPO will be included in the review process at the 60% and 95% plan development stages. Further development is anticipated to be several years in the future.

Thank you again for your attention and effort to this exciting project so vital to far Western Kentucky. This riverport can positively benefit businesses and industry up and down the Mississippi and Ohio Rivers and even the Tennessee and Cumberland Rivers. WKRRA respectfully requests the favorable acceptance of the WKRRA Riverport's development plan by The State Historical Preservation Office. Please reach out with any comments or requests for additional information.

Respectfully Submitted,

David Rambo

Chairman, West Kentucky Regional Riverport Authority



July 30, 2025

Ms. Kim Morris, PMP
Executive Vice President and Chief Operating Officer
GEO Consultants, Corp.
325 Kentucky Ave.
Kevil, Kentucky 42053

Subject: Habitat Survey and Protected Species Report

West Kentucky Regional Riverport Authority (WKRRA)

Ballard County, Kentucky

Dear Ms. Morris:

HDR is pleased to submit this Habitat Survey and Protected Species Report in support of the WKRRA project in Ballard County, Kentucky. The approximate 69-acre project site is located along the eastern bank of the Mississippi River, north of Mayfield Creek confluence, approximately one mile south of Wickliffe, Kentucky. This report documents the location and extent of threatened and endangered species' habitat located within the 69-acre site.

Thirteen listed or proposed listed species were identified by the United States Fish and Wildlife Service (USFWS) as known or potentially occurring in the Project Area; the Indiana bat (*Myotis sodalis*), gray bat (*Myotis grisescens*), northern long-eared bat (*Myotis septentrionalis*), fanshell (*Cyprogenia stegaria*), fat pocketbook (*Potamilus capax*), orangefoot pimpleback (pearlymussel) (*Plethobasus cooperianus*), pink mucket (pearlymussel) (*Lampsilis abrupta*), ring pink (*Obovaria retusa*), rough pigtoe (*Pleurobema plenum*), monarch butterfly (*Danaus plexippus*), alligator snapping turtle (*Macrochelys temminckii*), pallid sturgeon (*Scaphirhynchus albus*), and whooping crane (*Grus americana*).

On June 2, 2025, HDR performed an on-site field survey encompassing the Project Area to confirm the presence or absence of suitable habitat for the listed or proposed listed species. Three federally listed bat species: (Indiana bat, endangered), (northern long-eared bat, endangered), (gray bat, endangered) and one proposed listed insect (monarch butterfly, proposed threatened) could be affected by the Project as suitable habitat was identified in the Project Area.

The Project Area contains 53.7 acres of suitable known summer Indiana bat and potential northern long-eared bat habitat including 1.5 acres of suitable roosting habitat identified as live trees and/or snags of minimum diameter at breast height; had exfoliating bark, cracks, crevices, and/or cavities; and were located within 1,000 feet of other forested/wooded habitat and/or contained potential roost substrate. Gray bat foraging habitat was identified along perennial and intermittent stream riparian corridors. Monarch butterfly summer habitat was identified in herbaceous areas scattered across the property containing milkweed.

The 69-acre property is anticipated to remove some or all of the forested habitat providing suitable summer habitat for the Indiana bat and northern long-eared bat. The USFWS has determined that harvesting trees within stands where bats are known to use during the summer may result in "harm" and lead to take of these species. As the Project is located within known summer 1 (outer-tier) Indiana bat and northern long-eared bat potential habitat, removal of trees should follow the 2016 Revised Conservation Strategy for Forest Dwelling Bats in KY to account for mitigation for the species

Habitat Survey and Protected Species Report July 30, 2025 Page 2

by payment to the Imperiled Bat Conservation Fund (IBCF). Following the 2016 Revised Conservation Strategy guidance, removing trees during the summer unoccupied timeframe (August 16-March 31) would be the least expensive and require a 1.5 mitigation ratio costing 53.7 acres X \$5,300/acre X 1.5 = \$426,915.

Consultation with the USFWS will be required during the Section 404 permitting stage and overseen by U.S Army Corps of Engineers (USACE), the federal agency issuing the permits. During the consultation, HDR would recommend that in lieu of paying the significant cost to remove large amounts of forested habitat, WKRRA request other methods such as presence/absence surveys (mist netting) or habitat conservation plans to adequately mitigate the incidental take. To further reduce the cost of tree removal, WKRRA might also consider implementing tiered development strategies that remove trees on a staggered basis and/or incorporate tree preservation into its development plan.

We appreciate the opportunity to assist you on this project. Please contact Jeff Schaefer at (502) 909-3247 or Jeff.Schaefer@hdrinc.com with any questions.

Respectfully submitted, HDR Engineering, Inc.

Jeff Schaefer

Sr. Environmental Project Manager

cc: Sheryl Chino, HDR



Required Affidavit for Bidders, Offerors and Contractors (KRS 45A.110 & 45A.115)

Affidavit Effective for One (1) Year from Date of Execution

Instructions: Pursuant to <u>KRS 45A.110</u> and <u>45A.115</u>, a bidder, offeror, or contractor ("Contractor") is required to submit a Required Affidavit for Bidders, Offerors, and Contractors to be awarded a contract, or for the renewal of a contract. An authorized representative of the contracting party must complete the attestation below, have the attestation notarized, and return the completed affidavit to the Commonwealth.

Attestation

As a duly authorized representative for the Contractor, I swear and affirm under penalty of perjury, that that the Contractor has not knowingly violated campaign finance laws of the Commonwealth of Kentucky and that the award of a contract will not violate any provision of the campaign finance laws of the Commonwealth. For purposes of this attestation, "Knowingly" means that the bidder or offeror is aware or should have been aware of the existence of a violation. The bidder or offer understands that the Commonwealth retains the right to request an updated affidavit at any time.

Signature Chairman	Rad	David R. Rombs Printed Name ho/22/2025
Title		Date /
Bidder or Offeror Name:	West Kentucky Regions	al Riverport Authority
Address:	297 Kentucky Avenue	
	Kevil, KY 42053	
Commonwealth of Kentucky Ve	endor Code (If known):	
Subscribed and sworn to befo	ore me this 22 day of 1	October 2025.
State of: hutcky	Notary: 1 + 1	aula 5, Mott
County of: Carlisla	My Commission I	

ANGELA S. MOTT
Notary Public
Commonwealth of Kentucky
Commission Number KYNP39834
My Commission Expires Dec 14, 2025



Required Affidavit for Bidders, Offerors and Contractors (KRS 45A.110 & 45A.115)

Affidavit Effective for One (1) Year from Date of Execution

Instructions: Pursuant to <u>KRS 45A.110</u> and <u>45A.115</u>, a bidder, offeror, or contractor ("Contractor") is required to submit a Required Affidavit for Bidders, Offerors, and Contractors to be awarded a contract, or for the renewal of a contract. An authorized representative of the contracting party must complete the attestation below, have the attestation notarized, and return the completed affidavit to the Commonwealth.

Attestation

As a duly authorized representative for the Contractor, I swear and affirm under penalty of perjury, that that the Contractor has not knowingly violated campaign finance laws of the Commonwealth of Kentucky and that the award of a contract will not violate any provision of the campaign finance laws of the Commonwealth. For purposes of this attestation, "Knowingly" means that the bidder or offeror is aware or should have been aware of the existence of a violation. The bidder or offer understands that the Commonwealth retains the right to request an updated affidavit at any time.

a contract of the contract of		
NMW _u Signature	Richard Mason Niquette Printed Name	
President	10/20/2025 Date	_
Bidder or Offeror Name: Address:	Cultural Resource Analysts, Inc. 151 Walton Ave	
	Lexington, KY 40508	
Commonwealth of Kentucky	Vendor Code (If known):	
Subscribed and sworn to be	fore me this <u>20</u> day of <u>0cT</u> , <u>2025</u> .	
State of: KENTUCKY	Notary: January Mary	
County of: FAMETIE	MEHA NO.	
	NOTARY PUBLIC COMM. # KYNP35002 O	