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Memphis District

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PUBLIC NOTICE
U.S. ARMY CORPS OF ENGINEERS

Availability of Draft Environmental Assessment, 404(b)(1) evaluation and Draft Finding of No Significant Impact

REPLY TO:
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TITLE: Mississippi River Mainline Levee, Miston Berm Construction and Levee Rehabilitation, Dyer and Lake Counties, Tennessee

AUTHORITY: The proposed seepage remediation and levee rehabilitation of the Hickman, Kentucky to Obion River Levee System (Miston Levee) is authorized and would be funded as part of the Mississippi River Levees (MRL) portion of the Mississippi River and Tributaries (MR&T) Project. The MR&T Project is authorized by the Flood Control Act of 15 May 1928, as amended.

LOCATION: The proposed Miston Berm Construction and Levee Rehabilitation Project is located in Dyer County, Tennessee, and begins at Lower Owl Hoot Road or Baseline Station 14/50+25 and extends to the southern limit of work at Baseline Station 19/48+50. Suitable earthen material to construct the berms and repair the levee would be obtained from material excavated from an agriculture field on the riverside of the levee (Figure 1).

TO WHOM IT MAY CONCERN: Pursuant to the National Environmental Policy Act of 1969 as amended, the U.S. Army Corps of Engineers, Memphis District, is issuing this notice with the intention of constructing seepage berms and rehabilitating the approximately 2.7 miles of the Miston Levee.

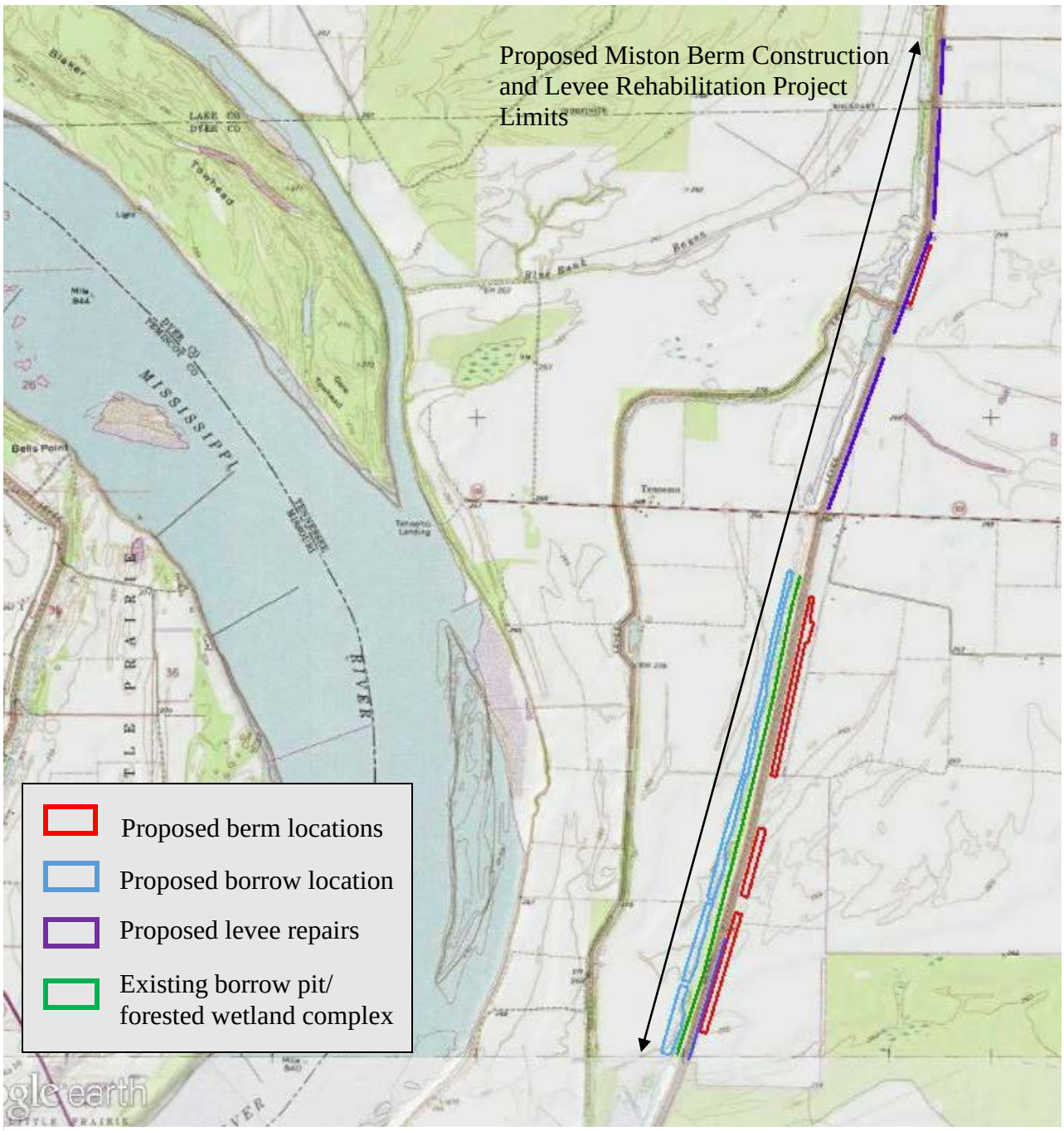

Figure 1. Topographic map indicating the proposed Miston project limits, berm locations and borrow location, Dyer and Lake Counties, Tennessee.

PURPOSE: The Miston Berm Project was designed in the early 1980's due to seepage issues discovered during floods in the late 1970's. Repairs were not completed at that time due to the lack of funding for the project. During the floods of 2011 and 2015, seepage issues were observed by Corps personnel. The purpose of the proposed action is to control seepage under the MRL during flood events on the Mississippi River to prevent levee damage or failure. A 1998 final Supplemental EIS (SEIS), *Mississippi River Mainline Levees Enlargement and Seepage Control*, addressed seepage control measures to be implemented along the Mississippi River Levee (MRL) including this action. While berm construction in this area was covered under the SEIS, it has been determined that additional right of way is required and potential environmental impacts have been identified.

The MRL, which also serves as Tennessee Highway 181, is causing serious safety concerns for local traffic as well as the large amount of haul-truck traffic due to the significant levee embankment slides along approximately 2.7 miles of the highway. The levee embankment slides would be repaired with the proposed project. Failure due to levee embankment slides or uncontrolled seepage and piping (sands and silts being carried under the levee during flood conditions) would result in property damage and could cause human injuries and/or loss of life.

PROPOSED ACTION: The proposed action would excavate and repair levee slides along the MRL using approximately 450,000 cubic yards of material excavated from the agricultural land adjacent to the existing borrow pit on the riverside of the MRL. Through Geotechnical analysis, it has been determined that this material is more suitable than the highly plastic clays that currently are causing the levee to slide in several locations. The slopes would also be flattened to the extent possible while staying within the existing right-of-way. Levee slopes would range between 3-3.5H:1V. The material that currently constitutes the existing levee embankment would be excavated and used for construction of the proposed seepage berms described below.

Seepage berms were considered in the 1998 SEIS and involve constructing four berms along the landside toe of the MRL to control seepage and piping under the levee. Approximately 430,000 cubic yards of material would be required for construction of the seepage berms. This material would be excavated from the levee embankment during the repair of the levee slides; any additional material required would be excavated from the proposed borrow pit. Temporary impacts to local roadways and the public use of those roads would result, as haul trucks would be needed to transport the tons of material to the project site; however, a traffic plan is being developed with the Tennessee Department of Transportation.

The majority of work would occur concurrently and in sections to reduce the risk of levee failure during construction. For example, the excavation of the levee slopes must occur concurrently with borrow pit excavation as no more than 300 feet of levee excavation may occur without backfill and compaction, and no more than 1,000 feet of levee may be excavated at any time. Back fill of the levee slopes must be complete within 30 days of excavation. Material excavated from the levee slopes must be hauled to the berm locations and compacted as work is occurring.

A total of approximately 3.3 acres of forested wetlands, 0.85 acres of farmed wetland, 0.14 acres of mowed/maintained wetlands along the landside toe of the levee, and 8 acres of non-wet treed

area would be impacted by the proposed project. Compensatory mitigation requirements entail creation of 27 acres of forested BLH wetlands (11 acres due to wetland impacts and 16 acres due to non-wet tree clearing) as described in the Mitigation Section below. Compensatory mitigation would occur concurrently with construction of the project.

ALTERNATIVES: Three alternatives were considered for the proposed action. These alternatives were: 1) no-action; 2) installation of relief wells and associated drainage work; and 3) construct a landside berm.

Alternative 1 – Future without Project Condition (No-Action)

In the future without project condition (no-action), the proposed action would not be constructed. The no-action alternative would result in continued seepage and piping during flood conditions. Sands and silts would be carried under the levee, which could lead to levee breach. Also, levee slides would continue to worsen causing severe degradation along Great River Road and potentially adding to the risk of levee failure during a major flood event. Failure of the levee would result in property damage, human injuries and/or loss of life.

Alternative 2 – Install Relief Wells with Associated Drainage Work and Repair Levee Slides

This proposed alternative would excavate and repair levee slides along the MRL using approximately 450,000 cubic yards of material excavated from the agricultural land adjacent to the existing borrow pit on the riverside of the MRL. Through Geotechnical analysis, it has been determined that this material is more suitable than the highly plastic clays that currently are causing the levee to slide in several locations. The slopes would also be flattened to extent possible while staying within the existing right-of-way. Levee slopes would range between 3-3.5H:1V.

Relief wells and associated drainage ditches were considered to control seepage along the MRL in this area. However, relief wells would not prevent piping if backwater has entered the landside levee area; therefore, this alternative is not acceptable for this area due to the regular occurrence of backwater flooding from the Obion River.

Alternative 3 – Construct a Landside Berm and Repair Levee Slides

This proposed alternative would excavate and repair levee slides along the MRL using approximately 450,000 cubic yards of material excavated from the agricultural land adjacent to the existing borrow pit on the riverside of the MRL. Through Geotechnical analysis, it has been determined that this material is more suitable than the highly plastic clays that currently are causing the levee to slide in several locations. The slopes would also be flattened to extent possible while staying within the existing right-of-way. Levee slopes would range between 3-

3.5H:1V. The material that currently constitutes the existing levee embankment would be excavated and used for construction of the proposed seepage berms described below.

This project feature was considered in the 1998 SEIS, and involves constructing four seepage berms along the landside toe of the MRL to control seepage and piping under the levee. Approximately 430,000 cubic yards of material would be required for construction of the seepage berms. This material would be excavated from the levee embankment during the repair of the levee slides and any additional material required would be excavated from the proposed borrow pit. The majority of work would occur concurrently and in sections to reduce the risk of levee failure during construction. A total of approximately 3.3 acres of forested wetlands, 0.85 acres of farmed wetland, 0.14 acres of mowed/maintained wetlands along the landside toe of the levee, and 8 acres of non-wet treed area would be impacted by the proposed project. Approximately 27 acres of prior converted cropland would be restored to bottomland hardwoods to mitigate these impacts as described in the Mitigation Section below.

Preferred Alternative for the Proposed Project

After careful consideration of all alternatives, it was determined that alternative 1 (no-action) was unacceptable because of risks to human life and property. If a seepage problem is not addressed, levee failure resulting in catastrophic impacts could ultimately result. Due to ineffectiveness of relief wells in this case due to backwater flooding, Alternative 2 is not practicable or reasonable. Alternative 3 is the only effective method for controlling seepage and piping in the identified seepage locations. All factors considered, alternative 3 is the most practical solution for seepage control and is the preferred alternative for the proposed project.

The Hickman Kentucky to Obion River Levee System portion of the MRL protects approximately 312,000 acres of land from damages during flood conditions. Approximately 6,900 structures exist in the protected segment and property is valued at $1.3 billion. Should the MRL at these locations breach, the population at risk is approximately 15,390 people.

MITIGATION: The Clean Water Act, the Water Resources Development Act, Rule 33 CFR §332, the 2008 Compensatory Mitigation Rule, et al. require that compensatory mitigation is completed to offset unavoidable impacts incurred due to a water resources project. The appropriate application of compensatory mitigation is to formulate an alternative that first avoids, then minimizes, and lastly, compensates for unavoidable adverse impacts. The draft environmental assessment (EA) evaluates the potential impacts associated with the proposed construction of the seepage berms and associated borrow site.

A total of approximately 3.3 acres of forested wetlands, 0.85 acres of farmed wetland, 0.14 acres of mowed/maintained wetlands along the landside toe of the levee, and 8 acres of non-wet treed area would be impacted by the proposed project. Compensatory mitigation requirements entail creation of 27 acres of forested BLH wetlands (11 acres due to wetland impacts and 16 acres due to non-wet tree clearing). Actions include planting bottomland hardwood species and restoring hydrology, if necessary, within tracts of cleared agricultural land. The mitigation site is anticipated to be located in Dyer County, Tennessee as the USACE has proposed two tracts of

land totaling approximately 36.5 aces (Figure 2) to mitigate for the unavoidable impacts that would be incurred due to these project actions. A detailed, site-specific mitigation plan is being drafted, and will be coordinated with an interagency team. Compensatory mitigation would occur concurrently with construction of the proposed project.

CLEAN WATER ACT: No significant impacts to water quality would occur as a result of the proposed project. A Section 404(b)(1) Evaluation was prepared for the proposed project action and is included as an appendix to the EA. A state water quality certification was requested from the State of Tennessee, Department of Environment and Conservation on 16 April 2018. The NEPA process would not be considered complete and the FONSI would not be signed until the Alteration of Aquatic Resources Permit is received by the USACE.

THREATENED AND ENDANGERED SPECIES: Pursuant to Section 7 of the Endangered Species Act, coordination began with the U.S. Fish and Wildlife Service (USFWS) in November of 2017 regarding threatened and endangered species in the project area. It was determined that the proposed project is within the range of both the Indiana and northern long-eared bat. Through coordination, it was determined that a mist-net survey would be conducted and a study proposal was submitted by USACE and accepted by USFWS. Mist-netting is scheduled to occur beginning May 15, 2018, weather-permitting. The results would be coordinated with USFWS prior to finishing the NEPA process and signing the FONSI.

CULTURAL RESOURCES: A literature review supplemented by a cultural resources survey within the project's area of potential effect (APE) was completed by American Resources Group. The investigation identified three non-significant cultural resources within the APE, sites 40DY48, 40DY49, and 40DY50. Furthermore, no historic properties are listed in or determined eligible for inclusion in the NRHP within the project's APE. Therefore, no additional cultural resources investigations are recommended prior to the project's implementation and the proposed project action would have no effect on cultural resources.

PUBLIC INTEREST REVIEW: The purpose of this public notice is to advise all interested parties of the proposed activities and to solicit comments and information necessary to evaluate the probable impact on the public interest. This notice is being circulated to federal, state and local environmental agencies; Native American tribes; and public. The decision to proceed with the proposed modifications will be based on an evaluation of the probable impact, including cumulative impacts, of the activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The potential benefits of the activity must be balanced against its reasonably foreseeable detriments. Potential direct, indirect, and cumulative effects of the activity on the human environment will be considered.

Memphis District is soliciting comments from the public; federal, state, and local agencies and officials; Native American Tribes; and other interested parties in order to consider and evaluate the impacts of the proposed activity. Any comments received will be considered by Memphis District to determine whether to proceed with the proposed action. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and other public interest factors. Comments are used in

Figure 2. Aerial photograph indicating the proposed Miston compensatory mitigation sites totaling approximately 36.5 acres of farmed land in Dyer County, Tennessee.

preparation of the final environmental assessment and/or draft environmental impact statement pursuant to the National Environmental Policy Act and are also used to determine the overall public interest of the proposed activity. **The draft environmental assessment and draft finding of no significant impact have been completed and will be circulated to agencies and any other party that responds to this notice requesting a copy. Copies have been placed on the District's website at:** http://www.mvm.usace.army.mil/About/Offices/Regulatory/PublicNotices.aspx. The files are located towards the bottom of the screen in the table, Memphis District Civil Works Projects. Refer to the column for State: Tennessee, Project: Miston Berm and Levee Rehabilitation. Under the column for Document, click on environmental assessment to access the draft EA, and click on finding of no significant impact to access the draft FONSI.

PUBLIC HEARING: Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this proposed project action. Requests for a public hearing should clearly state the reason for holding a public hearing. The District Engineer will determine if the issues raised are substantial and whether a hearing is needed in order to reach a decision on the project. Failure of any agency or individual to comment on this notice will be interpreted to mean that there is no objection to the proposed work.

COMMENTS OR REQUEST FOR ADDITIONAL INFORMATION: If you wish to obtain additional information or to submit comments on this proposal, please contact Andrea Carpenter at the U.S. Army Corps of Engineers, Environmental Compliance Branch, 167 North Main Street RM B-202, Memphis, Tennessee 38103-1894, at 901-544-0817 or Andrea.L.Carpenter@usace.army.mil. **Comments should be forwarded to this office by June 11, 2018.**

Sincerely,

Edward P. Lambert

Edward P. Lambert
Chief, Environmental Compliance Branch
Regional Planning and Environmental Division South